**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:** Buflomedil Hydrochloride

**Chemical Name:** 4-(1-Pyrrolidinyl)-1-(2,4,6-Trimethoxyphenyl)-1-Butanone

Synonyms: Buflomedil Hydrochloride; Buflomedil HCL; Chlorhidrato de Buflomedil

**Drug Code Number:** 16867: 16868: 16869; 80433; 81667; 16852

## 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 toxicity** Category 4

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

**Indication of danger:** Xn - Harmful

**Risk Phrases:** R22 - Harmful if swallowed

## 2.2 Label elements

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## Section 2. Hazards identification



Signal Word: Warning

**Hazard Statements:** H302 - Harmful if swallowed

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if

you feel unwell P330 - Rinse mouth

P501 - Dispose of contents/container to an approved waste disposal plant

#### 2.3 Other hazards

Not determined

# Section 3. Composition/information on ingredients

Chemical Name	Percent	EINECS/ELINCS Number	<b>EEC Classification</b>	EU - GHS Substance Classification	REACH No.
Buflomedil Hydrochloride 35543-24-9	100	252-611-9	Xn, R22	Acute Tox. 4 (H302)	No data available

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

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.

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

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.

**Medical Conditions** None known from occupational exposure.

**Aggravated by Exposure:** 

## 4.3 Indication of any immediate medical attention and special treatment needed

**Notes To Physician:** Treat symptomatically

## 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

Not determined **Special Exposure Hazards:** 

5.3 Advice for firefighters

**Protective Equipment and** 

**Precautions for Firefighters:** 

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

## 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.

## **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

Handle in accordance with good industrial hygiene and safety practice.

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## 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
Buflomedil Hydrochloride	500 mcg/m <sup>3</sup> 8-hr TWA	None
35543-24-9	-	

## 8.2. Exposure controls

**Engineering Controls:** Local exhaust ventilation as necessary to maintain exposures to within applicable

limits.

**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.

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:** Solid

Odor: Not determined. **Odor Threshold:** Not determined Not determined. pH: **Boiling Pt.** @ 760 mm Hg (°C): Not determined. 192-193

**Melting/Freezing Point (°C):** 

Flash Point (°C): Not determined. **Evaporation Rate at 20°C:** Not determined. 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. **Specific Gravity:** Not determined.

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**Solubility(ies):** Soluble in: water. **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

Not determined

# Section 10. Stability and reactivity

## 10.1. Reactivity

Not determined

#### 10.2. Chemical stability

Stable under normal conditions

## 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Not determined.

## 10.4. Conditions to avoid

Not determined.

## 10.5 Incompatible materials

Not determined

## 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: Not determined.

Chemical Name	Acute Test	Value	Units	Species
,		410	0 0	Rats
35543-24-9		275		Mice

**Acute Toxicity - Dermal:** Not determined.

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**Acute Toxicity - Inhalation:** Not determined.

**Corrosivity:** Not determined.

**Dermal Irritation:** Not determined.

**Eye Irritation:** Not determined.

**Sensitization:** Not determined.

**Toxicokinetics/Metabolism:** Not determined.

**Target Organ Effects:** Not determined.

**Reproductive Effects:** Not determined.

Carcinogenicity: Not determined.

Mutagenicity: Not determined.

**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

Not determined.

## 12.2. Persistence and degradability

Not determined.

## 12.3. Bioaccumulative potential

Not determined

#### 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.

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# 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:** Not regulated

14.1. UN Number: Not applicable
14.2. Proper shipping name: Not applicable
14.3. Hazard class: Not applicable
14.4. Packing group: Not applicable
14.5. Environmental hazard: Not applicable
14.6. Special Provisions: Not applicable
14.7. 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
Buflomedil Hydrochloride	252-611-9	-	-	Not listed.	-
35543-24-9					

Chemical Name	ENCS	ISHL	IECSC	AICS	KECL	New Zealand
Buflomedil Hydrochloride	-	-	-	-	KE-05-1318	
35543-24-9						

#### 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

 $\pmb{DSL/NDSL}\ -\ Canadian\ Domestic\ Substances\ List/Non-Domestic\ Substances\ List/Non-Dom$ 

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:
Buflomedil Hydrochloride	100	Not Listed	Not Listed	Not Listed

## **SARA 313 Information**

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Chemical Name	Percent	SARA 313 Chemical:	CERCLA RQ/SARA EHS RO (lbs):	SARA EHS TPQ (lbs):
Buflomedil Hydrochloride	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

**Risk Phrases:** R22 - Harmful if swallowed

Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed

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**Supersedes the SDS dated:** Jun-06-2000

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