Issued: Dec-18-2012

SAFETY DATA SHEET

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Name: Sibutramine Hydrochloride Monohydrate

Synonyms: Sibutramine HCl Monohydrate: Sibutramine HCL

List Number: 2080

Drug Code Number: 20208

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Pharmaceuticals

1.3 Details of the supplier of the safety data sheet

Supplier: AbbVie Inc.

1 North Waukegan Road North Chicago, IL 60064

USA

1-800-255-5162 +1-847-937-7433

Customer Service Telephone: 1-800-255-5162 (US and Canada only)

+1-847-937-7433

E-mail Address: AbbVie.SDS@abbvie.com

1.4 Emergency telephone number

Emergency Telephone: CHEMTREC: 1(800) 424-9300 (in USA and Canada)

or +1-703-527-3887 (international)

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute oral toxicityCategory 3Serious eye damage/eye irritationCategory 2Respiratory sensitizationCategory 1Skin sensitizationCategory 1Reproductive toxicityCategory 2Specific target organ systemicCategory 1

toxicity (repeated exposure)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Indication of danger: T - Toxic

Xi - Irritant

Issued: Dec-18-2012

Section 2. Hazards identification

Risk Phrases: R25 - Toxic if swallowed

R36 - Irritating to eyes

R42 - May cause sensitization by inhalation R43 - May cause sensitization by skin contact

R48/25 - Toxic: danger of serious damage to health by prolonged exposure if

swallowed

R62 - Possible risk of impaired fertility

R63 - Possible risk of harm to the unborn child

2.2 Label elements



Signal Word: Danger

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or

doctor/physician

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at

rest in a position comfortable for breathing

P309 + P311 - IF exposed or if you feel unwell: Call a POISON CENTER or

doctor/physician

2.3 Other hazards

Not determined

Section 3. Composition/information on ingredients

Chemical Name	Percent	EINECS/ELINCS	EEC Classification	EU - GHS	REACH No.
		Number		Substance	
				Classification	
Sibutramine Hydrochloride	100	NA	T; R23, R48/25, Xi;	Eye Irrit. 2 (H319)	No data available
Monohydrate			R36; R42, R43, R62,	Resp. Sens. 1	
125494-59-9			R63	(H334)	
				Skin Sens. 1 (H317)	
				Acute Tox. 3	
				(H331)	

Not Hazardous* - Based on available data, not classified as hazardous according to the criteria of the Globally Harmonized System.

Issued: Dec-18-2012

For the full text of the R-phrases mentioned in this Section, see Section 16

For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4. First aid measures

4.1 Description of first aid measures

Eye Contact: Remove from source of exposure. Flush with copious amounts of water. If irritation

persists or signs of toxicity occur, seek medical attention. Provide

symptomatic/supportive care as necessary.

Skin Contact: Remove from source of exposure. Flush with copious amounts of water. If irritation

persists or signs of toxicity occur, seek medical attention. Provide

symptomatic/supportive care as necessary.

Inhalation: Remove from source of exposure. If signs of toxicity occur, seek medical attention.

Provide symptomatic/supportive care as necessary.

Ingestion: Remove from source of exposure. If signs of toxicity occur, seek medical attention.

Provide symptomatic/supportive care as necessary.

Protection of First-aiders: Use personal protective equipment

4.2 Most important symptoms and effects, both acute and delayed

Signs and Symptoms: None known from occupational exposure. Clinical data suggests the following:

headaches, fast heart rate, increased blood pressure, drowsiness, dizziness, diarrhea,

palpitation, lightheadedness, dry mouth, dilated pupils, insomnia.

Medical Conditions

Aggravated by Exposure:

None known from occupational exposure. Medical conditions exacerbated due to exposure to the following organs: cardiovascular system, gastrointestinal system,

respiratory system, liver. Concurrent use of medications.

4.3 Indication of any immediate medical attention and special treatment needed

Notes To Physician: Monitor cardiovascular and respiratory system.

Section 5. Firefighting measures

5.1 Extinguishing Media

Suitable Extinguishing Media: Use extinguishing agent suitable for type of surrounding fire

Unsuitable Extinguishing Media: Not determined

5.2 Special hazards arising from the substance or mixture

Special Exposure Hazards: This material is capable of forming explosive dust clouds in air, therefore, measures

must be taken to avoid ignition. This material is particularly sensitive to ignition by

electrostatic discharge.

5.3 Advice for firefighters

Protective Equipment and Precautions for Firefighters:

As in any fire, wear self-contained breathing apparatus and full protective gear

Issued: Dec-18-2012

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions: For personal protection see section 8

6.2. Environmental precautions

Environmental Precautions: Contain material and prevent release to waterways or soil.

6.3. Methods and material for containment and cleaning up

Methods for Cleaning Up: Recover product and place in an appropriate container for disposal. Clean

contaminated surface thoroughly

6.4. Reference to other sections

Refer to Sections 8, 12, and 13 for further information.

Section 7. Handling and storage

7.1. Precautions for safe handling

Avoid dust formation. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Store according to label instructions

7.3. Specific end use(s)

Recommended use: Pharmaceuticals

Section 8. Exposure controls/personal protection

8.1. Control parameters

Exposure limits:

Chemical Name	Employee Exposure Limit	Skin Notation
Sibutramine Hydrochloride Monohydrate 125494-59-9	20 mcg/m ³ in 8-hr TWA	None

8.2. Exposure controls

Engineering Controls: Use inside a hood, glovebox or process enclosure.

Respiratory Protection: An approved respirator (i.e. NIOSH, EN, etc.) should be worn when exposures are

expected to exceed the applicable limits.

Eyes: Wear eye protection appropriate to handling activities.

Gloves: Impervious gloves.

Page 4 of 10

Issued: Dec-18-2012

Other PPE Data: Wear appropriate body coverings if contact may occur.

Environmental Exposure

Controls:

Not determined

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: White to off-white Crystalline Powder

Odor: Characteristic 'damp' odor.

Odor Threshold: Not determined pH: Not determined. **Boiling Pt.** @ 760 mm Hg (°C): Not determined. **Melting/Freezing Point (°C):** 193 - 195.5 (deg C) Flash Point (°C): Not determined. Not determined. **Evaporation Rate at 20°C:** Flammability (Solid): Not determined. **Lower Explosive Limit:** Not determined. **Upper Explosive Limit:** Not determined. **Vapor Pressure (mm Hg):** Not determined. Vapor Density (Air = 1): Not determined. **Bulk Density at 20°C:** 0.33 g/ml

Specific Gravity: Not determined.

Solubility(ies): Slightly soluble in: water. Highly soluble in: ethanol.

Partition coefficient: n- Not determined.

octanol/water

Autoignition Temp. (°C): Not determined.

Decomposition temperature (°C): Not determined.

Viscosity (centipoise): Not determined.

Explosion Severity: Not determined.

Oxidizer Properties: Not determined.

9.2. Other information

Maximum Pressure Rise (bar): 7.9 Kst Value (bar.m/s): 233 Min. Ignition Energy-Cloud 6-8

(mJ):

Min. Ignit. Temp. Dust Cloud 230

(°C):

Section 10. Stability and reactivity

10.1. Reactivity

Not determined

10.2. Chemical stability

Stable under normal conditions

Issued: Dec-18-2012

10.3. Possibility of hazardous reactions

Hazardous reactions: Not determined.

10.4. Conditions to avoid

Not determined.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decompostion products

Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride

Section 11. Toxicological information

11.1. Information on toxicological effects

Routes of Exposure:

Oral: Clinical Route
Dermal: Not determined.
Inhalation: Not determined.

Acute Toxicity - Oral: Data for component (s) given below.

Chemical Name	Acute Test	Value	Units	Species
Sibutramine Hydrochloride Monohydrate	LDLo =	200	mg/kg	Mice
125494-59-9		100		Rats

Acute Toxicity - Dermal: Not determined.

Acute Toxicity - Inhalation: Data for component (s) given below.

Chemical Name	Test	Value	Units	Species
Sibutramine Hydrochloride Monohydrate	LC 50 =	63	mg/m ³ , 4 hour	Rats
125494-59-9				

Other Toxicology Data: Data for component (s) given below:

Chemical Name	Test Type	Value	Units	Species	Comments
Sibutramine Hydrochloride Monohydrate	LD Lo (po) =	100 - 200	mg/kg	Rats Mice	None.
125494-59-9	LD Lo (ip) =	75		Rats	

Corrosivity: Not determined.

Dermal Irritation: Not an irritant.

Eye Irritation: Produced mild to moderate eye irritation in rabbits.

Sensitization: Reported to be weak sensitizer in animals. May cause allergic respiratory and skin

reactions.

Toxicokinetics/Metabolism: Not determined.

Target Organ Effects: Data for component (s) given below.

Issued: Dec-18-2012

Chemical Name	Target Organs:	Species	Dosage	Units	Route	Duration
Sibutramine Hydrochloride Monohydrate	Liver Central	Rats Mice Dogs	>=1	mg/kg	Oral	Variable exposure
125494-59-9	Nervous System	Monkeys	>=10			periods

Reproductive Effects: In animals adverse reproductive effects include: reduced fertility in females, fetal

abnormalities, fetal toxicity, maternal toxicity.

Data for component (s) given below.

Chemical Name	Species	Dosage	Units	Route	Duration
Sibutramine Hydrochloride	Rats	>= 1	mg/kg	Oral	Variable Treatment Regimens
Monohydrate	Rabbits	>12			
125494-59-9					

Carcinogenicity: Not carcinogenic in animal study.

Mutagenicity: Data for component (s) given below.

Chemical Name	Micronucleus Assay	Ames Test:	Mouse Lymphoma Assay	Chromosomal Abbr. Assay
Sibutramine Hydrochloride Monohydrate 125494-59-9	Negative	Negative	No Data.	Negative

Aspiration hazard: Not determined

Notes:

1. ALD: Approximate lethal dosage

2. LC50: Concentration in air that produces 50% mortality

3. LD50: Oral or dermal dosage that produces 50% mortality

Section 12. Ecological information

12.1. Toxicity

Data for component (s) given below.

Chemical Name	Percent	EC 50 (mg/l)	Species	Duration
Sibutramine Hydrochloride Monohydrate	100	1.8	Daphnia magna	48 Hours
125494-59-9				

12.2. Persistence and degradability

Not readily biodegradable.

Chemical Name	Percent	% Degradation	Duration
Sibutramine Hydrochloride Monohydrate	100	0	28 days
125494-59-9			•

12.3. Bioaccumulative potential

Data for components given below.

Chemical Name	Percent	Log Po/w
Sibutramine Hydrochloride Monohydrate 125494-59-9	100	< 3

Issued: Dec-18-2012

12.4. Mobility in soil

Not determined.

12.5. Results of PBT or vPvB assessment

Chemical safety report is not required for this substance/product.

12.6. Other adverse effects

Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

Notes

- 1. EC50: Concentration in water that produces 50% mortality in Daphnia sp.
- 2. LC50: Concentration in water that produces 50% mortality in fish.
- 3. EbC50/ErC50: Concentration in water that produces 50% inhibition of growth and in algae.

Section 13. Disposal considerations

13.1 Waste treatment methods

Waste Disposal Methods: Disposal should be made in accordance with country, federal, state and local

regulations.

Section 14. Transport information

ADR, DOT, ICAO/IATA, IMDG/IMO

Status: Regulated

14.1. UN Number: UN2811

14.2. Proper shipping name: Toxic solid, organic, n.o.s. (Sibutramine Hydrochloride Monohydrate)

14.3. Hazard class: 6.1 **14.4. Packing group:** III

14.5. Environmental hazard: Not applicable14.6. Special Provisions: Not applicable14.7. Transport in bulk according Not applicable

to Annex II of MARPOL 73/78

and the IBC Code:

Section 15. Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

Chemical Name	EINECS/ ELINCS	TSCA	DSL	NDSL	PICCS
Sibutramine Hydrochloride Monohydrate	-	-	-	Not listed.	-
125494-59-9					

Chemical Name	ENCS	ISHL	IECSC	AICS	KECL	New Zealand
Sibutramine Hydrochloride Monohydrate	-	7-(3)-853	-	-	-	
125494-59-9						

Issued: Dec-18-2012

Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

ISHL - Japan Industrial Safety and Health Law

IECSC - China Inventory of Existing Chemical Substances AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

Carcinogenicity Rating:

Chemical Name	Percent	NTP:	IARC:	ACGIH:
Sibutramine Hydrochloride Monohydrate	100	Not Listed	Not Listed	Not Listed

SARA 313 Information

Chemical Name	Percent	SARA 313 Chemical:	CERCLA RQ/SARA EHS RQ (lbs):	SARA EHS TPQ (lbs):
Sibutramine Hydrochloride Monohydrate	100	No	Not Applicable	Not applicable

Immediate Health:YesDelayed Health:NoFire:NoSudden Pressure:NoReactivity:No

RCRA Status: Not determined.

Proposition 65 Status: Does not contain chemicals known to the state of California to cause cancer or

reproductive harm.

WHMIS Hazard Class: Not determined.

NFPA Rating:

Health: 2 Fire: 1

Reactivity: 0

Notes:1. SARA = Superfund Amendments and the Reauthorization Act.

2. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act.

3. FIFRA = Federal Insecticide, Fungicide and Rodenticide Act.

4. TSCA = Toxic Substances Control Act.

5. EC = European Community.

6. WHMIS = Canadian Workplace Hazardous Materials Information System.

7. UN GHS = United Nations Globally Harmonized System for Hazard Identification.

15.2. Chemical safety assessment

Chemical safety assessment has not been conducted on the substance/product.

Section 16. Other information

Issued: Dec-18-2012

Section 16. Other information

Risk Phrases: R25 - Toxic if swallowed, R36 - Irritating to eyes, R42 - May cause sensitization by

inhalation, R43 - May cause sensitization by skin contact, R48/25 - Toxic: danger of serious damage to health by prolonged exposure if swallowed, R62 - Possible risk of

impaired fertility, R63 - Possible risk of harm to the unborn child

Document Authored By: Global Occupational Toxicology (D-03QC)

Issued: Dec-18-2012

Supersedes the SDS dated: Dec-14-2010

Disclaimer:

The information and recommendations contained herein are based upon tests believed to be reliable. However, AbbVie Inc. does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. AbbVie Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.