



# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : M 12329  
Product Name : METHYL ISOBUTYL KETONE

Manufacturer/supplier identification  
Company : NICE Chemicals (P) Ltd., Cochin, India  
Tel - 0484 2800212, 2802755

Contact for information : Tel. No.- 0484 2802536 Fax : 0484 2802483  
Emergency Telephone No. : 0484 2801583 Tele fax No. : 0484 2802483

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 2,2,4-trimethylpentane; Isobutyl tri methyl methane; iso-Octane

CAS-No : 108-10-1 EC No. : 203-550-1  
Molar Mass : 100.16 EC Index No. : 606-004-00-4  
Molecular Formula : C<sub>6</sub>H<sub>12</sub>O

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## 3. HAZARDS IDENTIFICATION : Highly flammable.

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**4. FIRST AID MEASURES** : After skin contact : Wash off with plenty of water.  
Remove contaminated clothing.

After eye contact : Rinse out with plenty of water at least 10 minutes with the eyelid held wide open. Summon eye specialist.

After inhalation: Fresh air. If necessary, apply mouth-to-mouth resuscitation or mechanical ventilation. Keep airways free.

After swallowing : Immediately make victim drink plenty of water.  
Subsequently administer: Activated Charcoal(20-40gm in 10% slurry). Risk of aspiration! Do not induce vomiting. No milk. No digestible oils.



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Keep airways free. Summon doctor. Laxative : Sodium sulfate (1 tablespoon/1/4 l water). After ingestion of large amounts : gastric lavage.

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**5. FIRE-FIGHTING MEASURES** : Suitable extinguishing media : Foam, Powder.

Fire extinguisher : Carbon Dioxide, powder.

Special risks : Combustible. Vapours heavier than air. Formation of explosion mixture possible with air. Keep away from sources of ignition.

Other information : Take measures to prevent electrostatic charging.

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**6. ACCIDENTAL RELEASE MEASURES**

Person related precautionary measures : Do not inhale vapours/aerosols.

Procedures for cleaning/absorption: Take up with liquid- absorbent material (e.g.Chemizorb). Forward for disposal. Clean up affected area.

Environmental-protection measures :

Do not allow to enter sewerage system; risk of explosion !

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**7. HANDLING AND STORAGE** : Handling : Take measures to prevent electrostatic charging.

Storage : Tightly closed. In a well-ventilated place.

Keep away from sources of ignition and heat. At +15° C to +25° C.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Respiratory protection : Required when vapours/aerosols are generated.

Eye protection : Required

Hand protection : Required

**Industrial hygiene** : Change contaminated clothing. Apply skin protective barrier cream recommended. Wash hands & face after working with substance.

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### 9. PHYSICAL & CHEMICAL PROPERTIES

Form : Liquid  
Colour : Colourless  
Odour : Characteristic  
pH value (20 °C) : Neutral  
Melting temperature : -84 °C  
Boiling temperature(760mmHg): 116 - 118 °C  
Ignition temperature : 475 °C  
Flash Point : 14 °C  
Explosion limit lower : 1.2 vol %  
                          upper : 8.0 vol %  
Vapour pressure (20 °C) : ~20 hPa  
Relative vapour density : Not available  
Density (20 °C) : ~0.80 gm/cm<sup>3</sup>  
Solubility in Water (20 °C) : ~ 18 - 20 gm/lit.

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### 10. STABILITY & REACTIVITY : Conditions to be avoided : Heating

Substances to be avoided : Oxidizing agent.

Hazardous decomposition products : No information available.

**Further information** : Highly inflammable.

Unsuitable working materials : various plastics, rubber.

Explosible with air in a vaporous/gaseous state.

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### 11. TOXICOLOGICAL INFORMATION

Acute toxicity : LC<sub>50</sub> (oral, rat): 2080 mg/kg

LC<sub>50</sub> (dermal, rabbit): >16000 mg/kg

Subacute to chronic toxicity : An embryotoxic effect need not be feared when  
the threshold limit value is observed.

Further toxicological information :

After inhalation : mucosal irritations, narcosis.



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After skin contact : Slight irritation symptoms. Danger or skin absorption.

After eye contact : Vapours; irritant effect.

After swallowing : Gastrointestinal complaints.

Systemic effects : headache, inebriation, nausea, narcosis.

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## 12. ECOLOGICAL INFORMATION

Ecotoxic effects : Biological effects : Toxic for aquatic organisms. Risk of formation of explosive vapours above water surface. Endangerous drinking-water supplies if allowed to enter soil and/or water.

Fish toxicity : LC<sub>0</sub> : <60 mg/lt.;

Aquatic organisms LC<sub>50</sub> : 10 mg/l./96 h;

Further ecologic data: Evaluation number (FRG)

(mammal) : 1; Evaluation number (FRG)(fish) : <4.0;

Do not allow to enter waters, waste water, or soil !.

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## 12. ECOLOGICAL INFORMATION

Ecotoxicity effects : Biological effects : Toxic for

aquatic organisms, aquatic organisms LC<sub>50</sub> : 1000mg/l/96h,

Fish toxicity : fish LC<sub>50</sub>: 460 mg/l./24 h

Daphnia toxicity : Daphnia magna LC<sub>50</sub>: 4280 mg/l/96 h

Degradability : ThOD : 2.72 gm/gm; BOD 4.4 Prozent of

ThOD/5 d; COD : 79 Prozent of ThOD

Further ecologic data : Do not allow to enter waters, waste water or soil !

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## 13. DISPOSAL METHOD

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like house-hold waste or recycled.

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. Approved waste disposal companies which will advise you on how to dispose of special waste.

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## 14. TRANSPORT INFORMATION

GGVS/GGVE class : 3      Number and letter : 3b  
Transport over land      ADR/RID class : 3      Number and letter : 3b  
ADR/RID & GGVS/GGVE :      Name of material : METHYL ISOBUTYL KETONE

Sea Transport IMDG :      IMDG class : 3.2      UN No. : 1245      Packing group : II  
Ems : 3-07      MFAG : 300  
Correct Technical Name : METHYL ISOBUTYL KETONE

Air Transport ICAO-TI      ICAO/IATA class : 3      UN No. : 1245  
and IATA-DGR :      Packaging group : II  
Correct Technical Name : METHYL ISOBUTYL KETONE

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## 15. REGULATORY INFORMATION

Labeling according to EC Directives

Symbol : F      Highly flammable

R-phrases : 11      Highly flammable.



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S-phrases : 9-16-23-33      Keep container in a well-ventilated place. Keep away from sources of ignitions - No smoking. Do not breathe vapour.  
Take precautionary measures against static discharges.

EC-No. : 203-550-1      EC label

Water pollution class : 1 (slightly polluting substance)

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### 16. OTHER INFORMATION

Reason for alteration :

Specific control parameter.

Change in the chapter on first aid measures.

The information contained herein is based on the present state of our knowledge.

It characterises the product with regard to the appropriate safety precautions. It

does not represent a guarantee of the properties of the product.

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