

# SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

## 1. Identification

**Product Identifier:** POLYCAT DBU

**Other means of identification**

**Recommended restrictions**

**Recommended use:** Chemical Intermediate  
**Restrictions on use:** Not determined.

**Manufacturer/Importer/Distributor Information**

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**Emergency telephone number:**

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)  
Emergency : +1 800 681 9531 (CHEMTREC MEXICO)  
+1 703 527 3887 (CHEMTREC WORLD)

## 2. Hazard(s) identification

**Hazard Classification**

**Health Hazards**

Acute toxicity (Oral)	Category 3
Skin corrosion	Category 1B

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Danger

<b>Hazard Statement:</b>	Toxic if swallowed. Causes severe skin burns and eye damage.
<b>Precautionary Statements</b>	
<b>Prevention:</b>	Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling.
<b>Response:</b>	IF SWALLOWED: Immediately call a POISON CENTER/doctor. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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/doctor. Wash contaminated clothing before reuse.
<b>Storage:</b>	Store locked up.
<b>Disposal:</b>	Dispose of contents/ container to an approved waste disposal plant.
<b>Hazard(s) not otherwise classified (HNOC):</b>	None.

### 3. Composition/information on ingredients

#### Substances

Chemical Identity	CAS number	Content in percent (%)*
Pyrimido[1,2-a]zepine, 2,3,4,6,7,8,9,10-octahydro-	6674-22-2	100%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

#### Description of necessary first-aid measures

<b>General information:</b>	Seek medical advice. If breathing is irregular or stopped, administer artificial respiration.
<b>Inhalation:</b>	If breathing is irregular or stopped, administer artificial respiration. Move to fresh air.
<b>Skin Contact:</b>	Wash off immediately with soap and plenty of water. Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Flush immediately with copious amounts of water. Initiate and maintain continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour. Cover wound with sterile dressing.
<b>Eye contact:</b>	Rinse immediately with plenty of water for at least 15 minutes. Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.

**Ingestion:** Prevent aspiration of vomit. Turn victim's head to the side. Never give anything by mouth to an unconscious person. If swallowed, seek medical advice immediately and show this container or label.

**Personal Protection for First-aid Responders:** Avoid contact with skin., A face shield should be worn. Use personal protective equipment., Wear self-contained breathing apparatus for firefighting if necessary.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat.

**Hazards:** No data available.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically.

**5. Fire-fighting measures**

**General Fire Hazards:** Do not allow run-off from fire fighting to enter drains or water courses. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Carbon Dioxide. Dry chemical. Dry sand. Limestone powder Alcohol resistant foam.

**Unsuitable extinguishing media:** No data available.

**Specific hazards arising from the chemical:** Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Avoid contact with skin. A face shield should be worn. Use personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Evacuate personnel to safe areas. Use self-contained breathing apparatus and chemically protective clothing.

**Accidental release measures:** If possible, stop flow of product.

**Methods and material for containment and cleaning up:** Place in appropriate chemical waste container. Approach suspected leak areas with caution. Call Emergency Response number for advice.

**Environmental Precautions:** Construct a dike to prevent spreading.

## 7. Handling and storage

### Handling

**Technical measures (e.g. Local and general ventilation):** Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

**Safe handling advice:** Avoid contact with skin and eyes. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Use only in well-ventilated areas. Avoid breathing vapors and/or aerosols. Use personal protective equipment. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash hands at the end of each workshift and before eating, smoking or using the toilet.

**Contact avoidance measures:** No data available.

**Hygiene measures:** Provide readily accessible eye wash stations and safety showers.

### Storage

**Safe storage conditions:** Do not store in reactive metal containers. Do not store near acids. Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Keep containers tightly closed in a dry, cool and well-ventilated place.

**Safe packaging materials:** No data available.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

**Appropriate Engineering Controls** Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

### Individual protection measures, such as personal protective equipment

**Eye/face protection:** Full face shield with goggles underneath.

#### Skin Protection

**Hand Protection:** Additional Information: Butyl rubber., Nitrile rubber., Neoprene gloves, Impervious gloves. Additional Information: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

#### Skin and Body Protection:

No specific recommendations. Impervious clothing Rubber or plastic boots Slicker Suit.

**Respiratory Protection:** Wear appropriate respirator when ventilation is inadequate. Not required for properly ventilated areas.

**Hygiene measures:** Provide readily accessible eye wash stations and safety showers.

## 9. Physical and chemical properties

### Appearance

**Physical state:** liquid

**Form:** liquid

<b>Color:</b>	colourless
<b>Odor:</b>	Odorless
<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	> 12.5 alkalines
<b>Freezing point:</b>	No data available.
<b>Boiling Point:</b>	259 °C
<b>Flash Point:</b>	> 96.11 °C
<b>Evaporation Rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.

<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	< 1.73 hPa (21 °C)
<b>Vapor density (air=1):</b>	No data available.
<b>Density:</b>	1.04 g/cm <sup>3</sup> (21 °C)
<b>Relative density:</b>	(water = 1) 1.04
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	Completely Soluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Self Ignition Temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	No data available.
<b>Kinematic viscosity:</b>	No data available.
<b>Dynamic viscosity:</b>	No data available.

#### Other information

<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.
<b>Minimum ignition temperature:</b>	No data available.
<b>Metal Corrosion:</b>	No data available.

### 10. Stability and reactivity

<b>Reactivity:</b>	see section "Possibility of hazardous reactions"
<b>Chemical Stability:</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.
<b>Conditions to avoid:</b>	No data available.
<b>Incompatible Materials:</b>	Organic acids (i.e. acetic acid, citric acid etc.). Mineral Acid Sodium hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Oxidizing agents.
<b>Hazardous Decomposition Products:</b>	Nitric acid. Ammonia Nitrogen Oxides Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon Monoxide. Carbon Dioxide.

### 11. Toxicological information

#### Information on likely routes of exposure

<b>Inhalation:</b>	If handled correctly, not a relevant route of exposure. Information on effects are given below.
<b>Skin Contact:</b>	Relevant route of exposure. Information on effects are given below.
<b>Eye contact:</b>	Relevant route of exposure. Information on effects are given below.
<b>Ingestion:</b>	If handled correctly, not a relevant route of exposure. Information on effects are given below.

**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

<b>Oral</b>	
<b>Product:</b>	LD 50 (Rat): 251 - 300 mg/kg
<b>Dermal</b>	
<b>Product:</b>	LD 50 (Rabbit): > 1,233 mg/kg
<b>Inhalation</b>	
<b>Product:</b>	No data is available on the product itself.

**Repeated dose toxicity**

**Product:** No data available.

**Skin Corrosion/Irritation**

**Product:** Corrosive in an in vitro test.

**Serious Eye Damage/Eye Irritation**

**Product:** Severe eye irritation Corrosive to the eyes of a rabbit.

**Respiratory or Skin Sensitization**

**Product:** No data available.

**Carcinogenicity**

**Product:** No data available.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:****US. National Toxicology Program (NTP) Report on Carcinogens:****US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

**Germ Cell Mutagenicity**

**In vitro**  
**Product:** No data available.

**In vivo**  
**Product:** No data available.

**Reproductive toxicity**

**Product:** No data is available on the product itself.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Aspiration Hazard**

**Product:** No data available.

**Other effects:** No data available.

**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:**

**Fish**  
**Product:** LC 50 (Leuciscus idus (Golden orfe), 96 h): 100 - 220 mg/l

**Aquatic Invertebrates**  
**Product:** EC 50 (Daphnia (water flea), 48 h): 50 mg/l

**Chronic hazards to the aquatic environment:**

**Fish**  
**Product:** No data available.

**Aquatic Invertebrates**  
**Product:** No data available.

**Toxicity to Aquatic Plants**  
**Product:** No data is available on the product itself.

**Persistence and Degradability**

**Biodegradation**  
**Product:** < 20 % According to the results of tests of biodegradability this product is not readily biodegradable.

**BOD/COD Ratio**  
**Product:** No data available.

**Bioaccumulative potential****Bioconcentration Factor (BCF)****Product:** No data available.**Partition Coefficient n-octanol / water (log Kow)****Product:** Log Kow: No data available.**Mobility in soil:** No data available.**Components:**Pyrimido[1,2-a]azepine,  
2,3,4,6,7,8,9,10-  
octahydro- No data available.**Other adverse effects:** Do not allow to enter soil, waterways or waste water canal.**13. Disposal considerations****Disposal methods:** Contact supplier if guidance is required.**Contaminated Packaging:** Dispose of container and unused contents in accordance with federal, state, and local requirements.**14. Transport information****Domestic regulation****49 CFR**

UN/ID/NA number : UN 2922

Proper shipping name : Corrosive liquids, toxic, n.o.s.  
(Diazabicyclo(5.4.0)undec-7-ene, 1,8- (dbu))

Class : 8

Subsidiary risk : 6.1

Packing group : II

Labels : 8 (6.1)

ERG Code : 154

Marine pollutant : no

Remarks : Keep separate from foodstuffs, luxury foods, feedstuffs

**International Regulations****IATA-DGR**

UN/ID No. : UN 2922

Proper shipping name : Corrosive liquid, toxic, n.o.s.  
(Diazabicyclo(5.4.0)undec-7-ene, 1,8- (dbu))



Class : 8  
Subsidiary risk : 6.1  
Packing group : II  
Labels : 8 (6.1)  
Packing instruction (cargo aircraft) : 855  
Packing instruction (passenger aircraft) : 851

**IMDG-Code**

UN number : UN 2922  
Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S.  
(Diazabicyclo(5.4.0)undec-7-ene, 1,8- (dbu))  
Class : 8  
Subsidiary risk : 6.1  
Packing group : II  
Labels : 8 (6.1)  
EmS Code : F-A, S-B  
Marine pollutant : no  
Remarks : Clear of living quarters.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

**15. Regulatory information****US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

Acute toxicity (any route of exposure), Skin Corrosion or Irritation

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances****SARA 311/312 Hazardous Chemical****Chemical Identity**                      **Threshold Planning Quantity****SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**US State Regulations****US. California Proposition 65**This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

No ingredient requiring a warning under CA Prop 65.

**US. New Jersey Worker and Community Right-to-Know Act**

No ingredient regulated by NJ Right-to-Know Law present.

**US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances**

No ingredient regulated by PA Right-to-Know Law present.

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**Inventory Status:**US TSCA Inventory:                      Included on Inventory.  
Canada DSL Inventory List:              Included on Inventory.

**16. Other information, including date of preparation or last revision**
**HMIS Hazard ID**

Health		3
Flammability		1
<b>Physical Hazards</b>		<b>0</b>
<b>PERSONAL PROTECTION</b>		

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect

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**Version #:** 1.0

**Further Information:** No data available.

**Revision Information:** Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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