

# SAFETY DATA SHEET

Date Prepared 06-26-2023

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : 2,4,6-Tri(dimethylaminomethyl)phenol

Product Number : 21370

CAS-No. : 90-72-2

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

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the material on the safety data sheet

Company : Ladd Research  
3 Ewing Place  
Essex Junction, VT 05452  
USA

Telephone : 802-658-4961

Fax : 802-660-8859

### 1.4 Emergency telephone number

Emergency Phone # : +1-703-741-5500 (Chemtrec)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion (Category 1B), H314

Serious eye damage (Category 1), H318

Skin sensitisation (Sub-category 1B), H317

Acute aquatic toxicity (Category 3), H402

Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H314

Causes severe skin burns and eye damage.

H317

May cause an allergic skin reaction.

H318

Causes serious eye damage.

H412

Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P261

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264

Wash skin thoroughly after handling.

P272

Contaminated work clothing should not be allowed out of the workplace.

P273

Avoid release to the environment.

P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
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/ physician.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms	: DMP-30™
Formula	: C <sub>15</sub> H <sub>27</sub> N <sub>3</sub> O
Molecular weight	: 265.39 g/mol
CAS-No.	: 90-72-2
EC-No.	: 202-013-9
Index-No.	: 603-069-00-0

#### Hazardous components

Component	Classification	Concentration
<b>2,4,6-Tris(dimethylaminomethyl)phenol</b>		
	Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1B; Aquatic Acute 3; Aquatic Chronic 3; H314, H317, H318, H412	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

---

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

---

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

---

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

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.

Storage class (TRGS 510): Combustible, corrosive hazardous materials

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### **Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### **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**

##### **Eye/face protection**

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin 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.

**Full contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

**Splash contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

---

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

- |   |  |
|---|--|
| a) Appearance                                   | Form: clear, viscous liquid<br>Colour: light yellow  |
| b) Odour  | amine-like   |
| c) Odour Threshold                              | No data available                                    |
| d) pH   | No data available                                    |
| e) Melting point/freezing point                 | Freezing point: < -20 °C (< -4 °F)                   |
| f) Initial boiling point and boiling range      | 130 - 135 °C (266 - 275 °F) at 1 hPa (1 mmHg) - lit. |
| g) Flash point                                  | 124 °C (255 °F) - closed cup                         |
| h) Evaporation rate                             | No data available                                    |
| i) Flammability (solid, gas)                    | No data available                                    |
| j) Upper/lower flammability or explosive limits | No data available                                    |
| k) Vapour pressure                              | >= 0.1 hPa (>= 0.1 mmHg) at 25 °C (77 °F)            |
| l) Vapour density                               | 9.16 - (Air = 1.0)                                   |

m) Relative density	0.969 g/cm <sup>3</sup> at 25 °C (77 °F)
n) Water solubility	850 g/l at 20 °C (68 °F) - soluble
o) Partition coefficient: n-octanol/water	log Pow: -0.659
p) Auto-ignition temperature	382 °C (720 °F)
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

## 9.2 Other safety information

Relative vapour density 9.16 - (Air = 1.0)

---

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents, Strong acidsStrong acids, Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - No data available  
In the event of fire: see section 5

---

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - male and female - 2,169 mg/kg  
(OECD Test Guideline 401)

Dermal: No data available

#### Skin corrosion/irritation

Skin - Rabbit

Result: Corrosive - 4 h  
(OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit

Result: Corrosive

#### Respiratory or skin sensitisation

Maximisation Test (GPMT) - Guinea pig

Result: The product is a skin sensitiser, sub-category 1B.  
(OECD Test Guideline 406)

#### Germ cell mutagenicity

No data available

Ames test  
S. typhimurium  
Result: negative

#### **Carcinogenicity**

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### **Reproductive toxicity**

No data available

No data available

#### **Specific target organ toxicity - single exposure**

No data available

#### **Specific target organ toxicity - repeated exposure**

No data available

#### **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: SN3500000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.,  
Cough, Shortness of breath, Headache, Nausea

---

## **12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

Toxicity to fish                      static test LC50 - Cyprinus carpio (Carp) - 175 mg/l - 96 h

Toxicity to algae                    static test EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - 84  
mg/l - 72 h  
(OECD Test Guideline 201)

Toxicity to bacteria

### **12.2 Persistence and degradability**

Biodegradability                    aerobic - Exposure time 28 d  
Result: 4 % - Not readily biodegradable.  
(OECD Test Guideline 301D)

### **12.3 Bioaccumulative potential**

### **12.4 Mobility in soil**

### **12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### **12.6 Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Harmful to aquatic life with long lasting effects.

---

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

#### Contaminated packaging

Dispose of as unused product.

---

## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 2735      Class: 8      Packing group: II  
Proper shipping name: Amines, liquid, corrosive, n.o.s. (2,4,6-Tris(dimethylaminomethyl)phenol)  
Reportable Quantity (RQ):  
Marine pollutant: No  
Poison Inhalation Hazard: No

### IMDG

UN number: 2735      Class: 8      Packing group: II      EMS-No: F-A, S-B  
Proper shipping name: AMINES, LIQUID, CORROSIVE, N.O.S. (2,4,6-Tris(dimethylaminomethyl)phenol)  
Marine pollutant: No

### IATA

UN number: 2735      Class: 8      Packing group: II  
Proper shipping name: Amines, liquid, corrosive, n.o.s. (2,4,6-Tris(dimethylaminomethyl)phenol)

---

## 15. REGULATORY INFORMATION

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Acute Health Hazard

### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

	CAS-No.	Revision Date
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	

### New Jersey Right To Know Components

	CAS-No.	Revision Date
2,4,6-Tris(dimethylaminomethyl)phenol	90-72-2	

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

---

## 16. OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3.

Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity

Eye Dam.	Serious eye damage
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

**HMIS Rating**

Health hazard:	3
Chronic Health Hazard:	
Flammability:	1
Physical Hazard	0

**NFPA Rating**

Health hazard:	3
Fire Hazard:	1
Reactivity Hazard:	0

**Disclaimer**

The information presented is believed to be correct and is the most accurate information available to us at this time. However, Ladd Research makes no warranty, express or implied, and assumes no liability for the information and the product described herein.

Date Revised: 06-26-2023