

Paushak Limited

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name	:	Diethylcarbamoyl Chloride
CAS No.	:	88-10-8
Company	:	Paushak Limited At: Panelav, PO:Tajpura, Taluka: Halol District: Panchmahals - 389350 Gujarat, INDIA.
Telephone	:	+91 2676 664403 / 664412
Emergency Phone #	:	+91-9909985374

2. HAZARDS IDENTIFICATION

OSHA Haz Com:

Acute Toxicity - Inhalation [Category 4]
Eye Damage/Irritation [Category 2]
Carcinogenicity [Category 2]
Flammable Liquids [Category 4]
Corrosive to Metals [Category 1]
Skin Corrosion/Irritation [Category 2]
Specific target organ toxicity - single exposure (Category 3), H335
Warning!

Signal word:

Hazard Statement(s):

H315: Causes skin irritation
H319: Causes serious eye irritation.
H302:Harm ful if swallowed
H332: Harmful if inhaled.
H351: Suspected of causing cancer.
H335: May cause respiratory irritation.

Pictogram(s) or Symbol(s):



Precautionary Statement(s):

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from flames and hot surfaces. – No smoking.
P234: Keep only in original container.
P260: Do not breathe dusts or mists.
P264: Wash hands and face thoroughly after handling
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves, protective clothing, face protection.
P301+P330+P331+P310: If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor.
P303+P361+P353+P310+P363: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse.
P304+P340+P310: If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor.
P305+P351+P338+P310: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.
P308+P313: If exposed or concerned: Get medical advice or attention.
P370+P378: In case of fire: Use dry chemical, dry sand or foam to extinguish.
P390: Absorb spillage to prevent material damage

P403+P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

P406: Store in corrosive resistant bottle or metal container with a resistant inner liner.

P501: Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40 CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified:

[HNOC] May be harmful if swallowed. Lachrymator

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:	Substance
Components:	Diethylcarbamoyl Chloride
Percent:	>97.0%(GC)(T)
CAS Number:	88-10-8
Molecular Weight:	135.59
Chemical Formula:	C ₅ H ₁₀ ClNO
Synonyms:	No data available
CA Index:	No data available
EC-No. :	201-798-5
Index-No. :	607-229-00-0

4. FIRST AID MEASURES

Inhalation:	Immediately call a poison centre or doctor. Effects of exposure (inhalation) to substance may be delayed. Inhalation of vapors or contact with substance will result in contamination and potential harmful effects. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Skin contact:	For severe burns, immediate medical attention is required. Immediately call a poison center or doctor. Effects of exposure (skin contact) to substance may be delayed. Remove and wash contaminated clothing before re-use. Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Eye contact:	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Eye contact with vapors or substance may cause severe injury, burns, or death. Call emergency medical service. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Ingestion:	Do not induce vomiting without medical advice. Effects of exposure (ingestion) to substance may be delayed. Call a physician or Poison Control Center immediately. Do not use mouth-to-mouth methods if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Symptoms/effects:	
Acute:	Pain. Redness.
Delayed:	Possibly carcinogenic to humans.
Immediate medical attention:	WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is harmful. WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is corrosive. CAUTION: Victim may be a source of contamination. For severe burns, immediate medical attention is required. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media:	Dry chemical, CO2 or water spray. Consult with local fire authorities before attempting large scale fire fighting operations.
Specific hazards arising from the chemical	Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas
Hazardous combustion products:	These products include: Carbon oxides Nitrogen oxides Halogenated compounds
Other specific hazards:	WARNING: Highly toxic HCl gas is produced during combustion.
Special precautions for fire-fighters:	Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material. CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient. Do not use straight streams. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Move containers from fire area if you can do it without risk.
Special protective equipment for fire-fighters:	Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection.
6. ACCIDENTAL RELEASE MEASURES	
Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Use spark proof tools and explosion-proof equipment. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
Personal protective equipment:	Wear eye protection (splash goggles) and face protection (full length face shield). Wear protective clothing (chemical resistant suit and chemical resistant boots). Vapor respirator. Be sure to use a approved respirator or equivalent. Wear protective gloves (nitrile).
Emergency procedures:	Isolate area until gas has dispersed. Do not clean-up or dispose except under supervision of a specialist. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and exercise caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if needed.
Methods and materials for containment and cleaning up:	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). All equipment used when handling the product must be grounded. Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material.
Environmental precautions:	Keep away from living quarters. Do not let product enter drains. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE	
Precautions for safe handling:	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2
Conditions for safe storage:	Store at ambient temperature. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Exposure to moisture Storage class : Combustible liquids, corrosive
Storage incompatibilities:	Bases, Store away from oxidizing agents
8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
Exposure limits:	No data available
Appropriate engineering controls:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday
Personal protective equipment	
Respiratory protection:	Respirator cartridges as a backup to engine protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.
Hand protection:	Wear protective gloves.
Eye protection:	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards.
Skin and body protection:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
9. PHYSICAL AND CHEMICAL PROPERTIES	
Physical state (20°C):	Liquid
Form:	Clear
Color:	Colorless - Pale yellow
Odor:	No data available
Odor threshold:	No data available
Melting point/freezing point:	Melting point/range: -32 °C
Boiling point/range:	117 - 123 °C at 177 hPa
Decomposition temperature:	No data available
Relative density:	1.07
Kinematic Viscosity:	No data available
Partition coefficient: n-octanol/water (log Pow)	No data available
Flash point:	76°C (169°F)
Flammability (solid, gas):	No data available
pH:	No data available
Vapor pressure:	100Pa/20°C
Vapor density:	4.1
Dynamic Viscosity:	No data available
Evaporation rate: (Butyl Acetate = 1)	No data available
Autoignition temperature:	400°C (752°F)
Flammability or explosive limits:	
Lower:	No data available
Upper:	No data available
Solubility(ies):	

10. STABILITY AND REACTIVITY	
Reactivity:	No data available
Chemical Stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions:	In use, may form flammable/explosive vapor-air mixture.
Conditions to avoid:	Heat, flames and sparks.
Incompatible materials:	Alkali, Bases, Moisture, Oxidizing agents
Hazardous Decomposition Products:	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas Other decomposition products - No data available In the event of fire: see section 5
11. TOXICOLOGICAL INFORMATION	
RTECS Number:	FD4025000
Acute Toxicity:	LD50 Oral - Rat - 2,700 mg/kg(Diethylcarbamoyl chloride) Remarks: Behavioral:Coma. Gastrointestinal disturbance Blood:Changes in spleen
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	Eyes - Rabbit (Diethylcarbamoyl chloride) Result: Moderate eye irritation
Respiratory or skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
NTP:	No data available
OSHA:	No data available
Routes of Exposure:	Inhalation, Eye contact, Ingestion, Skin contact.
Symptoms related to exposure:	Overexposure may result in serious illness or death. Skin contact may produce burns. Skin contact may result in inflammation; characterized by itching, scaling, reddening, or occasionally blistering. Eye contact can result in corneal damage or blindness. Inflammation of the eye is characterized by redness, watering, and itching.
Potential Health Effects:	May be harmful if inhaled or ingested. Overexposure may result in serious illness or death.
Target organ(s):	May cause respiratory irritation. (Diethylcarbamoyl chloride)
12. ECOLOGICAL INFORMATION	
Ecotoxicity	
Fish:	No data available
Crustacea:	No data available
Algae:	No data available
Persistence and degradability:	No data available
Bioaccumulative potential (BCF):	No data available
Mobility in soil:	No data available
Partition coefficient:	No data available
n-octanol/water (log Pow)	No data available
Soil adsorption (Koc):	No data available
13. DISPOSAL CONSIDERATIONS	
Disposal of product:	This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.
Disposal of container:	Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number:	Proper Shipping Name:	Class or Division:	Subrisk(s):	Packing Group:
UN3265	Corrosive liquid, acidic, organic, n.o.s.	8 Corrosive material	--	III
ADR/RID:	NO			
Marine pollutant:				

IATA

UN number:	Proper Shipping Name:	Class or Division:	Subrisk(s):	Packing Group:
UN3265	Corrosive liquid, acidic, organic, n.o.s.	8 Corrosive material	--	III
Marine pollutant:	NO			

IMDG

UN number:	Proper Shipping Name:	Class or Division:	Subrisk(s):	Packing Group:
UN3265	Corrosive liquid, acidic, organic, n.o.s.	8 Corrosive material	--	III
Marine pollutant:	NO			
EmS number:	F-A, S-B			

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.): This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313:	Not Listed
SARA 302:	Not Listed

State Regulations

State Right-to-Know

Massachusetts	Not Listed
New Jersey	Listed
Pennsylvania	Not Listed
California	Not Listed
Proposition 65:	

Other Information

NFPA Rating:	HMIS Classification:
Health: 2	Health: 2
Flammability: 2	Flammability: 2
Instability: 0	Physical: 0

International Inventories

WHMIS hazard class:	E: Corrosive material. B3: Combustible Liquid. D2A: Materials causing other toxic effects. (Very Toxic)
EC-No:	201-798-5

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide for technically qualified personnel. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Paushak Ltd. extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any third party use & shall not be held liable for any damage resulting from handling or from contact with the above product.