Handan Huajun Chemicals Co., Ltd

Material Safety Data Sheet

 Section 1 - Chemical Product MSDS Name: Chloromethyl pivalate 99+% Synonym: Pivaloyloxymethyl chloride, POM; Propanoic acid, 2,2-dimethyl-, chloromethyl ester

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
18997-19-8	Chloromethyl pivalate	99+	242-735-1

Hazard Symbols: XI Risk Phrases: 10 36/37/38

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Flammable. Irritating to eyes, respiratory system and skin.Lachrymator (substance which increases the flow of tears).

Potential Health Effects

Eye:

Causes eye irritation. Lachrymator (substance which increases the flow of tears). Lachrymator (substance which increases the flow of tears). May cause chemical conjunctivitis and corneal damage.

Skin:

Causes skin irritation. May cause dermatitis. May cause cyanosis of the extremities.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts may cause CNS depression.

Inhalation:

Causes respiratory tract irritation. Aspiration may lead to pulmonary edema. Vapors may cause dizziness or suffocation. May cause burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

Chronic:

Effects may be delayed.

Section 4 - FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Do NOT allow victim

to rub eyes or keep eyes closed.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Ingestion:

Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air.

Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Extinguishing Media:

Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Section 7 - HANDLING and STORAGE

Handling:

Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and

can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Use and store under nitrogen. Wash clothing before reuse. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Do not breathe vapor. Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in room temperature, dry, well-ventilated area away from incompatible substances.

Flammables-area.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits CAS# 18997-19-8: Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Clear liquid
Color: clear colorless to very faint yellow
Odor: None reported.
pH: Not available.
Vapor Pressure: Not available.
Viscosity: Not available.
Boiling Point: 70.0 - 72.0 deg C @ 50.00mmHg
Freezing/Melting Point: Not available.
Autoignition Temperature: Not applicable.
Flash Point: 40 deg C (104.00 deg F)
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Solubility in water: practically insoluble
Specific Gravity/Density: 1.0450g/cm3

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid:

Incompatible materials, ignition sources, excess heat, strong oxidants.

Incompatibilities with Other Materials:

Strong acids, strong bases, strong oxidizing agents, strong reducing agents.

Hazardous Decomposition Products:

Hydrogen chloride, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - TOXICOLOGICAL INFORMATION RTECS#: CAS# 18997-19-8 unlisted. LD50/LC50: Not available. Carcinogenicity: Chloromethyl pivalate - Not listed by ACGIH, IARC, or NTP.

Section 12 - ECOLOGICAL INFORMATION

Other No information available.

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - TRANSPORT INFORMATION

IATA

Shipping Name: FLAMMABLE LIQUID, N.O.S.* Hazard Class: 3 UN Number: 1993 Packing Group: III IMO Shipping Name: FLAMMABLE LIQUID, N.O.S. Hazard Class: 3.3 UN Number: 1993 Packing Group: III RID/ADR Shipping Name: FLAMMABLE LIQUID, N.O.S. Hazard Class: 3 UN Number: 1993 Packing group: III

Section 15 - REGULATORY INFORMATION

European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols: XI **Risk Phrases:** R 10 Flammable. R 36/37/38 Irritating to eyes, respiratory system and skin. Safety Phrases: S 16 Keep away from sources of ignition - No smoking. S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S 41 In case of fire and/or explosion do not breathe fumes. WGK (Water Danger/Protection) CAS# 18997-19-8: No information available. Canada CAS# 18997-19-8 is listed on Canada's NDSL List. CAS# 18997-19-8 is not listed on Canada's Ingredient Disclosure List. **US FEDERAL TSCA** CAS# 18997-19-8 is listed on the TSCA inventory.