



MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification

1.1 Product identifiers

Product Name : Pivaloyl Chloride, Trimethylacetyl chloride
Cat No.: AC140050000; AC140050010; AC140050050; AC140052500
CAS No. : 3282-30-2

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

Recommended uses : Laboratory chemicals.
Uses advised against: Food, drug, pesticide or biocidal product use.

1.3 Details of the supplier of the safety data sheet

Company : Krishna Solvechem Limited.
B/503, Sahayog, S. V. Road,
Kandivali (West), Mumbai – 400067. India.

Telephone : +91-22-6123 0222

Email : exports@kscl.co.in

1.4 Emergency telephone number

Emergency Phone : +91-8657457330

SECTION 2: Hazards identification

2.1 Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	(Category 2)
Corrosive to metals	(Category 1)
Acute oral toxicity	(Category 4)
Acute Inhalation Toxicity - Vapors	(Category 2)
Skin Corrosion/Irritation	(Category 1 B)
Serious Eye Damage/Eye Irritation	(Category 1)

2.2 Label elements

Pictogram :



Corrosive to metals

Signal word

Danger

Hazard statement (s)

Highly flammable liquid and vapor
May be corrosive to metals



Precautionary statement (s)

Prevention

Harmful if swallowed
Causes severe skin burns and eye damage
Fatal if inhaled.

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear respiratory protection
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep only in original container
Keep cool

RESPONSE:

Immediately call a POISON CENTER or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

IF INHALED:

Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF ON SKIN (or hair):

Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

Ingestion

Rinse mouth.
DO NOT induce vomiting

Storage:

Store in a well-ventilated place. Keep container tightly closed
Store locked up
Store in corrosive resistant polypropylene container with a resistant inliner



Store in a dry place

Disposal:

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC) Lachrymator (substance which increases the flow of tears)

SECTION 3: Composition / information on ingredients

Component	CAS-No	Weight %
Pivaloyl chloride by GC %	3282-30-2	NLT 99.00%

SECTION 4: First aid measures

4.1 Description of first aid measures

General Advice: Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

If inhalation : If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Remove to fresh air. Immediate medical attention is required.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Ingestion : Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects : Difficulty in breathing. Causes burns by all exposure routes. . Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated

4.3 Notes to Physician : Treat symptomatically



SECTION 5: Firefighting effects

5.1 Extinguishing media

Suitable extinguishing media : Water spray, carbon dioxide (CO₂), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

Unsuitable Extinguishing Media: :
Do not use a solid water stream as it may scatter and spread fire

5.2 Flash Point :

14 °C / 57.2 °F

Method :

No information available

Autoignition Temperature:

455 °C / 851 °F

Explosion Limits:

Upper

7.4%

Lower

1.9%

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge

No information available

Specific Hazards Arising from the Chemical :

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products :

Carbon monoxide (CO). Carbon dioxide (CO₂). Thermal decomposition can lead to release of irritating gases and vapors. Phosgene. Hydrogen chloride gas.

5.4 Protective Equipment and Precautions for Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA:

Health	Flammability	Instability	Physical hazards
4	3	1	W

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

6.2 Environmental precautions

Should not be released into the environment. See Section 12 for additional Ecological



Information.

6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

7.2 Conditions for safe storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Keep away from heat, sparks and flame. Flammables area.

SECTION 8: Exposure controls/personal protection

8.1 Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment.

8.2 Exposure controls

Personal protective equipment -

Eye / Face protection

Tight sealing safety goggles. Face protection shield.

Skin protection and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.



SECTION 9: Physical and chemical properties	
9.1 Information on basic physical and chemical properties	
a) Appearance	Light red, Form: Liquid
b) Odour	pungent
c) Odour Threshold	No data available
d) pH	No information available
e) Melting point / freezing point	-56 °C / -68.8 °F
f) Initial boiling point and boiling range	105 °C / 221 °F @ 760 mmHg
g) Flash point	14 °C / 57.2 °F
h) Evaporation rate	No data available
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Upper: 7.4% Lower: 1.9%
k) Vapour pressure	40 mbar @ 20 °C
l) Vapour density	4.2 (Air = 1.0)
m) Specific Gravity	0.980
n) Solubility	Decomposes in contact with water
o) Partition coefficient: n octanol/water	No data available
p) Auto-ignition temperature	455 °C / 851 °F
q) Decomposition temperature	No data available
r) Viscosity	0.86 mPa.s at 20 °C
s) Molecular formula	C5 H9 Cl O
t) Molecular Weight	120.58
SECTION 10: Stability and Reactivity	
10.1 Reactive Hazard :	None known, based on information available
10.2 Chemical stability :	Moisture sensitive.
10.3 Possibility of hazardous reactions :	None under normal processing.
10.4 Conditions to avoid :	Incompatible products. Excess heat. Keep away from open



<p>Endocrine Disruptor Information :</p> <p>Other Adverse Effects :</p>	<p>cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated</p> <p>No information available</p> <p>The toxicological properties have not been fully investigated.</p>
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SECTION 12: Ecological information

12.1 Ecotoxicity	
Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Reacts with water so no ecotoxicity data for the substance is available.	
Persistence and Degradability	Persistence is unlikely based on information available
Bioaccumulation/ Accumulation	No information available.
Mobility	Is not likely mobile in the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods:	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
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SECTION 14: Transport information

14.1 UN number :	ADR/RID: 2438		
	IMDG: 2438		
	IATA: 2438		
14.2 UN proper shipping name			
ADR/RID :	TRIMETHYLACETYL CHLORIDE		
IMDG :	TRIMETHYLACETYL CHLORIDE		
IATA :	TRIMETHYLACETYL CHLORIDE		
14.3 Transport hazard class(es)	ADR/RID: 6.1	IMDG: 6.1	IATA: 6.1
Subsidiary Hazard Class(es)	ADR/RID: 3 8	IMDG: 3 8	IATA: 3 8



15.2 U.S. State Right-to-Know Regulations:

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Pivaloyl chloride	-	X	-	-	-

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security - This product does not contain the following DHS Chemicals.

Other International Regulations

Mexico – Grade Serious risk, Grade 3

SECTION 16: Other information

16.1 Prepared By: Regulatory Affairs
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Print Date: 24-Dec-2022
Revision Summary: This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the globally Harmonized System of Classification and Labeling of chemicals (GHS)

16.2 Disclaimer:

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text