# 2,2,6,6 TETRAMETHYL PIPERIDINE-1-OXYL FOR SYNTHESIS MSDS

CAS No: 2564-83-2 MSDS



# **MATERIAL SAFETY DATA SHEET (MSDS)**

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance

:

EC no : 219-888-8 CAS No : 2564-83-2 Product code : 06237

Chemical structure :

H<sub>3</sub>C N CH<sub>3</sub>

Synonyms : TEMPO

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries
1st Floor , Above Bank of India, Guru Vihar , Rahon Road,
Ludhiana Pb. (141007)
+91 9316777775, +91 7707855700
sales@labogens.com - www.Labogens.com

#### 1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

### **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, H314

Category 1B

Full text of classification categories and H statements : see section 16

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#### Classification according to Directive 67/548/EEC or 1999/45/EC

C; R34

Full text of R-phrases: see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

GHS05

Signal word (CLP) : Danger

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage

Precautionary statements (CLP) : P280 - Wear protective gloves/protective clothing/eye protection/face protection

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a POISON CENTER or doctor/physician

#### Other hazards

No additional information available

### **SECTION 3: Composition/information on ingredients**

#### 3.1. **Substance**

Name : 2,2,6,6 TETRAMETHYL PIPERIDINE-1-OXYL For Synthesis

CAS No : 2564-83-2 : 219-888-8 EC no

Full text of R- and H-phrases: see section 16

#### 3.2. **Mixture**

Not applicable

#### **SECTION 4: First aid measures**

## **Description of first aid measures**

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with

water/shower. Immediately call a POISON CENTER or doctor/physician.

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First-aid measures after eye contact : 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.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or

doctor/physician.

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

Symptoms/injuries : Causes severe skin burns and eye damage.

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

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media : Do not use a heavy water stream.

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

No additional information available

## 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

#### **SECTION 6: Accidental release measures**

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

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Stop release.

### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

#### 6.4. Reference to other sections

No additional information available

#### SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures : Wash ... thoroughly after handling. Wash contaminated clothing before reuse.

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

Technical measures : Comply with applicable regulations.

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place.

Protect from moisture.

#### 7.3. Specific end use(s)

No additional information available

#### **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

No additional information available

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### 8.2. Exposure controls

Hand protection : protective gloves

Eye protection : Chemical goggles or face shield
Skin and body protection : Wear suitable protective clothing
Respiratory protection : Wear respiratory protection

### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Molecular mass : 156.25 g/mol Colour : Reddish crystals.

Odour : No data available

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 36 - 39

Freezing point : No data available

Boiling point : No data available

Flash point : 67 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Solubility : No data available

Viscosity, kinematic : No data available

Log Pow

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

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: No data available

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#### 9.2. Other information

No additional information available

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Thermal decomposition generates: Corrosive vapours.

### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Thermal decomposition generates: Corrosive vapours.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes severe skin burns and eye damage. Serious eye damage/irritation : Serious eye damage, category 1, implicit

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified Specific target organ toxicity (single : Not classified

exposure)

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

### **SECTION 12: Ecological information**

# 12.1. Toxicity

No additional information available

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#### Persistence and degradability

No additional information available

#### 12.3. **Bioaccumulative potential**

No additional information available

#### 12.4. **Mobility in soil**

No additional information available

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

No additional information available

#### 12.6. Other adverse effects

No additional information available

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Product/Packaging disposal

recommendations

: Dispose of contents/container to ...

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

#### 14.1. **UN** number

UN-No. (ADR) : 3263 UN-No. (IMDG) : 3263 UN-No.(IATA) : 3263 UN-No.(ADN) : 3263 UN-No. (RID) : 3263

# **UN** proper shipping name

: CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. Proper Shipping Name (ADR) Proper Shipping Name (IMDG) : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. Proper Shipping Name (IATA) : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. Proper Shipping Name (ADN) : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S. Proper Shipping Name (RID) : CORROSIVE SOLID, BASIC, ORGANIC, N.O.S.

Transport document description (ADR) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., 8, II, (E) Transport document description (IMDG) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., 8, II Transport document description (IATA) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., 8, II Transport document description (ADN) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., 8, II Transport document description (RID) : UN 3263 CORROSIVE SOLID, BASIC, ORGANIC, N.O.S., 8, II

#### 14.3. Transport hazard class(es)

#### **ADR**

Transport hazard class(es) (ADR) : 8 Danger labels (ADR) : 8

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#### **IMDG**

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8



#### **IATA**

Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8



### **ADN**

Transport hazard class(es) (ADN) : 8
Danger labels (ADN) : 8



### RID

Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8



### 14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

# 14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

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#### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : C8
Special provision (ADR) : 274
Limited quantities (ADR) : 1kg
Excepted quantities (ADR) : E2

Packing instructions (ADR) : P002, IBC08

Special packing provisions (ADR) : B4

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container : T3

instructions (ADR)

Portable tank and bulk container special

provisions (ADR)

Tank code (ADR) : SGAN, L4BN

Vehicle for tank carriage : AT
Transport category (ADR) : 2
Special provisions for carriage - Packages : V11

(ADR)

Hazard identification number (Kemler No.) : 80

Orange plates

80 3263

: TP33

Tunnel restriction code (ADR) : E EAC code : 2X

#### - Transport by sea

Special provision (IMDG) : 274 Limited quantities (IMDG) : 1 kg Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P002 IBC packing instructions (IMDG) : IBC08 IBC special provisions (IMDG) : B2, B4 Tank instructions (IMDG) : T3 Tank special provisions (IMDG) : TP33 EmS-No. (Fire) : F-A EmS-No. (Spillage) : S-B : B Stowage category (IMDG) Segregation (IMDG) : SG35 MFAG-No : 154

#### - Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y844
PCA limited quantity max net quantity : 5kg
(IATA)

PCA packing instructions (IATA) : 859
PCA max net quantity (IATA) : 15kg
CAO packing instructions (IATA) : 863
CAO max net quantity (IATA) : 50kg
Special provision (IATA) : A3
ERG code (IATA) : 8L

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#### - Inland waterway transport

Classification code (ADN) : C8
Special provisions (ADN) : 274
Limited quantities (ADN) : 1 kg
Excepted quantities (ADN) : E2
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

#### - Rail transport

Classification code (RID) : C8
Special provision (RID) : 274
Limited quantities (RID) : 1kg
Excepted quantities (RID) : E2

Packing instructions (RID) : P002, IBC08

Special packing provisions (RID) : B4

Mixed packing provisions (RID) : MP10

Portable tank and bulk container : T3

instructions (RID)

Portable tank and bulk container special

provisions (RID)

Tank codes for RID tanks (RID) : SGAN, L4BN

Transport category (RID) : 2 Special provisions for carriage – Packages : W11

(RID)

Colis express (express parcels) (RID) : CE10 Hazard identification number (RID) : 80

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

: TP33

Not applicable

#### **SECTION 15: Regulatory information**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

2,2,6,6 TETRAMETHYL PIPERIDINE-1-OXYL For Synthesis is not on the REACH Candidate List 2,2,6,6 TETRAMETHYL PIPERIDINE-1-OXYL For Synthesis is not on the REACH Annex XIV List

# 15.1.2. National regulations

# Germany

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance) Immission Control Act - 12.BlmSchV

Denmark

Class for fire hazard : Class III-1 Store unit : 50 liter

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Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management

guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

## 15.2. Chemical safety assessment

No additional information available

### **SECTION 16: Other information**

### Full text of R-, H- and EUH-phrases:

Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H314	Causes severe skin burns and eye damage
R34	Causes burns
С	Corrosive

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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