

2,2,4-TRIMETHYL PENTANE FOR PESTICIDE RESIDUE TRACE ANALYSIS MSDS



LABORATORY REAGENTS
& FINE CHEMICALS

CAS No: 540-89-1 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
Trade name : 2,2,4-TRIMETHYL PENTANE For pesticide residue trace analysis
CAS No : 540-89-1
Product code : 0352A

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, Manufacturing of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.
107 Wode House Road, Jehangir Villa, Colaba
400005 Mumbai - INDIA
T +91 22 6663 6663 - F +91 22 6663 6699
info@lobachemie.com - www.lobachemie.com

1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (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]

Flammable liquids, H225
Category 2
Aspiration hazard, H304
Category 1
Skin corrosion/irritation, H315
Category 2
Specific target organ
toxicity — Single
exposure, Category 3,
Narcosis H336
Hazardous to the aquatic
environment — Acute
Hazard, Category 1 H400
Hazardous to the aquatic
environment — Chronic
Hazard, Category 1 H410

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

F; R11

Xn; R65

Xi; R38

N; R50/53

R67

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02



GHS08



GHS07



GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H225 - Highly flammable liquid and vapour
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H336 - May cause drowsiness or dizziness
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) :

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician
P331 - Do NOT induce vomiting
P501 - Dispose of contents/container to ...

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : 2,2,4-TRIMETHYL PENTANE For pesticide residue trace analysis

CAS No : 540-89-1

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

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3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. 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. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see ... on this label).
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Immediately call a POISON CENTER or doctor/physician.

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

- Symptoms/injuries after inhalation : May cause drowsiness or dizziness.
- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

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), earth, sand, dry chemical powder or foam.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Highly flammable liquid and vapour.
- Explosion hazard : May form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

No additional information available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

- Protective equipment : Avoid breathing dust/fume/gas/mist/vapours/spray.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.
- Precautions for safe handling : No naked lights. No smoking. Use only non-sparking tools. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.
- Hygiene measures : Wash ... thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment.
- Storage conditions : Keep in fireproof place. Keep container tightly closed.
- Incompatible materials : Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

- Hand protection : protective gloves
- Eye protection : Chemical goggles or safety glasses
- Skin and body protection : Wear suitable protective clothing
- Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Colour : Clear Colorless.
- Odour : benzene-like.
- Odour threshold : No data available
- pH : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Melting point : -107.45 °C
- Freezing point : No data available
- Boiling point : 98 - 99 °C
- Flash point : -12 °C
- Auto-ignition temperature : 418

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Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable Highly flammable liquid and vapour
Vapour pressure	: 5.4 kPa at 20°C
Relative vapour density at 20 °C	: 3.93
Relative density	: 0.69194
Density	: 0.69194 g/cm ³
Solubility	: Water: Insoluble in cold water
Log Pow	: 4.6
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 0.01 - 0.06 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Open flame. Direct sunlight.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

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Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment.
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12.3. Bioaccumulative potential

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Log Pow	4.6
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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 ...

Additional information : Handle empty containers with care because residual vapours are flammable.

Ecology - waste materials : Hazardous waste due to toxicity.

SECTION 14: Transport information

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

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14.1. UN number

UN-No. (ADR)	: 1262
UN-No. (IMDG)	: 1262
UN-No.(IATA)	: 1262
UN-No.(ADN)	: 1262
UN-No. (RID)	: 1262

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: OCTANES
Proper Shipping Name (IMDG)	: OCTANES
Proper Shipping Name (IATA)	: OCTANES
Proper Shipping Name (ADN)	: OCTANES
Proper Shipping Name (RID)	: OCTANES
Transport document description (ADR)	: UN 1262 OCTANES, 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG)	: UN 1262 OCTANES, 3, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA)	: UN 1262 OCTANES, 3, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN)	: UN 1262 OCTANES, 3, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)	: UN 1262 OCTANES, 3, II, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR)	: 3
Danger labels (ADR)	: 3



IMDG

Transport hazard class(es) (IMDG)	: 3
Danger labels (IMDG)	: 3



IATA

Transport hazard class(es) (IATA)	: 3
Hazard labels (IATA)	: 3



ADN

Transport hazard class(es) (ADN)	: 3
Danger labels (ADN)	: 3

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RID

Transport hazard class(es) (RID) : 3

Danger labels (RID) : 3



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 : Yes

Marine pollutant : Yes

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1

Limited quantities (ADR) : 1L

Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02, R001

Mixed packing provisions (ADR) : MP19

Portable tank and bulk container

instructions (ADR) : T4

Portable tank and bulk container special provisions (ADR) : TP1

Tank code (ADR) : LGBF

Vehicle for tank carriage : FL

Transport category (ADR) : 2

Special provisions for carriage - Operation (ADR) : S2, S20

Hazard identification number (Kemler No.) : 33

Orange plates :



Tunnel restriction code (ADR) : D/E

EAC code : 3YE

- Transport by sea

Limited quantities (IMDG) : 1 L

Excepted quantities (IMDG) : E2

Packing instructions (IMDG) : P001

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IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-E
Stowage category (IMDG)	: B
MFAG-No	: 128

- Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
ERG code (IATA)	: 3H

- Inland waterway transport

Classification code (ADN)	: F1
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E2
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01
Number of blue cones/lights (ADN)	: 1

- Rail transport

Classification code (RID)	: F1
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E2
Packing instructions (RID)	: P001, IBC02, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: LGBF
Transport category (RID)	: 2
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 33

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

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

2,2,4-TRIMETHYL PENTANE For pesticide residue trace analysis is not on the REACH Candidate List

2,2,4-TRIMETHYL PENTANE For pesticide residue trace analysis is not on the REACH Annex XIV List

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15.1.2. National regulations

Germany

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

Denmark

Classification remarks : 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:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R11	Highly flammable
R38	Irritating to skin
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R65	Harmful: may cause lung damage if swallowed
R67	Vapours may cause drowsiness and dizziness
F	Highly flammable
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

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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