

MIXED SALTS OF A SINGLE-ENTITY AMPHETAMINE PRODUCT- dextroamphetamine saccharate, amphetamine aspartate monohydrate, dextroamphetamine sulfate, amphetamine sulfate capsule, extended release SpecGx LLC

HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use DEXTROAMPHETAMINE SACCHARATE, AMPHETAMINE ASPARTATE MONOHYDRATE, DEXTROAMPHETAMINE SULFATE, AMPHETAMINE SULFATE (Mixed Salts of a Single-Entity Amphetamine Product) EXTENDED-RELEASE CAPSULES safely and effectively. See full prescribing information for DEXTROAMPHETAMINE SACCHARATE, AMPHETAMINE ASPARTATE MONOHYDRATE, DEXTROAMPHETAMINE SULFATE, AMPHETAMINE SULFATE (Mixed Salts of a Single-Entity Amphetamine Product) EXTENDED-RELEASE CAPSULES.

DEXTROAMPHETAMINE SACCHARATE, AMPHETAMINE ASPARTATE MONOHYDRATE, DEXTROAMPHETAMINE SULFATE, AMPHETAMINE SULFATE (mixed salts of a single-entity amphetamine product) extended-release capsules, for oral use, CII
Initial U.S. Approval: 2001

WARNING: ABUSE, MISUSE, AND ADDICTION

See full prescribing information for complete boxed warning.

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules have a high potential for abuse and misuse, which can lead to the development of a substance use disorder, including addiction. Misuse and abuse of CNS stimulants, including Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, can result in overdose and death (5.1, 9.2, 10):

- Before prescribing Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, assess each patient's risk for abuse, misuse, and addiction.
- Educate patients and their families about these risks, proper storage of the drug, and proper disposal of any unused drug.
- Throughout treatment, reassess each patient's risk and frequently monitor for signs and symptoms of abuse, misuse, and addiction.

RECENT MAJOR CHANGES

Boxed Warning 10/2023
Dosage and Administration (2.1, 2.2) 10/2023
Warnings and Precautions (5.1, 5.2, 5.3, 5.4, 5.6, 5.10) 10/2023

INDICATIONS AND USAGE

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules are a central nervous system (CNS) stimulant indicated for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in patients 13 years and older. (1)

Limitations of Use:

Pediatric patients 12 years and younger experienced higher plasma exposure than patients 13 years and older at the same dose and experienced higher rates of adverse reactions, mainly insomnia and decreased appetite. (8.4)

DOSAGE AND ADMINISTRATION

- Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules should be administered once daily upon awakening.

	Recommended Starting Dose Titration Schedule		Maximum Daily Dose
Adults	12.5 mg	12.5 mg weekly	50 mg
Pediatrics (13 to 17)	12.5 mg	12.5 mg weekly	25 mg

- In adult patients with severe renal impairment the maximum dose should not exceed 25 mg daily. Use in adult patients with ESRD is not recommended. (2.6, 8.6)

- The maximum dose in pediatric patients with severe renal impairment is 12.5 mg daily. Use in pediatric patients with ESRD is not recommended. (2.6, 8.6)
- Patients are advised to take consistently either with or without food. (2.2)
- Administer upon awakening because the effects may last up to 16 hours and there is the potential for insomnia. (2.2)
- Prior to treatment, assess for presence of cardiac disease. (2.1)
- To avoid substitution errors and overdosage, do not substitute for other amphetamine products on a milligram-per-milligram basis because of different amphetamine base compositions and differing pharmacokinetic profiles. (2.7)

----- **DOSAGE FORMS AND STRENGTHS** -----

- Extended-release capsules: 12.5 mg, 25 mg, 37.5 mg, 50 mg (3)

----- **CONTRAINDICATIONS** -----

- Known hypersensitivity to amphetamine products or other ingredients in Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules. (4)
- Use with monoamine oxidase (MAO) inhibitors, or within 14 days of the last MAO inhibitor dose. (4, 7.1)

----- **WARNINGS AND PRECAUTIONS** -----

- *Risks to Patients with Serious Cardiac Disease:* Avoid use in patients with known structural cardiac abnormalities, cardiomyopathy, serious cardiac arrhythmia, coronary artery disease, or other serious cardiac disease. (5.2)
- *Increased Blood Pressure and Heart Rate:* Monitor blood pressure and pulse. (5.3)
- *Psychiatric Adverse Reactions:* Prior to initiating Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, screen patients for risk factors for developing a manic episode. If new psychotic or manic symptoms occur, consider discontinuing Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules. (5.4)
- *Long-Term Suppression of Growth in Pediatric Patients:* Closely monitor growth (height and weight) in pediatric patients. Pediatric patients not growing or gaining height or weight as expected may need to have their treatment interrupted. (5.5)
- *Peripheral Vasculopathy, Including Raynaud's Phenomenon:* Careful observation for digital changes is necessary during Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules treatment. Further clinical evaluation (e.g., rheumatology referral) may be appropriate for patients who develop signs or symptoms of peripheral vasculopathy. (5.6)
- *Seizures:* May lower the convulsive threshold. If a seizure occurs, discontinue Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules. (5.7)
- *Serotonin Syndrome:* Increased risk when co-administered with serotonergic agents (e.g., SSRIs, SNRIs, triptans), but also during overdosage situations. If it occurs, discontinue Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules and initiate supportive treatment. (5.8)
- *Motor and Verbal Tics, and Worsening of Tourette's Syndrome:* Before initiating Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, assess the family history and clinically evaluate patients for tics or Tourette's syndrome. Regularly monitor patients for the emergence or worsening of tics or Tourette's syndrome. Discontinue treatment if clinically appropriate. (5.10)

----- **ADVERSE REACTIONS** -----

Most common adverse reactions in patients with ADHD (incidence $\geq 5\%$ and at a rate at least twice placebo) are:

- Pediatrics (13 years and older): insomnia, decreased appetite, decreased weight, irritability, and nausea. (6.1)
- Adults: insomnia, decreased appetite, decreased weight, dry mouth, increased heart rate, and anxiety. (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact Mallinckrodt at 1-800-778-7898 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch

----- **DRUG INTERACTIONS** -----

Acidifying and Alkalinizing Agents: Agents that alter GI and urinary pH can alter blood levels of amphetamine. Acidifying agents (GI and urinary) decrease amphetamine blood levels, while alkalinizing agents (GI and urinary) increase amphetamine blood levels. Adjust Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules dosage accordingly. (2.5, 7.1)

----- **USE IN SPECIFIC POPULATIONS** -----

- *Pregnancy:* Based on animal data, may cause fetal harm. (8.1)

- *Lactation*: Breastfeeding not recommended. (8.2)
- *Pediatric*: Safety and effectiveness have not been established in pediatric patients ages 12 years and younger. (8.4)
- *Renal Impairment*: Dose adjustment is needed in patients with severe renal insufficiency. Use of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules in patients with ESRD is not recommended. (2.6, 8.6)

See 17 for Medication Guide.

Revised: 10/2023

FULL PRESCRIBING INFORMATION: CONTENTS*

WARNING: ABUSE, MISUSE, AND ADDICTION

1 INDICATIONS AND USAGE

2 DOSAGE AND ADMINISTRATION

- 2.1 Pretreatment Screening
- 2.2 General Administration Instructions
- 2.3 Administration Instructions
- 2.4 Recommended Dosage
- 2.5 Dosage Modifications Due to Drug Interactions
- 2.6 Dosage in Patients with Renal Impairment
- 2.7 Switching from Other Amphetamine Products

3 DOSAGE FORMS AND STRENGTHS

4 CONTRAINDICATIONS

5 WARNINGS AND PRECAUTIONS

- 5.1 Abuse, Misuse, and Addiction
- 5.2 Risks to Patients with Serious Cardiac Disease
- 5.3 Increased Blood Pressure and Heart Rate
- 5.4 Psychiatric Adverse Reactions
- 5.5 Long-Term Suppression of Growth in Pediatric Patients
- 5.6 Peripheral Vasculopathy, Including Raynaud's Phenomenon
- 5.7 Seizures
- 5.8 Serotonin Syndrome
- 5.9 Potential for Overdose Due to Medication Errors
- 5.10 Motor and Verbal Tics, and Worsening of Tourette's Syndrome

6 ADVERSE REACTIONS

- 6.1 Clinical Trials Experience
- 6.2 Adverse Reactions Associated with the Use of Amphetamines

7 DRUG INTERACTIONS

- 7.1 Drugs Having Clinically Important Interactions with Amphetamines
- 7.2 Drug/Laboratory Test Interactions

8 USE IN SPECIFIC POPULATIONS

- 8.1 Pregnancy
- 8.2 Lactation
- 8.4 Pediatric Use
- 8.5 Geriatric Use
- 8.6 Renal Impairment

9 DRUG ABUSE AND DEPENDENCE

- 9.1 Controlled Substance

9.2 Abuse

9.3 Dependence

10 OVERDOSAGE

11 DESCRIPTION

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

12.2 Pharmacodynamics

12.3 Pharmacokinetics

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

13.2 Animal Toxicology and/or Pharmacology

14 CLINICAL STUDIES

16 HOW SUPPLIED/STORAGE AND HANDLING

* Sections or subsections omitted from the full prescribing information are not listed.

FULL PRESCRIBING INFORMATION

WARNING: ABUSE, MISUSE, AND ADDICTION

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules have a high potential for abuse and misuse, which can lead to the development of a substance use disorder, including addiction.

Misuse and abuse of CNS stimulants, including Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, can result in overdose and death [see Overdosage (10)], and this risk is increased with higher doses or unapproved methods of administration, such as snorting or injection.

Before prescribing Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, assess each patient's risk for abuse, misuse, and addiction. Educate patients and their families about these risks, proper storage of the drug, and proper disposal of any unused drug. Throughout Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules treatment, reassess each patient's risk of abuse, misuse, and addiction and frequently monitor for signs and symptoms of abuse, misuse, and addiction [see Warnings and Precautions (5.1), Drug Abuse and Dependence (9.2)].

1 INDICATIONS AND USAGE

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules are indicated for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in patients 13 years and older [see *Clinical Studies (14)*].

Limitations of Use:

Pediatric patients 12 years and younger experienced higher plasma exposure than

patients 13 years and older at the same dose, and experienced higher rates of adverse reactions, mainly insomnia and decreased appetite [see *Use in Specific Populations* (8.4)].

2 DOSAGE AND ADMINISTRATION

2.1 Pretreatment Screening

Prior to treating patients with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, assess:

- for the presence of cardiac disease (i.e., perform a careful history, family history of sudden death or ventricular arrhythmia, and physical exam) [see Warnings and Precautions (5.2)]
- the family history and clinically evaluate patients for motor or verbal tics or Tourette's syndrome before initiating Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules [see Warnings and Precautions (5.10)]

2.2 General Administration Instructions

Because the effects of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules may last up to 16 hours and there is potential for insomnia, administer once daily in the morning upon awakening. In the event of a missed dose, do not administer later in the day. Do not administer additional medication to make up for the missed dose [see Adverse Reactions (6.1), Clinical Studies (14)].

2.3 Administration Instructions

Administer Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules orally with or without food. Advise patients to take Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules consistently either with food or without food [see *Clinical Pharmacology* (12.3)].

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules may be administered in one of the following ways:

- Swallow Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules whole, or
- Open capsule and sprinkle the entire contents over a spoonful of applesauce. The sprinkled applesauce should be consumed immediately; it should not be stored. Patients should take the sprinkled applesauce in its entirety without chewing.
- The dose of a single capsule should not be divided.

2.4 Recommended Dosage

Adults (18 to 55 years)

The recommended starting dose of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules is 12.5 mg once daily in the morning upon awakening. Initial doses of 25 mg once daily may be considered for some patients. Dosage may be adjusted in increments of 12.5 mg no sooner than weekly, up to a maximum dose of 50 mg once daily, based on the therapeutic needs and response of the patient. Doses

above 50 mg daily have shown no additional clinically meaningful benefit.

Pediatric Patients (13 to 17 years)

The recommended starting dose is 12.5 mg once daily in the morning upon awakening. Dosage may be adjusted in increments of 12.5 mg no sooner than weekly, up to a recommended maximum dose of 25 mg once daily. The dose should be individualized according to the needs and response of the patient. Doses higher than 25 mg have not been evaluated in clinical trials in pediatric patients.

2.5 Dosage Modifications Due to Drug Interactions

Agents that alter gastrointestinal and urinary pH can impact urinary excretion and alter blood levels of amphetamine. Acidifying agents (e.g., ascorbic acid) decrease blood levels, while alkalinizing agents (e.g., sodium bicarbonate) increase blood levels. Adjust Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules dosage accordingly [see *Drug Interactions (7.1)*].

2.6 Dosage in Patients with Renal Impairment

In adult patients with severe renal impairment (GFR between 15 to < 30 mL/min/1.73 m²), the recommended starting dose of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules is 12.5 mg daily with a maximum recommended dose of 25 mg daily. Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules are not recommended for use in patients with end stage renal disease (ESRD < 15 mL/min/1.73 m²). In pediatric patients (13 to 17 years) with severe renal impairment, the maximum dose is 12.5 mg, if tolerated [see *Use in Specific Populations (8.6)*, *Clinical Pharmacology (12.3)*].

2.7 Switching from Other Amphetamine Products

For patients switching from another medication or any other amphetamine products, discontinue that treatment, and titrate with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules using the titration schedule [see *Dosage and Administration (2.4)*].

Do not substitute for other amphetamine products on a milligram-per-milligram basis because of different amphetamine base compositions and differing pharmacokinetic profiles [see *Warnings and Precautions (5.9)*, *Description (11)*, *Clinical Pharmacology (12.3)*].

3 DOSAGE FORMS AND STRENGTHS

- Extended-release capsules 12.5 mg: opaque yellow body/opaque yellow cap (imprinted with "12.5 mg" and "M" in a box)
- Extended-release capsules 25 mg: opaque white body/opaque white cap (imprinted with "25 mg" and "M" in a box)
- Extended-release capsules 37.5 mg: opaque pink body/opaque blue cap (imprinted with "37.5 mg" and "M" in a box)
- Extended-release capsules 50 mg: opaque blue body/opaque blue cap (imprinted with "50 mg" and "M" in a box)

4 CONTRAINDICATIONS

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules are contraindicated in patients with:

- Known hypersensitivity to amphetamine, or other components of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules. Hypersensitivity reactions such as angioedema and anaphylactic reactions have been reported in patients treated with other amphetamine products [see *Adverse Reactions (6.2)*].
- Concomitant treatment with monoamine oxidase inhibitors (MAOIs), and also within 14 days following discontinuation of treatment with a monoamine oxidase inhibitor, because of an increased risk of hypertensive crisis [see *Drug Interactions (7.1)*].

5 WARNINGS AND PRECAUTIONS

5.1 Abuse, Misuse, and Addiction

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules have a high potential for abuse and misuse. The use of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules exposes individuals to the risks of abuse and misuse, which can lead to the development of a substance use disorder, including addiction. Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules can be diverted for non-medical use into illicit channels or distribution [see *Drug Abuse and Dependence (9.2)*]. Misuse and abuse of CNS stimulants, including Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, can result in overdose and death [see *Overdosage (10)*], and this risk is increased with higher doses or unapproved methods of administration, such as snorting or injection.

Before prescribing Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, assess each patient's risk for abuse, misuse, and addiction. Educate patients and their families about these risks and proper disposal of any unused drug. Advise patients to store Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules in a safe place, preferably locked, and instruct patients to not give Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules to anyone else. Throughout Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules treatment, reassess each patient's risk of abuse, misuse, and addiction and frequently monitor for signs and symptoms of abuse, misuse, and addiction.

5.2 Risks to Patients with Serious Cardiac Disease

Sudden death has been reported in patients with structural cardiac abnormalities or other serious cardiac disease who were treated with CNS stimulants at the recommended ADHD dosage.

Avoid Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules use in patients with known structural cardiac abnormalities, cardiomyopathy, serious cardiac arrhythmia, coronary artery disease, or other serious cardiac disease.

5.3 Increased Blood Pressure and Heart Rate

CNS stimulants cause an increase in blood pressure (mean increase about 2 to 4 mmHg) and heart rate (mean increase about 3 to 6 bpm). Some patients may have

larger increases.

Monitor all Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules-treated patients for potential tachycardia and hypertension [see Adverse Reactions (6.1)].

5.4 Psychiatric Adverse Reactions

Exacerbation of Pre-Existing Psychosis

CNS stimulants may exacerbate symptoms of behavior disturbance and thought disorder in patients with a pre-existing psychotic disorder.

Induction of a Manic Episode in Patients with Bipolar Disorder

CNS stimulants may induce a manic or mixed episode in patients with bipolar disorder. Prior to initiating Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules treatment, screen patients for risk factors for developing a manic episode (e.g., comorbid or history of depressive symptoms or a family history of suicide, bipolar disorder, and depression).

New Psychotic or Manic Symptoms

CNS stimulants, at the recommended dosage, may cause psychotic or manic symptoms, e.g., hallucinations, delusional thinking, or mania in patients without a prior history of psychotic illness or mania. In a pooled analysis of multiple short-term, placebo-controlled studies of CNS stimulants, psychotic or manic symptoms occurred in approximately 0.1% of CNS stimulant-treated patients compared to 0% of placebo-treated patients. If such symptoms occur, consider discontinuing Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules.

5.5 Long-Term Suppression of Growth in Pediatric Patients

CNS stimulants have been associated with weight loss and slowing of growth rate in pediatric patients.

In a 4-week, placebo-controlled trial of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules in patients ages 6 to 17 years old with ADHD, there was a decrease in weight in the Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules groups compared to weight gain in the placebo group [see *Adverse Reactions (6.1)*].

Closely monitor growth (weight and height) in Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules-treated pediatric patients. Pediatric patients who are not growing or gaining weight as expected may need to have their treatment interrupted. Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules are not approved for use in pediatric patients 12 years and younger [see *Use in Specific Populations (8.4)*].

5.6 Peripheral Vasculopathy, Including Raynaud's Phenomenon

CNS stimulants, including Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, used to treat ADHD are associated with peripheral vasculopathy, including Raynaud's phenomenon. Signs and symptoms are usually intermittent and mild; however, sequelae have included digital ulceration and/or soft tissue breakdown. Effects of peripheral vasculopathy, including Raynaud's

phenomenon, were observed in postmarketing reports and at the therapeutic dosage of CNS stimulants in all age groups throughout the course of treatment. Signs and symptoms generally improved after dosage reduction or discontinuation of the CNS stimulant.

Careful observation for digital changes is necessary during Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules treatment. Further clinical evaluation (e.g., rheumatology referral) may be appropriate for Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules-treated patients who develop signs or symptoms of peripheral vasculopathy.

5.7 Seizures

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules may lower the convulsive threshold in patients with prior history of seizure, in patients with prior EEG abnormalities in the absence of seizures, and in patients without a history of seizures and no prior EEG evidence of seizures. In the presence of seizures, Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules should be discontinued.

5.8 Serotonin Syndrome

Serotonin syndrome, a potentially life-threatening reaction, may occur when amphetamines are used in combination with other drugs that affect the serotonergic neurotransmitter systems such as monoamine oxidase inhibitors (MAOIs), selective serotonin reuptake inhibitors (SSRIs), serotonin norepinephrine reuptake inhibitors (SNRIs), triptans, tricyclic antidepressants, fentanyl, lithium, tramadol, tryptophan, buspirone, and St. John's Wort [see *Drug Interactions (7.1)*]. The co-administration with cytochrome P450 2D6 (CYP2D6) inhibitors may also increase the risk with increased exposure to Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules. In these situations, consider an alternative non-serotonergic drug or an alternative drug that does not inhibit CYP2D6 [see *Drug Interactions (7.1)*].

Serotonin syndrome symptoms may include mental status changes (e.g., agitation, hallucinations, delirium, and coma), autonomic instability (e.g., tachycardia, labile blood pressure, dizziness, diaphoresis, flushing, hyperthermia), neuromuscular symptoms (e.g., tremor, rigidity, myoclonus, hyperreflexia, incoordination), seizures, and/or gastrointestinal symptoms (e.g., nausea, vomiting, diarrhea).

Concomitant use of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules with MAOI drugs is contraindicated [see *Contraindications (4)*].

Discontinue treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules and any concomitant serotonergic agents immediately if the above symptoms occur, and initiate supportive symptomatic treatment. If concomitant use of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules with other serotonergic drugs or CYP2D6 inhibitors is clinically warranted, initiate Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules with lower doses, monitor patients for the emergence of serotonin syndrome during drug initiation or titration, and inform patients of the increased risk for serotonin syndrome.

5.9 Potential for Overdose Due to Medication Errors

Medication errors, including substitution and dispensing errors, between Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules and other amphetamine products could occur, leading to possible overdose. To avoid substitution errors and overdose, do not substitute for other amphetamine products on a milligram-per-milligram basis because of different amphetamine base compositions and differing pharmacokinetic profiles [see *Dosage and Administration (2.7)*, *Overdosage (10)*].

5.10 Motor and Verbal Tics, and Worsening of Tourette's Syndrome

CNS stimulants, including amphetamine, have been associated with the onset or exacerbation of motor and verbal tics. Worsening of Tourette's syndrome has also been reported [see *Adverse Reactions (6.2)*].

Before initiating Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, assess the family history and clinically evaluate patients for tics or Tourette's syndrome. Regularly monitor Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules-treated patients for the emergence or worsening of tics or Tourette's syndrome, and discontinue treatment if clinically appropriate.

6 ADVERSE REACTIONS

The following adverse reactions are discussed in greater detail in other sections of the labeling:

- Abuse, Misuse, and Addiction [see *Boxed Warning, Warnings and Precautions (5.1)*, *Drug Abuse and Dependence (9.2, 9.3)*]
- Hypersensitivity to amphetamine products or other ingredients of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules [see *Contraindications (4)*]
- Hypertensive Crisis When Used Concomitantly with Monoamine Oxidase Inhibitors [see *Contraindications (4)*, *Drug Interactions (7.1)*]
- Risks to Patients with Serious Cardiac Disease [see *Warnings and Precautions (5.2)*]
- Increased Blood Pressure and Heart Rate [see *Warnings and Precautions (5.3)*]
- Psychiatric Adverse Reactions [see *Warnings and Precautions (5.4)*]
- Long-Term Suppression of Growth in Pediatric Patients [see *Warnings and Precautions (5.5)*]
- Peripheral Vasculopathy, including Raynaud's phenomenon [see *Warnings and Precautions (5.6)*]
- Seizures [see *Warnings and Precautions (5.7)*]
- Serotonin Syndrome [see *Warnings and Precautions (5.8)*]
- Motor and Verbal Tics, and Worsening of Tourette's Syndrome [see *Warnings and Precautions (5.10)*]

6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in clinical practice.

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules were

studied in adults (18 to 55 years) and pediatric patients (13 to 17 years) who met Diagnostic and Statistical Manual of Mental Disorders, 4th or 5th editions (DSM-IV-TR[®] or DSM-5) criteria for ADHD. The safety data for adults were pooled from three randomized, double-blind, placebo-controlled studies in doses of 12.5 mg to 75 mg per day (1.5 times the maximum recommended dosage). Doses higher than 50 mg per day did not demonstrate additional clinical benefit and are not recommended.

The safety data for pediatric patients (13 to 17 years) is from 1 randomized, double-blind, placebo-controlled study of doses of 12.5 mg to 25 mg. The total exposure in patients treated with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules totalled 704; this included pediatric patients, 78 adolescent patients and 626 adult patients from multiple well-controlled trials. The duration of use ranged from 4 to 7 weeks [see *Clinical Studies (14)*].

Adverse Reactions Leading to Discontinuation of Treatment

In pooled controlled trials of adult patients, 9% (54/626) of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules-treated patients discontinued due to adverse reactions compared to 2% (7/328) of placebo-treated patients. The most frequent adverse reactions leading to discontinuation (i.e., leading to discontinuation in at least 1% of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules-treated patients and at a rate at least twice that of placebo) were insomnia (2%, n=15), blood pressure increased (2%, n=10), decreased appetite (1%, n=5), and headache (1%, n=4).

In a controlled trial including adolescent patients (13 to 17 years), 5% (4/78) of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules-treated patients discontinued due to adverse reactions compared to 0% (0/79) of placebo-treated patients. The most frequent adverse reaction leading to discontinuation (i.e., leading to discontinuation in at least 1% of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules-treated patients and at a rate at least twice that of placebo) were dizziness (1%, n=1), depression (1%, n=1), abdominal pain upper (1%, n=1), and viral infection (1%, n=1).

Adverse Reactions Occurring at an Incidence of \geq 2% and at Least Twice Placebo Among Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules-Treated Adults in Clinical Trials

The most common adverse reactions reported in adults were insomnia, decreased appetite, dry mouth, decreased weight, heart rate increased, and anxiety. Table 1 lists the adverse reactions that occurred \geq 2% compared to placebo. The most common adverse reaction (insomnia) generally occurred early during treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules.

Table 1 Adverse Reactions Reported by 2% or More of Adults Taking Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules and at Least Twice the Incidence in Patients Taking Placebo in 3 Clinical Trials (4, 6, and 7 Weeks)

Body System	Adverse Reaction	Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules* (N=626)	Placebo (N=328)
Nervous System			

	Anxiety	7%	3%
	Feeling Jittery	2%	1%
	Agitation	2%	0%
	Bruxism	2%	0%
Psychiatric Disorders			
	Insomnia	31%	8%
	Depression	3%	0%
Metabolism and Nutritional Disorders			
	Decreased Appetite	30%	4%
	Weight Decreased	9%	0%
Gastrointestinal System			
	Dry Mouth	23%	4%
	Diarrhea	3%	1%
Cardiovascular System			
	Heart Rate Increased	9%	0%
	Palpitations	4%	2%
Genitourinary System			
	Dysmenorrhea [†]	4%	2%
	Erectile Dysfunction [‡]	2%	1%

* Includes doses up to 75 mg (1.5 times the maximum recommended dosage).

[†] Dysmenorrhea was observed in 11 females

[‡] Erectile dysfunction was observed in 6 males

Adverse Reactions Occurring at an Incidence of 2% or More and at Least Twice Placebo Among Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules-Treated Adolescents (13 to 17 years) in a 4-Week Clinical Trial

The most common adverse reactions reported in adolescents were decreased appetite, nausea, insomnia, abdominal pain upper, irritability, and weight decreased. Table 2 lists the adverse reactions that occurred $\geq 2\%$ compared to placebo.

Table 2 Adverse Reactions Reported by $\geq 2\%$ or More of Adolescents Taking Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules and at Least Twice the Incidence in Patients Taking Placebo in a 4-Week Clinical Trial

Body System	Adverse Reaction	Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules	Placebo (N=79)
-------------	------------------	------------------------------------------------------------------------------	----------------

		(N=78)	
Nervous System			
	Dizziness	4%	0%
Metabolism and Nutrition Disorders			
	Decreased Appetite	22%	6%
	Weight Decreased	5%	1%
Psychiatric Disorders			
	Irritability	6%	3%
	Insomnia*	8%	3%
Gastrointestinal Disorders			
	Nausea	8%	4%
	Abdominal Pain, Upper	4%	1%

* *Insomnia includes terms: initial insomnia, middle insomnia, terminal insomnia and insomnia.*

6.2 Adverse Reactions Associated with the Use of Amphetamines

The following adverse reactions have been associated with the use of amphetamines. The following adverse reactions have been identified during post-approval use of amphetamines. Because these reactions are reported voluntarily from a population of uncertain size, it is not possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

Allergic: Urticaria, rash, hypersensitivity reactions, including angioedema and anaphylaxis. Serious skin rashes, including Stevens-Johnson syndrome and toxic epidermal necrolysis have been reported.

Cardiovascular: Dyspnea, sudden death. There have been isolated reports of cardiomyopathy associated with chronic amphetamine use.

Central Nervous System: Psychotic episodes at recommended doses, overstimulation, restlessness, euphoria, dyskinesia, dysphoria, headache, tics, fatigue, aggression, anger, logorrhea, dermatillomania, and paresthesia (including formication), motor and verbal tics.

Endocrine: Impotence, changes in libido, frequent or prolonged erections.

Eye Disorders: Mydriasis.

Gastrointestinal: Unpleasant taste, constipation, intestinal ischemia.

Musculoskeletal and Connective Tissue Disorders: Rhabdomyolysis.

Skin: Alopecia.

Vascular Disorders: Raynaud's phenomenon.

7 DRUG INTERACTIONS

7.1 Drugs Having Clinically Important Interactions with Amphetamines

Table 3 Drugs Having Clinically Important Interactions with Amphetamines

<i>Monoamine Oxidase Inhibitors (MAOIs)</i>	
Clinical Impact	MAOI antidepressants slow amphetamine metabolism, increasing amphetamines effect on the release of norepinephrine and other monoamines from adrenergic nerve endings causing headaches and other signs of hypertensive crisis. Toxic neurological effects and malignant hyperpyrexia can occur, sometimes with fatal results.
Intervention	Do not administer Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules during or within 14 days following the administration of MAOI [see <i>Contraindications (4)</i>].
<i>Serotonergic Drugs</i>	
Clinical Impact	The concomitant use of amphetamines and serotonergic drugs increases the risk of serotonin syndrome.
Intervention	Initiate with lower doses and monitor patients for signs and symptoms of serotonin syndrome, particularly during Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules initiation or dosage increase. If serotonin syndrome occurs, discontinue Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules and concomitant serotonergic drug(s) [see <i>Warnings and Precautions (5.7)</i>].
<i>Alkalinizing Agents</i>	
Clinical Impact	May increase exposure to amphetamine and exacerbate the action of amphetamine.
Intervention	Caution should be taken when co-administering Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules and gastrointestinal and urinary alkalinizing agents.
<i>Acidifying Agents</i>	
Clinical Impact	Lower blood levels and efficacy of amphetamines.
Intervention	Increase dose of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules based on clinical response.
<i>Tricyclic Antidepressants</i>	
Clinical Impact	May enhance the activity of tricyclic or sympathomimetic agents causing sustained increases in the concentration of <i>d</i> -amphetamine in the brain; cardiovascular effects can be potentiated.
Intervention	Monitor frequently and adjust Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules dose or use alternative therapy based on clinical response.
<i>CYP2D6 Inhibitors</i>	
Clinical Impact	May increase the exposure of amphetamine.
Intervention	Start with lower doses and monitor frequently and adjust Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules dose or

	use alternative therapy based on clinical response.
<i>Gastric pH Modulators</i>	
Clinical Impact	Potential change in shape of PK profile and exposure may occur.
Intervention	Monitor patients for changes in clinical effect and use alternative therapy based on clinical response.

7.2 Drug/Laboratory Test Interactions

Amphetamines can cause a significant elevation in plasma corticosteroid levels. This increase is greatest in the evening. Amphetamines may interfere with urinary steroid determinations.

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Pregnancy Exposure Registry

There is a pregnancy exposure registry that monitors pregnancy outcomes in women exposed to Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules during pregnancy. Healthcare providers are encouraged to register patients by calling the National Pregnancy Registry for Psychiatric Medications at 1-866-961-2388 or visiting online at <https://womensmentalhealth.org/research/pregnancyregistry/>.

Risk Summary

The limited available data from published literature and postmarketing reports on use of amphetamine in pregnant women are not sufficient to inform a drug-associated risk for major birth defects and miscarriage. Adverse pregnancy outcomes, including premature delivery and low birth weight, have been seen in infants born to mothers dependent on amphetamines [see *Clinical Considerations*].

In an embryofetal development study, amphetamine (*d*- to *l*- enantiomer ratio of 3:1, the same as in Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules) had no effects on embryofetal morphological development or survival when administered to pregnant rats and rabbits throughout the period of organogenesis up to doses 10 times the maximum recommended human dose (MRHD) of 25 mg/day given to adolescents, on a mg/m² body surface area basis. However, in a pre- and post-natal development study, amphetamine (*d*- to *l*- ratio of 3:1) administered orally to pregnant rats during gestation and lactation caused a decrease in pup survival and a decrease in pup body weight that correlated with a delay in developmental landmarks at clinically relevant doses of amphetamine. In addition, adverse effects on reproductive performance were observed in pups whose mothers were treated with amphetamine. Long-term neurochemical and behavioral effects have also been reported in animal developmental studies using clinically relevant doses of amphetamine [see *Data*].

The estimated background risk of major birth defects and miscarriage for the indicated population is unknown. All pregnancies have a background risk of birth defect, loss or other adverse outcomes. In the U.S. general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2 to 4% and 15 to 20%, respectively.

Clinical Considerations

Fetal/Neonatal Adverse Reactions

Amphetamines, such as Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, cause vasoconstriction and thereby may decrease placental perfusion. In addition, amphetamines can stimulate uterine contractions increasing the risk of premature delivery. Infants born to amphetamine-dependent mothers have an increased risk of premature delivery and low birth weight.

Monitor infants born to mothers taking amphetamines for symptoms of withdrawal such as feeding difficulties, irritability, agitation, and excessive drowsiness.

Data

Animal Data

Amphetamine (*d*- to *l*- enantiomer ratio of 3:1, the same as in Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules) had no apparent effects on embryofetal morphological development or survival when administered orally to pregnant rats and rabbits throughout the period of organogenesis at doses of up to 6 and 16 mg/kg/day, respectively. These doses are approximately 2 and 10 times, respectively, the maximum recommended human dose (MRHD) of 25 mg/day given to adolescents, on a mg/m² body surface area basis. Fetal malformations and death have been reported in mice following parenteral administration of *d*-amphetamine doses of 50 mg/kg/day (approximately 8 times the MRHD given to adolescents on a mg/m² basis) or greater to pregnant animals. Administration of these doses was also associated with severe maternal toxicity.

A pre- and postnatal development study was conducted with amphetamine (*d*- to *l*- enantiomer ratio of 3:1) in which pregnant rats received daily oral doses of 2, 6, and 10 mg/kg from gestation day 6 to lactation day 20. These doses are approximately 0.6, 2, and 3 times the MRHD of 25 mg/day amphetamine (*d*- to *l*- ratio of 3:1) given to adolescents, on a mg/m² basis. All doses caused hyperactivity and decreased weight gain in the dams. A decrease in pup survival was seen at all doses. A decrease in pup body weight was seen at 6 and 10 mg/kg which correlated with delays in developmental landmarks, such as preputial separation and vaginal opening. Increased pup locomotor activity was seen at 10 mg/kg on day 22 postpartum but not at 5 weeks postweaning. When pups were tested for reproductive performance at maturation, gestational weight gain, number of implantations, and number of delivered pups were decreased in the group whose mothers had been given 10 mg/kg.

A number of studies from the literature in rodents indicate that prenatal or early postnatal exposure to amphetamine (*d*- or *d*, *l*-) at doses similar to those used clinically can result in long-term neurochemical and behavioral alterations. Reported behavioral effects include learning and memory deficits, altered locomotor activity, and changes in sexual function.

8.2 Lactation

Risk Summary

Based on limited case reports in published literature, amphetamine (*d*- or *d*, *l*-) is present in human milk, at relative infant doses of 2% to 13.8% of the maternal weight-adjusted dosage and a milk/plasma ratio ranging between 1.9 and 7.5. There are no reports of adverse effects on the breastfed infant. Long-term neurodevelopmental effects on infants from amphetamine exposure are unknown. It is possible that large dosages of

dextroamphetamine might interfere with milk production, especially in women whose lactation is not well established. Because of the potential for serious adverse reactions in nursing infants, including serious cardiovascular reactions, blood pressure and heart rate increase, suppression of growth, and peripheral vasculopathy, advise patients that breastfeeding is not recommended during treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules.

8.4 Pediatric Use

The safety and effectiveness of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules in pediatric patients with ADHD ages 13 to 17 years have been established in two placebo-controlled clinical studies [see *Adverse Reactions (6.1)*, *Clinical Pharmacology (12.3)*, *Clinical Studies (14)*].

The safety and effectiveness of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules have not been established in pediatric patients ages 12 years and younger.

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules have been studied for the treatment of ADHD in pediatric patients 6 to 12 years in two placebo controlled safety and efficacy trials. In the first trial, pediatric patients 6 to 12 years experienced higher rates of adverse reactions in some cases compared to patients 13 years and older, including higher rates of insomnia (30% versus 8%) and appetite decreased (43% versus 22%). In addition, amphetamine systemic exposures (both *d*- and *l*-) in pediatric patients 6 to 12 years following a single dose were higher than those observed in adults at the same dose (72-79% higher C_{max} and approximately 83% higher AUC). A second trial evaluated a lower dose than those approved for pediatric patients 13 to 17 years; efficacy was not demonstrated for the lower dose. Therefore, a safe and effective dose cannot be established in pediatric patients 12 years and younger.

Growth Suppression

Growth should be monitored during treatment with stimulants, including Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, in pediatric patients 13 to 17 years who are not growing or gaining weight as expected may need to have their treatment interrupted [see *Warnings and Precautions (5.5)*, *Adverse Reactions (6.1)*].

Juvenile Animal Toxicity Data

Juvenile rats treated with mixed amphetamine salts (same as in Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules) early in the postnatal period through sexual maturation demonstrated transient changes in motor activity. Learning and memory was impaired at approximately 8 times the maximum recommended human dose (MRHD) given to children on a mg/m^2 basis. No recovery was seen following a drug free period. A delay in sexual maturation was observed at a dose approximately 8 times the MRHD given to children on a mg/m^2 basis, although there was no effect on fertility.

In a juvenile developmental study, rats received daily oral doses of amphetamine (*d* to *l* enantiomer ratio of 3:1, the same as in Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules) of 2, 6, or 20 mg/kg on days 7 to 13 of age; from day 14 to approximately day 60 of age these doses were given b.i.d. for total daily doses of 4, 12, or 40 mg/kg . The latter doses are approximately 0.8, 2, and 8 times the MRHD

of 25 mg/day given to children on a mg/m² basis. Post-dosing hyperactivity was seen at all doses; motor activity measured prior to the daily dose was decreased during the dosing period but the decreased motor activity was largely absent after an 18 day drug-free recovery period. Performance in the Morris water maze test for learning and memory was impaired at the 40 mg/kg dose, and sporadically at the lower doses, when measured prior to the daily dose during the treatment period; no recovery was seen after a 19 day drug-free period. A delay in the developmental milestones of vaginal opening and preputial separation was seen at 40 mg/kg but there was no effect on fertility.

8.5 Geriatric Use

Clinical studies of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently from younger subjects. Other reported clinical experience has not identified differences in responses between the elderly and younger patients. In general, dose selection for an elderly patient should start at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

8.6 Renal Impairment

Due to reduced clearance of amphetamine in patients with severe renal insufficiency (GFR 15 to < 30 mL/min/1.73 m²), the maximum dose in adults should be reduced. Pediatric patients ages 13 to 17 years with severe renal insufficiency can be given the recommended starting dose if tolerated, but the dose should not be escalated. Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules are not recommended in patients with ESRD (GFR < 15 mL/min/1.73 m²) [see *Dosage and Administration (2.6)*, *Clinical Pharmacology (12.3)*].

D-amphetamine is not dialyzable.

9 DRUG ABUSE AND DEPENDENCE

9.1 Controlled Substance

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules contain mixed amphetamine salts, a Schedule II controlled substance.

9.2 Abuse

Mixed Salts of a Single-Entity Amphetamine Product have a high potential for abuse and misuse which can lead to the development of a substance use disorder, including addiction [see *Warnings and Precautions (5.1)*]. Mixed Salts of a Single-Entity Amphetamine Product can be diverted for non-medical use into illicit channels or distribution.

Abuse is the intentional non-therapeutic use of a drug, even once, to achieve a desired psychological or physiological effect. Misuse is the intentional use, for therapeutic purposes, of a drug by an individual in a way other than prescribed by a healthcare provider or for whom it was not prescribed. Drug addiction is a cluster of behavioral, cognitive, and physiological phenomena that may include a strong desire to take the

drug, difficulties in controlling drug use (e.g., continuing drug use despite harmful consequences, giving a higher priority to drug use than other activities and obligations), and possible tolerance or physical dependence.

Misuse and abuse of amphetamine may cause increased heart rate, respiratory rate, or blood pressure; sweating; dilated pupils; hyperactivity; restlessness; insomnia; decreased appetite; loss of coordination; tremors; flushed skin; vomiting; and/or abdominal pain. Anxiety, psychosis, hostility, aggression, and suicidal or homicidal ideation have also been observed with CNS stimulants abuse and/or misuse. Misuse and abuse of CNS stimulants, including Mixed Salts of a Single-Entity Amphetamine Product, can result in overdose and death [see *Overdosage (10)*], and this risk is increased with higher doses or unapproved methods of administration, such as snorting or injection.

9.3 Dependence

Physical Dependence

Mixed Salts of a Single-Entity Amphetamine Product may produce physical dependence. Physical dependence is a state that develops as a result of physiological adaptation in response to repeated drug use, manifested by withdrawal signs and symptoms after abrupt discontinuation or a significant dose reduction of a drug.

Withdrawal signs and symptoms after abrupt discontinuation or dose reduction following prolonged use of CNS stimulants including Mixed Salts of a Single-Entity Amphetamine Product include dysphoric mood; depression; fatigue; vivid, unpleasant dreams; insomnia or hypersomnia; increased appetite; and psychomotor retardation or agitation.

Tolerance

Mixed Salts of a Single-Entity Amphetamine Product may produce tolerance. Tolerance is a physiological state characterized by a reduced response to a drug after repeated administration (i.e., a higher dose of a drug is required to produce the same effect that was once obtained at a lower dose).

10 OVERDOSAGE

Clinical Effects of Overdose

Overdose of CNS stimulants is characterized by the following sympathomimetic effects:

- Cardiovascular effects including tachyarrhythmias, and hypertension or hypotension. Vasospasm, myocardial infarction, or aortic dissection may precipitate sudden cardiac death. Takotsubo cardiomyopathy may develop.
- CNS effects including psychomotor agitation, confusion, and hallucinations. Serotonin syndrome, seizures, cerebral vascular accidents, and coma may occur.
- Life-threatening hyperthermia (temperatures greater than 104°F) and rhabdomyolysis may develop.

Overdose Management

Consider the possibility of multiple drug ingestion. The pharmacokinetic profile of Mixed Salts of a Single-Entity Amphetamine Product should be considered when treating patients with overdose. D-amphetamine is not dialyzable. Consider contacting the Poison Help line (1-800-222-1222) or a medical toxicologist for additional overdose management recommendations.

11 DESCRIPTION

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules contain mixed salts of a single-entity amphetamine, a CNS stimulant. Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules contain equal amounts (by weight) of four salts: dextroamphetamine sulfate and amphetamine sulfate, dextroamphetamine saccharate and amphetamine aspartate monohydrate. This results in a 3:1 mixture of dextro- to levoamphetamine base equivalent.

The 12.5 mg, 25 mg, 37.5 mg and 50 mg strength capsules are for oral administration. They contain three types of drug-releasing beads, an immediate release and two different types of delayed release (DR) beads. The first DR bead releases amphetamine at pH 5.5 and the other DR bead releases amphetamine at pH 7.0.

<u>EACH CAPSULE CONTAINS:</u>	<u>CAPSULE STRENGTHS</u>			
	<u>12.5 mg</u>	<u>25 mg</u>	<u>37.5 mg</u>	<u>50 mg</u>
Dextroamphetamine Saccharate	3.125 mg	6.250 mg	9.375 mg	12.500 mg
Amphetamine Aspartate Monohydrate	3.125 mg	6.250 mg	9.375 mg	12.500 mg
Dextroamphetamine Sulfate	3.125 mg	6.250 mg	9.375 mg	12.500 mg
Amphetamine Sulfate	3.125 mg	6.250 mg	9.375 mg	12.500 mg
Total mixed amphetamine salts	12.500 mg	25 mg	37.5 mg	50 mg
Total amphetamine base equivalence	7.8 mg	15.6 mg	23.5 mg	31.3 mg

Inactive Ingredients and Colors: The inactive ingredients in Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules include: hard gelatin capsules, ethylcellulose, medium-chain triglycerides, oleic acid, hydroxypropyl cellulose, magnesium stearate, Methacrylic Acid and Ethyl Acrylate Copolymer, sodium lauryl sulfate, polysorbate, sucrose, corn starch, talc, triethyl citrate, and (poly(methyl acrylate-co-methyl methacrylate-co-methacrylic acid 7:3:1; 280000 mw)). The gelatin capsules for all four strengths contain gelatin, Sodium lauryl sulfate, titanium dioxide, and edible inks which contain shellac glaze, propylene glycol, potassium hydroxide, and black iron oxide. The 12.5 mg strength gelatin capsules also contain yellow iron oxide. The 37.5 mg strength contains FD&C Blue No. 1 and FD&C Red No. 3. The 50 mg strength capsule also contains FD&C Blue No. 1.

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

Amphetamines are non-catecholamine sympathomimetic amines with CNS stimulant activity. The exact mode of therapeutic action in ADHD is not known.

12.2 Pharmacodynamics

Amphetamines block the reuptake of norepinephrine and dopamine into the presynaptic neuron and increase the release of these monoamines into the extraneuronal space.

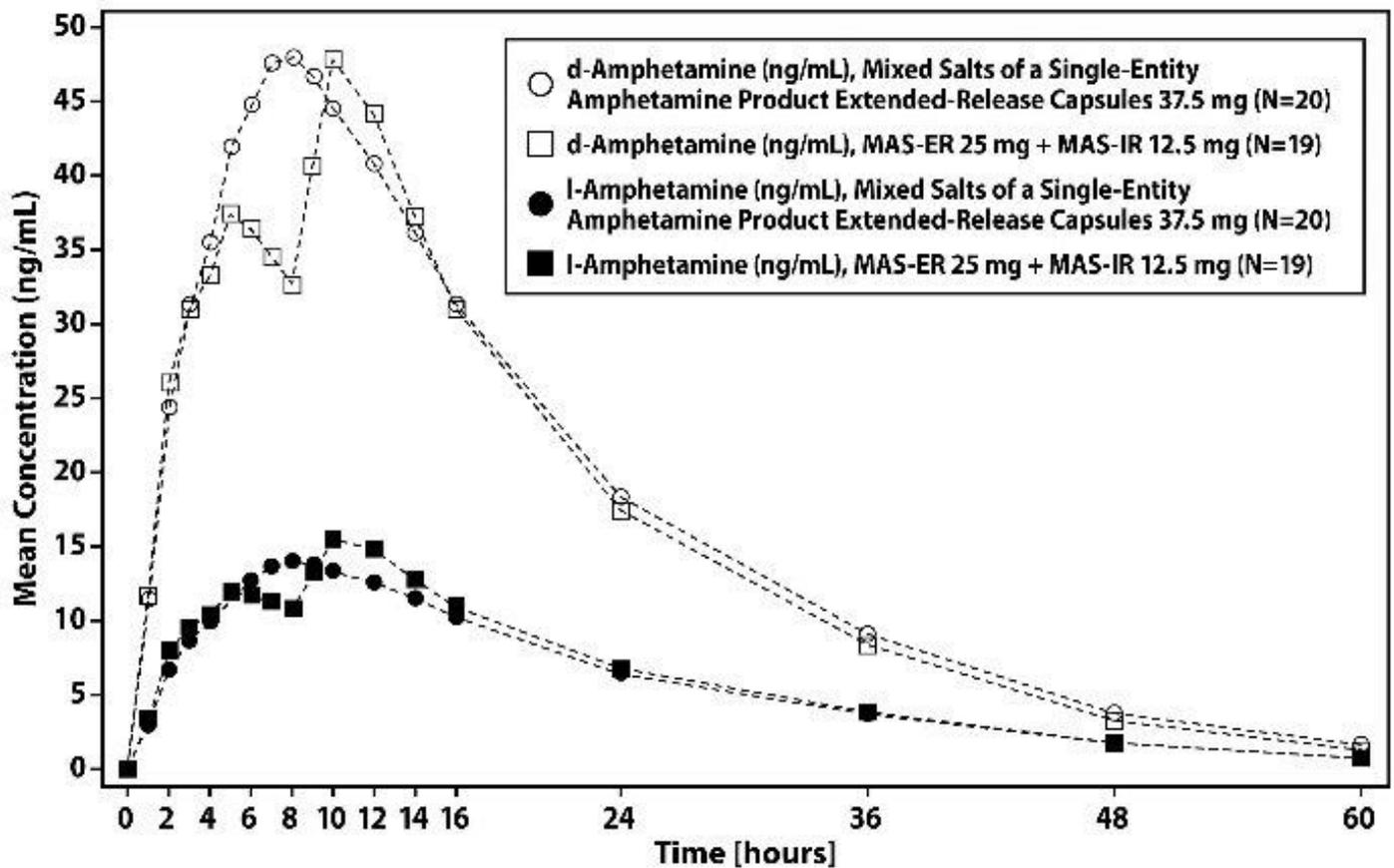
12.3 Pharmacokinetics

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules contain *d*-amphetamine and *l*-amphetamine salts in the ratio of 3:1. Pharmacokinetic studies of *d*- and *l*-amphetamine after oral administration of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules have been conducted in healthy adults (19 to 52 years) and pediatric patients (6 to 17 years) with ADHD. Following administration of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, the peak plasma concentrations occurred in about 7 to 10 hours in pediatric patients and about 8 hours in adults for both *d*-amphetamine and *l*-amphetamine. The mean plasma elimination half-life for *d*-amphetamine ranges from about 10 to 11 hours and *l*-amphetamine from 10 to 13 hours in both pediatric and adult patients.

Absorption

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules exhibit linear dose proportionality over the range of 12.5 to 50 mg. Steady-state is achieved between Days 7 and 8 of dosing with mean accumulation ratio of 1.6. A single dose of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release 37.5 mg capsules provided comparable plasma concentration profiles of both *d*- and *l*-amphetamine to mixed amphetamine salts extended release (MAS-ER) 25 mg followed by 12.5 mg immediate release amphetamine administered 8 hours later (Figure 1).

Figure 1 Mean Plasma Concentrations of *d*- and *l*-Amphetamine Following Oral Administration of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules 37.5 mg vs MAS-ER 25 mg Followed by Immediate-Release MAS-IR 12.5 mg 8 Hours Later in Adults



Effect of Food

High-fat meal does not affect the extent of absorption of *d*- and *l*-amphetamine when taken with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules. T_{max} is prolonged by 5 hours (from 7.0 hours at fasted state to 12.0 hours after a high-fat meal) for *d*-amphetamine and 4.5 hours (from 7.5 hours at fasted state to 12 hours after a high-fat meal) for *l*-amphetamine after administration of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules 50 mg with high-fat meal. Opening the capsule and sprinkling the contents on applesauce results in comparable absorption and exposure to the intact capsule taken in the fasted state [see *Dosage and Administration* (2.3)].

Effect of Alcohol

The *in vitro* testing showed increases in amphetamine release rate from Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules in the presence of 20% and, more noticeably, 40% alcohol. There is no *in vivo* study conducted for the effect of alcohol on drug exposure.

Elimination

Metabolism

Amphetamine is reported to be oxidized at the 4 position of the benzene ring to form 4-hydroxyamphetamine, or on the side chain α or β carbons to form alpha-hydroxyamphetamine or norephedrine, respectively. Norephedrine and 4-hydroxyamphetamine are both active and each is subsequently oxidized to form 4-hydroxy-norephedrine. Alpha-hydroxyamphetamine undergoes deamination to form phenylacetone, which ultimately forms benzoic acid and its glucuronide and the glycine conjugate hippuric acid. Although the enzymes involved in amphetamine metabolism have not yet been clearly defined, CYP2D6 is known to be involved with formation of 4-hydroxy-amphetamine.

Since CYP2D6 is genetically polymorphic, population variations in amphetamine metabolism are a possibility.

Amphetamine is known to inhibit monoamine oxidase. Amphetamines are not an *in vitro* inhibitor of the major human CYP450 isoforms (CYP1A2, CYP2C9, CYP2C19, CYP2D6, and CYP3A4), nor was it an *in vitro* inducer of CYP1A2, CYP2B6 or CYP3A4/5. Amphetamines are not an *in vitro* substrate for P-gp.

Excretion

The renal excretion is the primary route for elimination of *d*- and *l*-amphetamine and its metabolites after administration of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules.

At normal urine pHs, approximately half of an administered dose of amphetamine is recoverable in urine as derivatives of alpha-hydroxy-amphetamine and approximately another 30% to 40% of the dose is recoverable in urine as amphetamine itself. Urinary recovery of amphetamine is highly dependent on pH and urine flow rates. Alkaline urine pHs result in less ionization and reduced renal elimination, and acidic pHs and high flow rates result in increased renal elimination. Urinary recovery of amphetamine has been reported to range from 1% to 75%, and the fraction of a dose hepatically metabolized is dependent on urine pH. Consequently, both hepatic and renal dysfunctions have the potential to alter the elimination of amphetamine and could result in prolonged exposures [see *Drug Interactions (7.1)*].

Specific Populations

Age

Comparison of the pharmacokinetics of *d*- and *l*-amphetamine after oral administration of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules in pediatric patients with ADHD 13 to 17 years old and healthy adult subjects (19 to 52 years) indicates that body weight is the primary determinant of apparent differences in the pharmacokinetics of *d*- and *l*-amphetamine across the age range.

PK data from patients age 13 to 17 years (n=14) who received a single 25 mg Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsule was scaled (based on PK proportionality) and compared with PK data from adult patients 19 to 51 years (n=20) who received 37.5 mg. Based on dose proportionality, a single dose of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules administered to pediatric patients age 13 to 17 years (n=14) would produce about 21 to 31% higher C_{max} for *d*- and *l*-amphetamine and 21 to 31% higher AUC for *d*- and *l*-amphetamine, compared to the same dose of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules administered to adults (age 19 to 51 years).

Male and Female Patients

In pharmacokinetic studies, systemic exposure to *d*- and *l*-amphetamine was similar in women (N=41) and in men (N=61).

Racial Groups

Formal pharmacokinetic studies for race have not been conducted. However, amphetamine pharmacokinetics appeared to be comparable among Whites (N=41), Blacks (N=27), and Hispanics (N=34).

Patients with Renal impairment

The effect of renal impairment on *d*- and *l*-amphetamine after administration of Mixed

Salts of a Single-Entity Amphetamine Product Extended-Release Capsules has not been studied.

In a pharmacokinetic study of lisdexamfetamine in adult subjects with normal and impaired renal function mean *d*-amphetamine clearance was reduced from 0.7 L/hr/kg in normal subjects to 0.4 L/hr/kg in subjects with severe renal impairment (GFR 15 to < 30 mL/min/1.73 m²) patients. Dialysis did not significantly affect the clearance of *d*-amphetamine. The impact of renal impairment on the disposition of amphetamine would be expected to be similar between oral administration of lisdexamfetamine and Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules [see *Use in Specific Populations (8.6)*].

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

Carcinogenesis

No evidence of carcinogenicity was found in studies in which *d, l*-amphetamine (enantiomer ratio of 1:1) was administered to mice and rats in the diet for 2 years at doses of up to 30 mg/kg/day in male mice, 19 mg/kg/day in female mice, and 5 mg/kg/day in male and female rats. These doses are approximately 3, 2, and 1 times, respectively, the maximum recommended human dose of 50 mg/day on a mg/m² body surface area basis in adults.

Mutagenesis

Amphetamine, in the enantiomer ratio present, *d*- to *l*- ratio of 3:1, was not clastogenic in the mouse bone marrow micronucleus test *in vivo* and was negative when tested in the *E. coli* component of the Ames test *in vitro*. *d, l*-Amphetamine (1:1 enantiomer ratio) has been reported to produce a positive response in the mouse bone marrow micronucleus test, an equivocal response in the Ames test, and negative responses in the *in vitro* sister chromatid exchange and chromosomal aberration assays.

Impairment of Fertility

Amphetamines, in the enantiomer ratio, *d*- to *l*- ratio of 3:1, did not adversely affect fertility or early embryonic development in the rat at doses of up to 20 mg/kg/day (approximately 6 times the maximum recommended human dose of 25 mg/day given to adolescents on a mg/m² body surface area basis).

13.2 Animal Toxicology and/or Pharmacology

Acute administration of high doses of amphetamine (*d*- or *d, l*-) has been shown to produce long-lasting neurotoxic effects, including irreversible nerve fiber damage in rodents. The significance of these findings to humans is unknown.

14 CLINICAL STUDIES

Efficacy of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules in the treatment of ADHD was established in the following trials:

- Three short-term trials in adults (18 to 55 years, Studies 1, 2, and 3)
- Two short-term trials in pediatric patients (13 to 17 years, Studies 4 and 5)

Adult Patients (18 to 55 Years) with ADHD

The approved adult doses, 12.5 mg, 25 mg, and 37.5 mg are based on Studies 1 and 3 and the 50 mg dose efficacy is based on Study 2. Doses up to 75 mg per day (1.5 times the maximum recommended adult dosage) were evaluated, but demonstrated no additional clinical benefit.

A 4-week, randomized, double-blind, multi-center, placebo-controlled, forced-dose titration, safety and efficacy study (Study 1) was conducted in adults aged 18 to 55 years (N=275) who met DSM-5 criteria for ADHD. Patients were randomized in a 1:1:1 ratio, to two Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules treatment groups and a placebo group. Group 1 received a dose of 12.5 mg/day throughout the study. Group 2 were titrated on a weekly basis from the initial dose 12.5 mg until target dose of 37.5 mg/day was reached by Week 3 and were maintained at 37.5 mg throughout the study. Group 3 received placebo.

The primary efficacy endpoint was defined as the change from baseline of the adult ADHD-Rating Scale (RS) with prompts total score at Week 4. Baseline adult ADHD-RS with prompts total score was defined as the last valid adult ADHD-RS with prompts total score assessment prior to taking the first dose of double-blind investigational product, usually at Visit 2. The primary comparison of interest was at Week 4 for each Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules dose compared with placebo. Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules demonstrated a statistically significant treatment effect compared with placebo on change of ADHD-RS total score from baseline at visit 6 (Week 4), for both 12.5 mg and 37.5 mg doses respectively (Study 1 in Table 4). Patients on Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules also showed statistically significantly greater improvement on the Clinical Global Impression of Improvement (CGI-I) score compared with placebo treatment.

Two multi-center, randomized, double-blind, placebo-controlled, crossover studies of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules 25 mg/day (Study 3) and 50 mg/day (Study 2) were conducted in adult patients who met DSM-IV TR criteria for ADHD. The efficacy was determined using the Permanent Product Measure of Performance (PERMP), a skill-adjusted math test that measures attention in ADHD. PERMP total score results from the sum of the number of math problems attempted plus the number of math problems answered correctly. Efficacy assessments were conducted at 2, 4, 8, 12, 14, and 16 hours post-dose using the PERMP. Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules treatment, compared to placebo, reached statistical significance at either 2 hours (Study 2) or 4 hours (Study 3) post-dose to 16 hours post-dose in both studies. In a pre-specified supplementary analysis for Study 2, the maximum approved dose of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules (50 mg) demonstrated a statistically significant treatment effect compared with placebo beginning at 2 to 16 hours post-dose (Study 2 and Study 3 in Table 4).

Pediatric Patients (13 to 17 Years) with ADHD

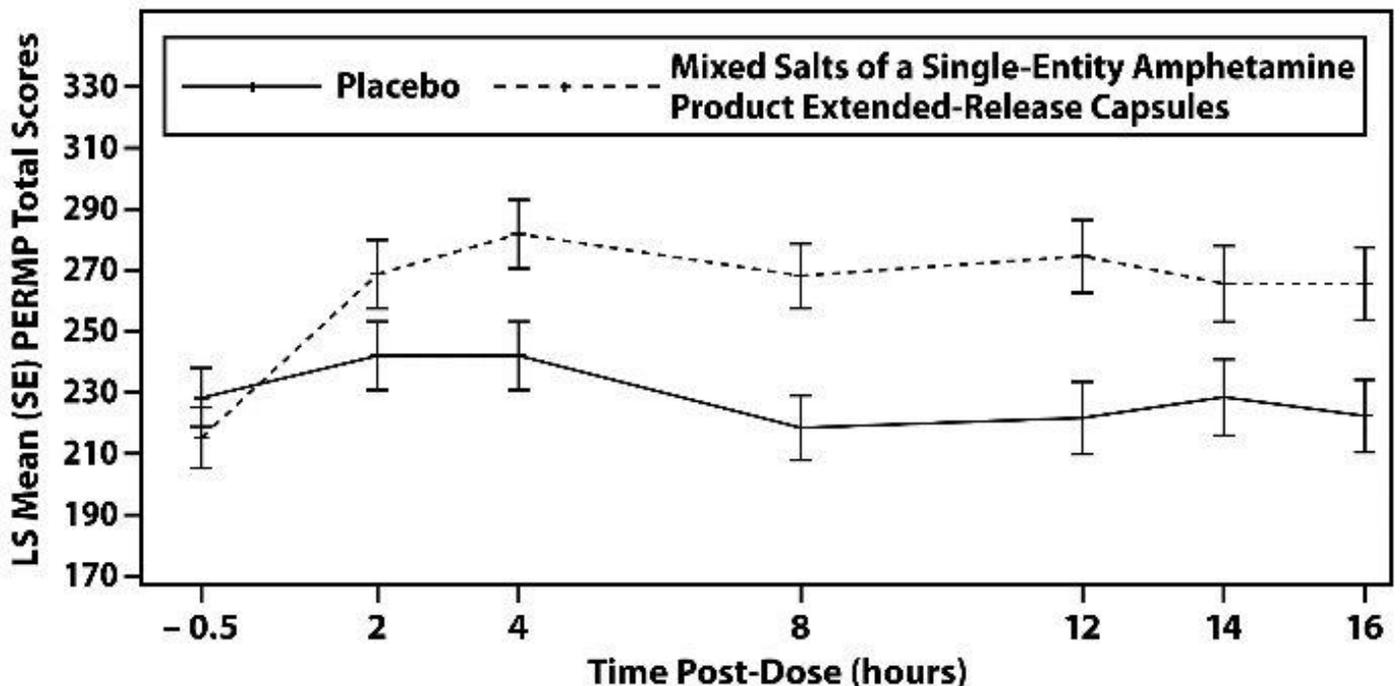
A 4-week, randomized, double-blind, multi-center, placebo-controlled, dose-optimization, safety and efficacy study (Study 4) was conducted. In Study 4, the 157 pediatric patients 13 to 17 years old who met DSM-IV TR criteria for ADHD, were randomized in a 1:1 ratio to Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules or placebo group. Subjects were titrated from a dose of 12.5 mg/day until an optimal dose was reached (up to a maximum dose of 25 mg); this dose was maintained

during the dose-maintenance period (Study 4 in Table 4).

The primary efficacy endpoint was defined as the change from baseline of the ADHD-RS-IV Total Score at Week 4. The baseline ADHD-RS-IV Total Score was defined as the last valid ADHD-RS-IV Total Score assessment prior to taking the first dose of double-blind investigational product, usually at Visit 2. Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules demonstrated a statistically significant treatment effect compared with placebo on the change of ADHD RS-IV total scores from baseline at Visit 6 (Week 4). Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules also showed statistically significantly greater improvement on the Clinical Global Impression of Improvement (CGI-I) score at Visit 6 (Week 4).

A multi-center, randomized, double-blind, placebo-controlled, crossover study of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules 25 mg/day (Study 5) was conducted in adolescent patients who met DSM-IV TR criteria for ADHD. The efficacy was determined using the Permanent Product Measure of Performance (PERMP), a skill-adjusted math test that measures attention in ADHD. PERMP total score results from the sum of the number of math problems attempted plus the number of math problems answered correctly. Efficacy assessments were conducted at 2, 4, 8, 12, 14, and 16 hours post-dose using the PERMP. Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules treatment, compared to placebo, reached statistical significance at 2 to 16 hours post-dose (Study 5 in Table 4, Figure 2).

Figure 2 LS Mean (SE) PERMP Total Score by Treatment and Time-Point for Adolescents Ages 13 to 17 with ADHD after 1 Week of Double Blind Treatment (Study 5)



LS Mean: least-squares mean; SE: standard error

In both adults and pediatric patients, examination of a population subset based on gender or race did not reveal any differences.

Table 4 Summary of Primary Efficacy Results from Short-Term Studies of

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules in Adult and Pediatric Patients with ADHD

Study Number (Age range)	Primary Endpoint	Treatment Group	Mean Baseline Score (SD)	LS Mean Change from Baseline	Placebo-Subtracted Difference* (95% CI)
Adult Studies					
Study 1 (18 to 55 years)	ADHD-RS	Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules (12.5 mg/day) [†]	39.8 (6.38)	-18.5	-8.1 (-11.7, -4.4)
		Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules (37.5 mg/day) [†]	39.9 (7.07)	-23.8	-13.4 (-17.1, -9.7)
		Placebo	40.5 (6.52)	-10.4	
Study 2 (18 to 55 years)	Average PERMP	Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules (50mg/day) [†]	239.2 (75.6) [‡]	293.23 [§]	18.38 (11.28, 25.47)
		Placebo	249.6 (76.7) [‡]	274.85 [§]	
Study 3 (18 to 55 years)	Average PERMP	Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules (25 mg/day) [†]	217.5 (59.6) [‡]	267.96 [§]	19.29 (10.95, 27.63)
		Placebo	226.9 (61.7) [‡]	248.67 [§]	
Pediatric Studies					
Study 4 (13 to 17 years) [¶]	ADHD-RS-IV	Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules (12.5-25 mg/day) [†]	36.7 (6.15)	-20.3	-8.7 (-12.6, -4.8)
		Placebo	38.3 (6.67)	-11.6	
Study 5 (13 to 17 years)	Average PERMP	Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules (25 mg/day) [†]	214.5 (87.8) [‡]	272.67 [§]	41.26 (32.24, 50.29)
		Placebo	228.7 (101) [‡]	231.41 [§]	

SD: standard deviation; LS Mean: least-squares mean; CI: confidence interval.

* Difference (drug minus placebo) in least-squares mean change from baseline.

† Doses statistically significantly superior to placebo.

‡ Pre-dose PERMP total score.

§ LS Mean for PERMP is post-dose average score over all sessions of the treatment day, rather than change from baseline.

¶ Results represent subgroup of Study 4 and not the total population.

16 HOW SUPPLIED/STORAGE AND HANDLING

How Supplied

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules are available as:

- Extended-release capsules 12.5 mg: opaque yellow body/opaque yellow cap (imprinted with "12.5 mg" and "M" in a box)
Bottles of 100..... NDC 0406-0805-01
- Extended-release capsules 25 mg: opaque white body/opaque white cap (imprinted with "25 mg" and "M" in a box)
Bottles of 100..... NDC 0406-0803-01
- Extended-release capsules 37.5 mg: opaque pink body/opaque blue cap (imprinted with "37.5 mg" and "M" in a box)
Bottles of 100..... NDC 0406-0807-01
- Extended-release capsules 50 mg: opaque blue body/opaque blue cap (imprinted with "50 mg" and "M" in a box)
Bottles of 100..... NDC 0406-0804-01

Storage and Handling

Dispense in a tight, light-resistant container as defined in the USP.

Store at room temperature, 20°C to 25°C (68°F to 77°F). Excursions permitted between 15°C to 30°C (59°F to 86°F) [see USP Controlled Room Temperature].

17 PATIENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (Medication Guide).

Abuse, Misuse, and Addiction

Educate patients and their families about the risks of abuse, misuse, and addiction of Mixed Salts of a Single-Entity Amphetamine Product, which can lead to overdose and death, and proper disposal of any unused drug [see Warnings and Precautions (5.1), Drug Abuse and Dependence (9.2), Overdosage (10)]. Advise patients to store Mixed Salts of a Single-Entity Amphetamine Product in a safe place, preferably locked, and instruct patients to not give Mixed Salts of a Single-Entity Amphetamine Product to anyone else.

Risks to Patients with Serious Cardiac Disease

Advise patients that there are potential risks to patients with serious cardiac disease, including sudden death with Mixed Salts of a Single-Entity Amphetamine Product use. Instruct patients to contact a healthcare provider immediately if they develop symptoms such as exertional chest pain, unexplained syncope, or other symptoms suggestive of cardiac disease [see Warnings and Precautions (5.2)].

Increased Blood Pressure and Heart Rate

Instruct patients that Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules can cause elevations of their blood pressure and pulse rate and they should be monitored for such effects [see *Warnings and Precautions (5.3)*].

Psychiatric Adverse Reactions

Advise patients that Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, at recommended doses, may cause psychotic or manic symptoms even in patients without prior history of psychotic symptoms or mania [see *Warnings and Precautions (5.4)*].

Long-Term Suppression of Growth in Pediatric Patients

Advise patients, family members, and caregivers that Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules may cause slowing of growth including weight loss [see *Warnings and Precautions (5.5)*].

Circulation Problems in Fingers and Toes [Peripheral Vasculopathy, Including Raynaud's Phenomenon]

Instruct patients beginning treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules about the risk of peripheral vasculopathy, including Raynaud's phenomenon, and associated signs and symptoms: fingers or toes may feel numb, cool, painful, and/or may change from pale, to blue, to red. Instruct patients to report to their physician any new numbness, pain, skin color change, or sensitivity to temperature in fingers or toes. Instruct patients to call their physician immediately with any signs of unexplained wounds appearing on fingers or toes while taking Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules. Further clinical evaluation (e.g., rheumatology referral) may be appropriate for certain patients [see *Warnings and Precautions (5.6)*].

Seizures

Caution patient that Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules may lower the convulsive threshold. Advise patients to contact their healthcare provider immediately and to discontinue Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules if a seizure occurs [see *Warnings and Precautions (5.7)*].

Serotonin Syndrome

Caution patients about the risk of serotonin syndrome with concomitant use of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules and other serotonergic drugs including SSRIs, SNRIs, triptans, tricyclic antidepressants, fentanyl, lithium, tramadol, tryptophan, buspirone, St. John's Wort, and with drugs that impair metabolism of serotonin (in particular MAOIs, both those intended to treat psychiatric disorders and also others such as linezolid [see *Contraindications (4), Warnings and Precautions (5.8), Drug Interactions (7.1)*]. Advise patients to contact their healthcare provider or report to the emergency room if they experience signs or symptoms of serotonin syndrome.

Motor and Verbal Tics, and Worsening of Tourette's Syndrome

Advise patients that motor and verbal tics and worsening of Tourette's syndrome may occur during treatment with Mixed Salts of a Single-Entity Amphetamine Product. Instruct patients to notify their healthcare provider if emergence of new tics or worsening of tics or Tourette's syndrome occurs [see *Warnings and Precautions (5.10)*].

Concomitant Medications

Advise patients to notify their physicians if they are taking, or plan to take, any prescription or over-the-counter drugs because there is a potential for interactions [see *Drug Interactions (7.1)*].

Pregnancy Registry

Advise patients that there is a pregnancy exposure registry that monitors pregnancy outcomes in women exposed to Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules during pregnancy [see *Use in Specific Populations (8.1)*].

Pregnancy

Advise patients of the potential fetal effects from the use of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules during pregnancy. Advise patients to notify their healthcare provider if they become pregnant or intend to become pregnant during treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules [see *Use in Specific Populations (8.1)*].

Lactation

Advise women not to breastfeed if they are taking Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules [see *Use in Specific Populations (8.2)*].

Alcohol

Advise patients to avoid alcohol while taking Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules. Consumption of alcohol while taking Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules may result in a more rapid release of the dose of mixed amphetamine salts [see *Clinical Pharmacology (12.3)*].

Mallinckrodt, the “M” brand mark and the Mallinckrodt Pharmaceuticals logo are trademarks of a Mallinckrodt company.

© 2023 Mallinckrodt.

Manufactured for:

SpecGx LLC

Webster Groves, MO 63119 USA

Issued 10/2023

Mallinckrodt™
Pharmaceuticals

An electronic copy of this medication guide can be obtained from www.mallinckrodt.com/Medguide/MG20D13.pdf or by calling 1-800-778-7898 for alternate delivery options.

Dispense with Medication Guide available at:
www.mallinckrodt.com/Medguide/MG20D13.pdf or by calling 1-800-778-7898.

MEDICATION GUIDE
Dextroamphetamine Saccharate, Amphetamine Aspartate Monohydrate,
Dextroamphetamine
Sulfate, Amphetamine Sulfate

**(dex" troe am fet' a meen sac cha rate, am fet' a meen a spar' tate, dex"
troe am fet' a meen sul'
fate, am fet' a meen sul' fate)
(Mixed Salts of a Single-Entity Amphetamine Product)
Extended-Release Capsules, CII**

What is the most important information I should know about Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules?

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules may cause serious side effects, including:

- **Abuse, misuse, and addiction.** Mixed Salts of a Single-Entity Amphetamine Product has a high chance for abuse and misuse and may lead to substance use problems, including addiction. Misuse and abuse of Mixed Salts of a Single-Entity Amphetamine Product, other amphetamine containing medicines, and methylphenidate containing medicines, can lead to overdose and death. The risk of overdose and death is increased with higher doses of Mixed Salts of a Single-Entity Amphetamine Product or when it is used in ways that are not approved, such as snorting or injection.
 - Your healthcare provider should check you or your child's risk for abuse, misuse, and addiction before starting treatment with Mixed Salts of a Single-Entity Amphetamine Product and will monitor you or your child during treatment.
 - Mixed Salts of a Single-Entity Amphetamine Product may lead to physical dependence after prolonged use, even if taken as directed by your healthcare provider.
 - Do not give Mixed Salts of a Single-Entity Amphetamine Product to anyone else. See **"What is Mixed Salts of a Single-Entity Amphetamine Product?"** for more information.
 - Keep Mixed Salts of a Single-Entity Amphetamine Product in a safe place and properly dispose of any unused medicine. See **"How should I store Mixed Salts of a Single-Entity Amphetamine Product?"** for more information.

Tell your healthcare provider if you or your child have ever abused or been dependent on alcohol, prescription medicines or street drugs.

- **Risks for people with serious heart disease.** Sudden death has happened in people who have heart defects or other serious heart disease. Your healthcare provider should check you or your child carefully for heart problems before starting Mixed Salts of a Single-Entity Amphetamine Product. Tell your healthcare provider if you or your child have any heart problems, heart disease, heart defects.

Call your healthcare provider or go to the nearest hospital emergency room right away if you or your child have any signs of heart problems such as chest pain, shortness of breath, or fainting during treatment with Mixed Salts of a Single-Entity Amphetamine Product.

- **Increased blood pressure and heart rate.**

Your healthcare provider should check you or your child's blood pressure and heart rate regularly during treatment with Mixed Salts of a Single-Entity Amphetamine Product.

- **Mental (psychiatric) problems, including:**
 - new or worse behavior and thought problems
 - new or worse bipolar illness

- new psychotic symptoms (such as hearing voices, or seeing or believing things that are not real) or new manic symptoms

Tell your healthcare provider about any mental problems you or your child have, or about a family history of suicide, bipolar illness, or depression.

Call your healthcare provider right away if you or your child have any new or worsening mental symptoms or problems while taking Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, especially hearing voices, seeing or believing things that are not real, or new manic symptoms.

What are Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules?

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules are a central nervous system (CNS) stimulant prescription medicine used for the treatment of Attention Deficit Hyperactivity Disorder (ADHD) in people 13 years of age and older.

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules are not for use in children 12 years of age and younger.

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules are a federally controlled substance (CII) because it contains amphetamine that can be a target for people who abuse prescription medicines or street drugs.

Keep Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules in a safe place to protect it from theft. Never give Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules to anyone else, because it may cause death or harm them. Selling or giving away Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules may harm others and is against the law.

Do not take Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules if you or your child are:

- allergic to amphetamine or any of the ingredients in Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules. See the end of the Medication Guide for a complete list of ingredients in Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules.
- taking, or have taken within the past 14 days, a medicine used to treat depression called a monoamine oxidase inhibitor (MAOI).

Before taking Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, tell your healthcare provider about all medical conditions, including if you or your child:

- have heart problems, heart disease, heart defects or high blood pressure
- have mental problems including psychosis, mania, bipolar illness or depression, or have a family history of suicide, bipolar illness, or depression
- have circulation problems in fingers and toes
- have or have had seizures
- have kidney problems
- have or had repeated movements or sounds (tics) or Tourette's syndrome, or have a family history of tics or Tourette's syndrome
- are pregnant or plan to become pregnant. It is not known if Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules will harm your unborn baby. Tell your healthcare provider if you become pregnant during treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules.

- There is a pregnancy registry for females who are exposed to Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules during pregnancy. The purpose of the registry is to collect information about the health of females exposed to Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules and their baby. If you or your child becomes pregnant during treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, talk to your healthcare provider about registering with the National Pregnancy Registry for Psychiatric Medications at 1-866-961-2388 or visit online at <https://womensmentalhealth.org/research/pregnancyregistry/>.
- are breastfeeding or plan to breastfeed. Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules pass into breast milk. You should not breastfeed during treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules.

Tell your healthcare provider about all the medicines that you or your child takes, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules may affect the way other medicines work and other medicines may affect how Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules work. Taking Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules with other medicines can cause serious side effects.

Especially tell your healthcare provider if you or your child take:

- selective serotonin reuptake inhibitors (SSRIs)
- medicines used to treat migraine headaches called triptans
- lithium
- tramadol
- buspirone
- serotonin norepinephrine reuptake inhibitors (SNRIs)
- tricyclic antidepressants
- fentanyl
- tryptophan
- St. John's Wort

Know the medicines that you or your child takes. Keep a list of your medicines with you to show your or your child's healthcare provider and pharmacist when you or your child get a new medicine.

Your healthcare provider will decide whether Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules can be taken with other medicines. **Do not start any new medicine during treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules without talking to your or your child's healthcare provider first.**

How should I take Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules?

- Take Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules exactly as prescribed by your healthcare provider.
- Your healthcare provider may change the dose if needed.
- Take Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules 1 time each day in the morning right after you wake-up. Mixed Salts of a Single-Entity

Amphetamine Product Extended-Release Capsules may last up to 16 hours and can cause difficulty sleeping.

- If you miss a dose of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, do not take your dose later in the day or double your dose to make up for a missed dose. Take your Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules dose the next morning at your regularly scheduled time.
- Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules can be taken with or without food but take it the same way each time.
- Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules may be swallowed whole or if Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules cannot be swallowed whole, the capsules may be opened and sprinkled over a spoonful of applesauce.
 - swallow all of the applesauce and medicine mixture right away
 - do not chew the applesauce and medicine mixture
 - do not store the sprinkled applesauce

If you or your child takes too many Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules, call your healthcare provider or Poison Help line at 1-800-222-1222 or go to the nearest hospital emergency room right away.

What should I avoid during treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules?

You should avoid drinking alcohol during treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules.

What are possible side effects of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules?

Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules can cause serious side effects, including:

- See **“What is the most important information I should know about Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules?”**
- **Slowing of growth (height and weight) in children.** Children should have their height and weight checked often during treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules. Your healthcare provider may stop your child’s Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules treatment if they are not growing or gaining weight as expected.
- **Circulation problems in fingers and toes (peripheral vasculopathy, including Raynaud’s phenomenon). Signs and symptoms may include:**
 - fingers or toes may feel numb, cool, painful
 - fingers or toes may change color from pale, to blue, to red

Tell your healthcare provider if you have or your child has any numbness, pain, skin color change, or sensitivity to temperature in your fingers or toes.

Call your healthcare provider if you or your child have any signs of unexplained wounds appearing on fingers or toes during treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release

Capsules.

- **Seizures.** Your healthcare provider will stop treatment with Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules if you have a seizure.
- **New or worsening tics or worsening Tourette's syndrome.** Tell your healthcare provider if you or your child get any new or worsening tics or worsening Tourette's syndrome during treatment with Mixed Salts of a Single-Entity Amphetamine Product.
- **Serotonin syndrome.** This problem may happen when Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules are taken with certain other medicines and may be life-threatening. Call your healthcare provider or go to the nearest hospital emergency room if you get symptoms of serotonin syndrome which may include:
 - agitation, hallucinations, coma
 - loss of coordination
 - flushing
 - fast heartbeat
 - seizures
 - confusion
 - sweating or fever
 - nausea, vomiting, or diarrhea
 - dizziness
 - changes in blood pressure
 - muscle stiffness or tightness
 - high body temperature (hyperthermia)

The most common side effects of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules include:

- trouble sleeping
- decreased appetite
- dry mouth
- increased heart rate
- anxiety
- nausea
- irritability
- weight loss

These are not all the possible side effects of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules.

Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

How should I store Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules?

- Store Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules at room temperature between 68°F to 77°F (20°C to 25°C).
- Protect Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules from light.
- Store Mixed Salts of a Single-Entity Amphetamine Product Extended-Release

Capsules in a safe place, like a locked cabinet.

- Dispose of remaining, unused, or expired Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules by a medicine take-back program at a U.S. Drug Enforcement Administration (DEA) authorized collection site. If no take-back program or DEA authorized collector is available, mix Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules with an undesirable, nontoxic substance such as dirt, cat litter, or used coffee grounds to make it less appealing to children and pets. Place the mixture in a container such as a sealed plastic bag and throw away Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules in the household trash. Visit www.fda.gov/drugdisposal for additional information on disposal of unused medicines.

Keep Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules and all medicines out of the reach of children.

General information about the safe and effective use of Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not use Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules for a condition for which it was not prescribed. Do not give Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules to other people, even if they have the same condition. It may harm them and it is against the law. You can ask your healthcare provider or pharmacist for information about Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules that is written for healthcare professionals.

What are the ingredients in Mixed Salts of a Single-Entity Amphetamine Product Extended-Release Capsules?

Active ingredients: dextroamphetamine saccharate, amphetamine aspartate monohydrate, dextroamphetamine sulfate, amphetamine sulfate

Inactive ingredients: hard gelatin capsules, ethylcellulose, medium-chain triglycerides, oleic acid, hydroxypropyl cellulose, magnesium stearate, Methacrylic Acid and Ethyl Acrylate Copolymer, sodium lauryl sulfate, polysorbate, sucrose, corn starch, talc, triethyl citrate, and (poly(methyl acrylate-co-methyl methacrylate-co-methacrylic acid 7:3:1; 280000 mw)). The gelatin capsules for all four strengths contain gelatin, Sodium lauryl sulfate, titanium dioxide, and edible inks which contain shellac glaze, propylene glycol, potassium hydroxide, and black iron oxide. The 12.5 mg strength gelatin capsules also contain yellow iron oxide. The 37.5 mg strength contains FD&C Blue No. 1 and FD&C Red No. 3. The 50 mg strength capsule also contains FD&C Blue No. 1.

Manufactured for: SpecGx LLC, Webster Groves, MO 63119 USA,
www.mallinckrodt.com or call 1-800-778-7898

This Medication Guide has been approved by the U.S. Food and Drug Administration.

Issued:10/2023

MG20D13

Mallinckrodt™

PRINCIPAL DISPLAY PANEL - 12.5 mg Capsule Bottle Label

NDC 0406-0805-01

100 CAPSULES

**Dextroamphetamine Saccharate,
Amphetamine Aspartate Monohydrate,
Dextroamphetamine Sulfate, Amphetamine Sulfate
(Mixed Salts of a Single-Entity Amphetamine Product)
Extended-Release Capsules
CII**

**ONCE-DAILY
12.5 mg
Rx only**

Do not substitute for Adderall XR®.
PHARMACIST: Dispense the Medication Guide
provided separately to each patient.

Mallinckrodt™

L00D87
Rev 05/2018

NDC 0406-0805-01 **100 CAPSULES**

**Dextroamphetamine Saccharate,
Amphetamine Aspartate Monohydrate,
Dextroamphetamine Sulfate, Amphetamine Sulfate
(Mixed Salts of a Single-Entity Amphetamine Product)
Extended-Release Capsules**

ONCE-DAILY 12.5 mg Rx only

Do not substitute for Adderall XR®.
PHARMACIST: Dispense the Medication Guide
provided separately to each patient.

Mallinckrodt™

Each Extended-Release Capsule contains:
Dextroamphetamine Saccharate, 3.125 mg;
Amphetamine Aspartate Monohydrate, 3.125 mg;
Dextroamphetamine Sulfate, 3.125 mg;
Amphetamine Sulfate, 3.125 mg
Total amphetamine base equivalence 7.8 mg
**USUAL DOSAGE: One capsule once daily
upon awakening**
STORAGE: Store at 20°C to 25°C (68°F to 77°F);
excursions permitted between 15°C to 30°C
(59°F to 86°F) [See USP Controlled Room
Temperature].
DISPENSE IN A TIGHT, LIGHT-RESISTANT
CONTAINER AS DEFINED IN THE USP.
KEEP THIS AND ALL MEDICATIONS OUT OF THE
REACH OF CHILDREN.
Manufactured for:
SpecGx LLC
Webster Groves, MO 63119 USA

S/N 00000000000000
LOT 0000000000
EXP 0000/00

GTIN: 00304060805019

L00D87
Rev 05/2018

PRINCIPAL DISPLAY PANEL - 25 mg Capsule Bottle Label

NDC 0406-0803-01

100 CAPSULES

**Dextroamphetamine Saccharate,
Amphetamine Aspartate Monohydrate,
Dextroamphetamine Sulfate, Amphetamine Sulfate
(Mixed Salts of a Single-Entity Amphetamine Product)
Extended-Release Capsules
CII**

**ONCE-DAILY
25 mg
Rx only**

Do not substitute for Adderall XR®.
PHARMACIST: Dispense the Medication Guide
provided separately to each patient.

Mallinckrodt™

L00D88

Rev 09/2023

NDC 0406-0803-01 **100 CAPSULES**

Dextroamphetamine Saccharate, Amphetamine Aspartate Monohydrate, Dextroamphetamine Sulfate, Amphetamine Sulfate (Mixed Salts of a Single-Entity Amphetamine Product) Extended-Release Capsules

ONCE-DAILY 25 mg Rx only

Do not substitute for Adderall XR®.

PHARMACIST: Dispense the Medication Guide provided separately to each patient.

Mallinckrodt™

Each Extended-Release Capsule contains:
Dextroamphetamine Saccharate, 6.25 mg;
Amphetamine Aspartate Monohydrate, 6.25 mg;
Dextroamphetamine Sulfate, 6.25 mg;
Amphetamine Sulfate, 6.25 mg
Total amphetamine base equivalence 15.6 mg
USUAL DOSAGE: One capsule once daily upon awakening
STORAGE: Store at 20°C to 25°C (68°F to 77°F); excursions permitted between 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature].
DISPENSE IN A TIGHT, LIGHT-RESISTANT CONTAINER AS DEFINED IN THE USP.
KEEP THIS AND ALL MEDICATIONS OUT OF THE REACH OF CHILDREN.
Manufactured for:
SpecGx LLC
Webster Groves, MO 63119 USA

S/N 00000000000000
LOT 0000000000
EXP 0000/00

GTIN: 00304060803015

L00D88
Rev 09/2023

PRINCIPAL DISPLAY PANEL - 37.5 mg Capsule Bottle Label

NDC 0406-0807-01

100 CAPSULES

**Dextroamphetamine Saccharate,
Amphetamine Aspartate Monohydrate,
Dextroamphetamine Sulfate, Amphetamine Sulfate
(Mixed Salts of a Single-Entity Amphetamine Product)
Extended-Release Capsules**

CII

ONCE-DAILY

37.5 mg

Rx only

Do not substitute for Adderall XR®.

PHARACIST: Dispense the Medication Guide provided separately to each patient.

Mallinckrodt™

L00D89

Rev 05/2018

NDC 0406-0807-01 **100 CAPSULES**

**Dextroamphetamine Saccharate,
Amphetamine Aspartate Monohydrate,
Dextroamphetamine Sulfate, Amphetamine Sulfate
(Mixed Salts of a Single-Entity Amphetamine Product)
Extended-Release Capsules** **C II**

ONCE-DAILY 37.5 mg Rx only

Do not substitute for Adderall XR®.
PHARMACIST: Dispense the Medication Guide provided separately to each patient.

Mallinckrodt™

Each Extended-Release Capsule contains:
Dextroamphetamine Saccharate, 9.375 mg;
Amphetamine Aspartate Monohydrate, 9.375 mg;
Dextroamphetamine Sulfate, 9.375 mg;
Amphetamine Sulfate, 9.375 mg

Total amphetamine base equivalence 23.5 mg

USUAL DOSAGE: One capsule once daily upon awakening

STORAGE: Store at 20°C to 25°C (68°F to 77°F); excursions permitted between 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature].

DISPENSE IN A TIGHT, LIGHT-RESISTANT CONTAINER AS DEFINED IN THE USP.

KEEP THIS AND ALL MEDICATIONS OUT OF THE REACH OF CHILDREN.

Manufactured for:
SpecGx LLC
Webster Groves, MO 63119 USA

100D89
Rev 05/2018

S/N 0000000000000000
LOT 0000000000
EXP 0000/00

GTIN: 00304060807013

PRINCIPAL DISPLAY PANEL - 50 mg Capsule Bottle Label

NDC 0406-0804-01

100 CAPSULES

**Dextroamphetamine Saccharate,
Amphetamine Aspartate Monohydrate,
Dextroamphetamine Sulfate, Amphetamine Sulfate
(Mixed Salts of a Single-Entity Amphetamine Product)
Extended-Release Capsules
C II**

**ONCE-DAILY
50 mg
Rx only**

Do not substitute for Adderall XR®.
PHARMACIST: Dispense the Medication Guide provided separately to each patient.

Mallinckrodt™

L00D90
Rev 09/2023

NDC 0406-0804-01 **100 CAPSULES**

Dextroamphetamine Saccharate, Amphetamine Aspartate Monohydrate, Dextroamphetamine Sulfate, Amphetamine Sulfate (Mixed Salts of a Single-Entity Amphetamine Product) Extended-Release Capsules

ONCE-DAILY 50 mg Rx only

Do not substitute for Adderall XR®.

PHARMACIST: Dispense the Medication Guide provided separately to each patient.

Mallinckrodt™

Each Extended-Release Capsule contains:
 Dextroamphetamine Saccharate, 12.5 mg;
 Amphetamine Aspartate Monohydrate, 12.5 mg;
 Dextroamphetamine Sulfate, 12.5 mg;
 Amphetamine Sulfate, 12.5 mg
 Total amphetamine base equivalence 31.3 mg

USUAL DOSAGE: One capsule once daily upon awakening

STORAGE: Store at 20°C to 25°C (68°F to 77°F); excursions permitted between 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature].

DISPENSE IN A TIGHT, LIGHT-RESISTANT CONTAINER AS DEFINED IN THE USP.

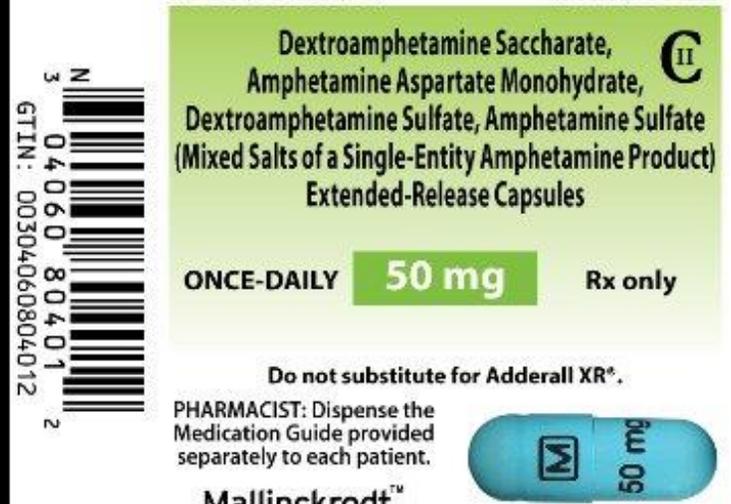
KEEP THIS AND ALL MEDICATIONS OUT OF THE REACH OF CHILDREN.

Manufactured for:
 SpecGx LLC
 Webster Groves, MO 63119 USA

1.000390
 Rev 09/2023

S/N 00000000000000
 LOT 0000000000
 EXP 0000/00

GTIN: 00304060804012



MIXED SALTS OF A SINGLE-ENTITY AMPHETAMINE PRODUCT

dextroamphetamine saccharate, amphetamine aspartate monohydrate, dextroamphetamine sulfate, amphetamine sulfate capsule, extended release

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:0406-0805
Route of Administration	ORAL	DEA Schedule	CII

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
DEXTROAMPHETAMINE SULFATE (UNII: JJ7680327N) (DEXTROAMPHETAMINE - UNII:TZ47U051FI)	DEXTROAMPHETAMINE SULFATE	3.125 mg
DEXTROAMPHETAMINE SACCHARATE (UNII: G83415V073) (DEXTROAMPHETAMINE - UNII:TZ47U051FI)	DEXTROAMPHETAMINE SACCHARATE	3.125 mg
AMPHETAMINE ASPARTATE MONOHYDRATE (UNII: O1ZPV62004) (AMPHETAMINE - UNII:CK833KGX7E)	AMPHETAMINE ASPARTATE MONOHYDRATE	3.125 mg
AMPHETAMINE SULFATE (UNII: 6DPV8NK46S) (AMPHETAMINE - UNII:CK833KGX7E)	AMPHETAMINE SULFATE	3.125 mg

Inactive Ingredients

Ingredient Name	Strength
GELATIN, UNSPECIFIED (UNII: 2G86QN327L)	
METHACRYLIC ACID AND ETHYL ACRYLATE COPOLYMER (UNII: NX76LV5T8J)	
SUCROSE (UNII: C151H8M554)	
TALC (UNII: 7SEV7J4R1U)	
TRIETHYL CITRATE (UNII: 8Z96QXD6UM)	
FERRIC OXIDE YELLOW (UNII: EX438O2MRT)	
TITANIUM DIOXIDE (UNII: 15FIX9V2JP)	
STARCH, CORN (UNII: O8232NY3SJ)	
ETHYLCELLULOSE, UNSPECIFIED (UNII: 7Z8S9VYZ4B)	

HYDROXYPROPYL CELLULOSE, UNSPECIFIED (UNII: 9XZ8H6N6OH)
MAGNESIUM STEARATE (UNII: 70097M6I3O)
MEDIUM-CHAIN TRIGLYCERIDES (UNII: C9H2L21V7U)
OLEIC ACID (UNII: 2UMI9U37CP)
SODIUM LAURYL SULFATE (UNII: 368GB5141J)
SHELLAC (UNII: 46N107B71O)
PROPYLENE GLYCOL (UNII: 6DC9Q167V3)
POTASSIUM HYDROXIDE (UNII: WZH3C48M4T)
ALCOHOL (UNII: 3K9958V90M)
POLYSORBATE 80 (UNII: 6OZP39ZG8H)
FERROUS OXIDE (UNII: G7036X8B5H)
POLY(METHYL ACRYLATE-CO-METHYL METHACRYLATE-CO-METHACRYLIC ACID 7:3:1; 280000 MW) (UNII: 99Q3C7L77T)

Product Characteristics

Color	yellow, yellow	Score	no score
Shape	CAPSULE	Size	14mm
Flavor		Imprint Code	12;5;mg;M
Contains			

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0406-0805-01	100 in 1 BOTTLE; Type 0: Not a Combination Product	11/01/2023	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA211546	11/01/2023	

MIXED SALTS OF A SINGLE-ENTITY AMPHETAMINE PRODUCT

dextroamphetamine saccharate, amphetamine aspartate monohydrate, dextroamphetamine sulfate, amphetamine sulfate capsule, extended release

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:0406-0803
Route of Administration	ORAL	DEA Schedule	CII

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
DEXTROAMPHETAMINE SULFATE (UNII: JJ768O327N) (DEXTROAMPHETAMINE - UNII:TZ47U051FI)	DEXTROAMPHETAMINE SULFATE	6.25 mg

DEXTROAMPHETAMINE SACCHARATE (UNII: G83415V073) (DEXTROAMPHETAMINE - UNII:TZ47U051F)	DEXTROAMPHETAMINE SACCHARATE	6.25 mg
AMPHETAMINE ASPARTATE MONOHYDRATE (UNII: O1ZPV62004) (AMPHETAMINE - UNII:CK833KGX7E)	AMPHETAMINE ASPARTATE MONOHYDRATE	6.25 mg
AMPHETAMINE SULFATE (UNII: 6DPV8NK46S) (AMPHETAMINE - UNII:CK833KGX7E)	AMPHETAMINE SULFATE	6.25 mg

Inactive Ingredients

Ingredient Name	Strength
GELATIN, UNSPECIFIED (UNII: 2G86QN327L)	
METHACRYLIC ACID AND ETHYL ACRYLATE COPOLYMER (UNII: NX76LV5T8J)	
SUCROSE (UNII: C151H8M554)	
TALC (UNII: 7SEV7J4R1U)	
TRIETHYL CITRATE (UNII: 8Z96QXD6UM)	
TITANIUM DIOXIDE (UNII: 15FIX9V2JP)	
STARCH, CORN (UNII: O8232NY3S)	
ETHYLCELLULOSE, UNSPECIFIED (UNII: 7Z8S9VYZ4B)	
HYDROXYPROPYL CELLULOSE, UNSPECIFIED (UNII: 9XZ8H6N6OH)	
MAGNESIUM STEARATE (UNII: 70097M6130)	
MEDIUM-CHAIN TRIGLYCERIDES (UNII: C9H2L21V7U)	
OLEIC ACID (UNII: 2UMI9U37CP)	
SODIUM LAURYL SULFATE (UNII: 368GB5141J)	
SHELLAC (UNII: 46N107B71O)	
PROPYLENE GLYCOL (UNII: 6DC9Q167V3)	
POTASSIUM HYDROXIDE (UNII: WZH3C48M4T)	
ALCOHOL (UNII: 3K9958V90M)	
POLYSORBATE 80 (UNII: 6OZP39ZG8H)	
FERROUS OXIDE (UNII: G7036X8B5H)	
POLY(METHYL ACRYLATE-CO-METHYL METHACRYLATE-CO-METHACRYLIC ACID 7:3:1; 280000 MW) (UNII: 99Q3C7L77T)	

Product Characteristics

Color	white, white	Score	no score
Shape	CAPSULE	Size	18mm
Flavor		Imprint Code	25;mg;M
Contains			

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0406-0803-01	100 in 1 BOTTLE; Type 0: Not a Combination Product	11/01/2023	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA211546	11/01/2023	

MIXED SALTS OF A SINGLE-ENTITY AMPHETAMINE PRODUCT

dextroamphetamine saccharate, amphetamine aspartate monohydrate, dextroamphetamine sulfate, amphetamine sulfate capsule, extended release

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:0406-0807
Route of Administration	ORAL	DEA Schedule	CII

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
DEXTROAMPHETAMINE SULFATE (UNII: JJ768O327N) (DEXTROAMPHETAMINE - UNII:TZ47U051FI)	DEXTROAMPHETAMINE SULFATE	9.375 mg
DEXTROAMPHETAMINE SACCHARATE (UNII: G83415V073) (DEXTROAMPHETAMINE - UNII:TZ47U051FI)	DEXTROAMPHETAMINE SACCHARATE	9.375 mg
AMPHETAMINE ASPARTATE MONOHYDRATE (UNII: O1ZPV62004) (AMPHETAMINE - UNII:CK833KGX7E)	AMPHETAMINE ASPARTATE MONOHYDRATE	9.375 mg
AMPHETAMINE SULFATE (UNII: 6DPV8NK46S) (AMPHETAMINE - UNII:CK833KGX7E)	AMPHETAMINE SULFATE	9.375 mg

Inactive Ingredients

Ingredient Name	Strength
GELATIN, UNSPECIFIED (UNII: 2G86QN327L)	
METHACRYLIC ACID AND ETHYL ACRYLATE COPOLYMER (UNII: NX76LV5T8J)	
SUCROSE (UNII: C151H8M554)	
TALC (UNII: 7SEV7J4R1U)	
TRIETHYL CITRATE (UNII: 8Z96QXD6UM)	
FD&C BLUE NO. 1 (UNII: H3R47K3TBD)	
FD&C RED NO. 3 (UNII: PN2ZH5LOQY)	
TITANIUM DIOXIDE (UNII: 15FIX9V2JP)	
STARCH, CORN (UNII: O8232NY3SJ)	
ETHYLCELLULOSE, UNSPECIFIED (UNII: 7Z8S9VYZ4B)	
HYDROXYPROPYL CELLULOSE, UNSPECIFIED (UNII: 9XZ8H6N6OH)	
MAGNESIUM STEARATE (UNII: 70097M6I30)	
MEDIUM-CHAIN TRIGLYCERIDES (UNII: C9H2L21V7U)	
OLEIC ACID (UNII: 2UMI9U37CP)	
SODIUM LAURYL SULFATE (UNII: 368GB5141J)	
SHELLAC (UNII: 46N107B71O)	
PROPYLENE GLYCOL (UNII: 6DC9Q167V3)	
POTASSIUM HYDROXIDE (UNII: WZH3C48M4T)	
ALCOHOL (UNII: 3K9958V90M)	
POLYSORBATE 80 (UNII: 6OZP39ZG8H)	
FERROUS OXIDE (UNII: G7036X8B5H)	
POLY(METHYL ACRYLATE-CO-METHYL METHACRYLATE-CO-METHACRYLIC ACID 7:3:1; 280000 MW) (UNII: 99Q3C7L77T)	

Product Characteristics

Color	pink, blue	Score	no score
Shape	CAPSULE	Size	19mm
Flavor		Imprint Code	37;5;mg;M
Contains			

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0406-0807-01	100 in 1 BOTTLE; Type 0: Not a Combination Product	11/01/2023	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA211546	11/01/2023	

MIXED SALTS OF A SINGLE-ENTITY AMPHETAMINE PRODUCT

dextroamphetamine saccharate, amphetamine aspartate monohydrate, dextroamphetamine sulfate, amphetamine sulfate capsule, extended release

Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:0406-0804
Route of Administration	ORAL	DEA Schedule	CII

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
DEXTROAMPHETAMINE SULFATE (UNII: JJ768O327N) (DEXTROAMPHETAMINE - UNII:TZ47U051FI)	DEXTROAMPHETAMINE SULFATE	12.5 mg
DEXTROAMPHETAMINE SACCHARATE (UNII: G83415V073) (DEXTROAMPHETAMINE - UNII:TZ47U051FI)	DEXTROAMPHETAMINE SACCHARATE	12.5 mg
AMPHETAMINE ASPARTATE MONOHYDRATE (UNII: O1ZPV62004) (AMPHETAMINE - UNII:CK833KGX7E)	AMPHETAMINE ASPARTATE MONOHYDRATE	12.5 mg
AMPHETAMINE SULFATE (UNII: 6DPV8NK46S) (AMPHETAMINE - UNII:CK833KGX7E)	AMPHETAMINE SULFATE	12.5 mg

Inactive Ingredients

Ingredient Name	Strength
GELATIN, UNSPECIFIED (UNII: 2G86QN327L)	
METHACRYLIC ACID AND ETHYL ACRYLATE COPOLYMER (UNII: NX76LV5T8J)	
SUCROSE (UNII: C151H8M554)	
TALC (UNII: 7SEV7J4R1U)	
TRIETHYL CITRATE (UNII: 8Z96QXD6UM)	

TITANIUM DIOXIDE (UNII: 15FIX9V2JP)
FD&C BLUE NO. 1 (UNII: H3R47K3TBD)
STARCH, CORN (UNII: O8232NY3SJ)
ETHYLCELLULOSE, UNSPECIFIED (UNII: 7Z8S9VYZ4B)
HYDROXYPROPYL CELLULOSE, UNSPECIFIED (UNII: 9XZ8H6N6OH)
MAGNESIUM STEARATE (UNII: 70097M6I30)
MEDIUM-CHAIN TRIGLYCERIDES (UNII: C9H2L21V7U)
OLEIC ACID (UNII: 2UMI9U37CP)
SODIUM LAURYL SULFATE (UNII: 368GB5141J)
SHELLAC (UNII: 46N107B71O)
PROPYLENE GLYCOL (UNII: 6DC9Q167V3)
POTASSIUM HYDROXIDE (UNII: WZH3C48M4T)
ALCOHOL (UNII: 3K9958V90M)
POLYSORBATE 80 (UNII: 6OZP39ZG8H)
FERROUS OXIDE (UNII: G7036X8B5H)
POLY(METHYL ACRYLATE-CO-METHYL METHACRYLATE-CO-METHACRYLIC ACID 7:3:1; 280000 MW) (UNII: 99Q3C7L77T)

Product Characteristics

Color	blue, blue	Score	no score
Shape	CAPSULE	Size	22mm
Flavor		Imprint Code	50;mg;M
Contains			

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0406-0804-01	100 in 1 BOTTLE; Type 0: Not a Combination Product	11/01/2023	

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
ANDA	ANDA211546	11/01/2023	

Labeler - SpecGx LLC (080679498)

Establishment

Name	Address	ID/FEI	Business Operations
SpecGx LLC		957414238	analysis(0406-0805, 0406-0803, 0406-0807, 0406-0804) , manufacture(0406-0805, 0406-0803, 0406-0807, 0406-0804)

Establishment

Name	Address	ID/FEI	Business Operations
SpecGx LLC		163205300	api manufacture(0406-0805, 0406-0803, 0406-0807, 0406-0804)

