

Section 1: Identification

Product Name	Metoprolol Tartrate USP
Commercial Name	Not available.
Product Use	Active Pharmaceutical Ingredient
Restrictions On Use	Not available.
Product Code	55-2697
Company	PCCA 9901 South Wilcrest Houston, TX 77099 Phone: 1-800-331-2498 Fax: 1-800-874-5760
	In case of emergency contact: CHEMTREC (24hr) 1-800-424-9300

Section 2: Hazard(s) Identification

OSHA Haz Com:	Serious eye damage/eye irritation Category 2A Specific target organ toxicity, single exposure Category 1
CFR 1910.1200	(cardiovascular system)
Signal Word	WARNING
Hazard Statement(s)	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Suspected of damaging the unborn child. Harmful to aquatic life with long lasting effects. Causes damage to organs (cardiovascular system)
Pictogram(s) or Symbol(s)	


Precautionary Statement(s):

Prevention	ere's the text from the image, ready to copy:P201 - Obtain special instructions before use.P202 - Do not handle until all safety precautions have been read and understood.P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.P264 - Wash hands and other exposed areas thoroughly after handling.P273 - Avoid release to the environment.P280 - Wear protective gloves/protective clothing/eye protection/face protection.
Response	P301+P312 - IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.P302+P352 - IF ON SKIN: Wash with plenty of soap and water.P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing.P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.P308+P313 - IF exposed or concerned: Get medical advice/attention.P312 - Call a POISON CENTER/doctor/physician if you feel unwell.P330 - Rinse mouth.P332+P313 - If skin irritation occurs: Get medical advice/attention.P337+P313 - If eye irritation persists: Get medical advice/attention.
Storage	P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	P501 - Dispose of contents/container to: Hazardous waste. Comply with applicable regulations

Section 3: Composition/Information on Ingredients

Substance/Mixture	Substance
Components	Metoprolol Tartrate USP
% By Weight	100
CAS#	56392-17-7
Molecular Weight	Not available.
Chemical Formula	C15H25N1O3
Synonym(s)	Not available.

Mixtures				
Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Metoprolol Tartrate USP	56392-17-7	100		

Section 4: First-Aid Measures

Inhalation	Move to fresh air in case of accidental inhalation. Assure fresh air breathing. Obtain medical attention if breathing difficulty persists. If breathing is difficult, give oxygen.
Skin Contact	Rinse skin with water/shower. Wash with plenty of soap and water. Flush with water for 15 minutes. If skin irritation persists, take medical advice
Eye Contact	Rinse with water while holding the eyes wide open. Contact lenses should be removed. Obtain medical attention if pain, blinking or redness persist. Continue to rinse eye with clean water for 20-30 minutes, retracting eyelids often.
Ingestion	Rinse mouth out with water. The following symptoms may occur: (see section: 2). If you feel unwell, seek medical advice. Do NOT induce vomiting.
Symptoms/Effects	
Acute	Cardiovascular effects. Pharmacologically active material. Occupational exposure may cause physiological effects.
Delayed	Cardiovascular effects. Pharmacologically active material. Occupational exposure may cause physiological effects.
Immediate Medical Attention	Provide general supportive measures and treat symptomatically.

Section 5: Fire-Fighting Measures**Suitable Extinguishing Media**

Water. Foam. Dry chemical or CO₂. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media

Not available

Products of Combustion

Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard

Firefighters Special Equipment and Precautions

Wear suitable protective equipment. Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing. Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6: Accidental Release Measures

Keep unnecessary personnel away. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid inhalation of dust from the spilled material. Ensure adequate ventilation. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear appropriate personal protective equipment. For personal protection, see section 8 of the SDS. Methods and materials for containment and cleaning up: For waste disposal, see section 13 of the SDS. Avoid the generation of dusts during clean-up. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination. Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Here's the text ready to copy: 7.1 Conditions for safe storage, including any incompatibilities
Technical measures: Comply with applicable regulations.
Storage conditions: To guarantee the quality and properties of the product, keep: dry, Keep in a cool, well ventilated place away from heat. Store in original container.

Section 8: Exposure Controls/Personal Protection

Exposure Limits	TWA 0.1 mg/m ³
Engineering Controls	Appropriate engineering controls: Ensure adequate ventilation, especially in confined areas.



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Metoprolol Tartrate USP

55-2697

Personal Protection

Personal protective equipment: Eye protection: Chemical safety goggles required. Hand protection: Chemical-resistant gloves required. Skin and body protection: Long sleeved clothing. Respiratory protection: Protecting mask required. Thermal hazards: No information available. Hygiene measures: When using do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of work area and clothing. Environmental exposure controls: Do not allow material to contaminate ground water system.

Section 9: Physical and Chemical Properties

Appearance	White crystalline powder.		
Odor	Odourless.		
Odor Threshold	Not available.		
Melting Point	121 - 124 °C	pH	in aqueous solution 6 - 7 Solution:
Freezing Point	Not available.	Vapor Pressure	Not available.
Boiling Point/Range	Not available.	Vapor Density	Not available.
Decomposition temperature	Not available.	Viscosity	Not available.
Partition Coefficient: n-octanol/water	0.6	Evaporation Rate	Not available.
Flash Point	Not available.	Autoignition temperature	752 °F (400 °C)
Flammability	Not available.	Flammability or Explosive Limits:	
		Lower	Not available.
		Upper	Not available.
Solubility(ies)	Very soluble in water. Alcohol, Methylene chloride		
Other	Acetone: Slightly soluble. Chloroform: Freely soluble. Ethanol: Freely soluble. Ether: Insoluble. Methylene chloride: Freely soluble. Chemical family Phenol derivative; aryloxypropanolamine derivative. Density 170.00 kg/m3 Dust explosion properties Minimum ignition energy (MIE) - dust cloud 1 - 3 mJ Molecular formula (C15H25NO3)2 . C4H6O6 Molecular weight 684.81 Potential for dust explosion: Potential heavy dust explosion.		

Section 10: Stability and Reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical Stability	Material is stable under normal conditions.
Hazardous Polymerization	No dangerous reaction known under conditions of normal use.
Conditions to Avoid	Contact with incompatible materials
Incompatible Materials	oxidizing agents.
Hazardous Decomposition Products	NOx. Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions.

Section 11: Toxicological Information

RTECS	UB7450100
Acute Toxicity	Acute Dermal: LD50 Rabbit > 3000 mg/kg Inhalation: LC50 Rat > 2510 mg/m3, 4 hours Oral: LD50 Mouse 1158 - 2460 mg/kg, Rat 3090 - 4670 mg/kg
Skin Corrosion/Irritation	Not available.
Serious Eye Damage/Irritation	Causes serious eye irritation
Respiratory or Skin Sensitization	Not available.
Germ Cell Mutagenicity	Not available.
Carcinogenicity	Not available.
Reproductive Toxicity	

Knowledge about health hazard is incomplete. Some beta-adrenergic blocking agents have been reported to cause fetal and neonatal bradycardia, hypotension, and hypoglycemia when administered during pregnancy, and may also be associated with fetal growth retardation.

Routes of Entry

Eye. Ingestion.

Symptoms Related to Exposure

Beta-adrenergic blockers: Gastrointestinal disturbances. Headache. Mood or mental changes. Drowsiness. Weakness. Insomnia. Nervousness. Visual disturbances. Swelling of feet or legs. Muscle, joint, or chest pain. Seizures. Coma. Cardiovascular effects. Respiratory depression.

Potential Health Effects

Not available.

Target Organ(s) Causes damage to organs (cardiovascular system)

Section 12: Ecological Information**Ecotoxicity**

Aquatic Algae EC50 Algae 7.3 mg/l, 3 days Algae Crustacea EC50 Water flea (Daphnia magna) > 100 mg/l, 48 hours Water flea (Daphnia magna) Fish LC50 Zebra danio (Danio rerio) 54 mg/l, 96 hours

Persistence and Degradability

Biodegradation 17

Bioaccumulative Potential

Octanol/water partition coefficient log Kow 1.88 at 20C

Mobility in Soil

Not available.

Other Adverse Effects

Not available.

Section 13: Disposal Considerations**Waste Disposal**

Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Disposal of Container

Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Other Considerations

Not available.

Section 14: Transport Information**DOT Classification**

Not a DOT controlled material (United States). This material is not classified dangerous good according to international transportation regulations (ADR/RID-IMDG-ICAO/IATA). DOT UN number: UN3077 UN proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Metoprolol Tartrate) Transport hazard class(es) Class 9 Subsidiary risk - Packing group III

Section 15: Regulatory Information**Regulations**



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Metoprolol Tartrate USP

55-2697

US federal regulations: CERCLA/SARA Hazardous Substances - Not applicable. One or more components are not listed on TSCA. This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed. SARA 304 Emergency release notification Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not regulated. Superfund Amendments and Reauthorization Act of 1986 (SARA) Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Hazard categories SARA 302 Extremely hazardous substance Not listed. YesSARA 311/312 Hazardous chemical SARA 313 (TRI reporting) Not regulated Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated. Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Not regulated.Safe Drinking Water Act (SDWA) California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins

Other

Not available.

Section 16: Other Information

The information provided on this SDS Is correct to the best of our knowledge, Information and belief at the date of its publication. The Information given is designed only as a guide for safe handling, use, processing, storage, transportation, and disposal of the designated material and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. End of Safety Data Sheet