

SAFETY DATA SHEET

ACETONE

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

| | |
|----------------------------|---|
| PRODUCT NAME | ACETONE |
| PRODUCT NO. | 66001 |
| APPLICATION | Solvent |
| SUPPLIER | MacDermid plc Palmer Street Bordesley Birmingham B9 4EU +44 (0) 121 606 8100 |
| CONTACT PERSON | sdsuk@macdermid.com |
| EMERGENCY TELEPHONE | 24 Hour Emergency Incident Number +44 (0)208 762 8322 |

2 HAZARDS IDENTIFICATION

Highly flammable. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

CLASSIFICATION F;R11 Xi;R36 R66 R67

3 COMPOSITION/INFORMATION ON INGREDIENTS

EU INDEX NO. 606-001-00-8

EC (EINECS) NO. 200-662-2

CAS-NO. 67-64-1

4 FIRST-AID MEASURES

GENERAL INFORMATION

CAUTION! First aid personnel must be aware of own risk during rescue! NOTE! Keep affected person away from heat, sparks and flames! NOTE! Effects may be delayed. Keep affected person under observation.

INHALATION

Move the exposed person to fresh air at once. Rinse nose and mouth with water. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION

Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention immediately!

SKIN CONTACT

Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.

SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapours. Beware, risk of formation of toxic and corrosive gases. Be aware of danger of explosion. Use water to keep fire exposed containers cool and disperse vapours. Cool containers exposed to flames with water until well after the fire is out. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

UNUSUAL FIRE & EXPLOSION HAZARDS

HIGHLY FLAMMABLE! May explode in a fire. May travel considerable distance to source of ignition and flash back. Vapour explosion and poison hazard indoors, outdoors and in sewers.

SPECIFIC HAZARDS

The product is flammable, and heating may generate vapours which may form explosive vapour/air mixtures.

PROTECTIVE MEASURES IN FIRE

Use air-supplied respirator during fire fighting. Wear full protective clothing.

ACETONE

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Take precautionary measures against static discharges. Do not smoke, use naked flames or other sources of ignition. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

ENVIRONMENTAL PRECAUTIONS

Do not discharge into drains, water courses or onto the ground. Avoid release to the environment.

SPILL CLEAN UP METHODS

Wear necessary protective equipment. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb spillage with non-combustible, absorbent material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Runoff or release to sewer, waterway or ground is forbidden. Inform Authorities if large amounts are involved.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Static electricity and formation of sparks must be prevented. Use explosion proof electric equipment. Contaminated rags and cloths must be put in fireproof containers for disposal. Do not use in confined spaces without adequate ventilation and/or respirator. Observe workplace exposure limits and minimise the risk of inhalation of vapours and mist.

STORAGE PRECAUTIONS

Flammable/combustible - Keep away from oxidisers, heat and flames. Keep away from heat, sparks and open flame. Keep separate from food, feedstuffs, fertilisers and other sensitive material. Take precautionary measures against static discharges.

STORAGE CLASS

Flammable liquid storage.

MIN. STORAGE TEMP (°C) 5

MAX. STORAGE TEMP (°C) 40

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

| Name | Std | LT - ppm | LT - mg/m3 | ST - ppm | ST - mg/m3 |
|---------|-----|----------|------------|----------|------------|
| ACETONE | WEL | 500 ppm | 1210 mg/m3 | 1500 ppm | 3620 mg/m3 |

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Provide adequate ventilation. Observe Workplace Exposure Limits and minimise the risk of inhalation of vapours. Explosion-proof general and local exhaust ventilation.

RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Seek advice from supervisor on the companies' respiratory protection standards.

HAND PROTECTION

Protective gloves must be used if there is a risk of direct contact or splash. Use protective gloves made of: Butyl rubber.

EYE PROTECTION

Wear splash-proof eye goggles to prevent any possibility of eye contact. Contact lenses should not be worn when working with this chemical!

OTHER PROTECTION

Provide eyewash station and safety shower. Wear suitable protective clothing as protection against splashing or contamination.

HYGIENE MEASURES

Wash promptly with soap & water if skin becomes contaminated. Promptly remove non-impervious clothing that becomes wet. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties. Wash at the end of each work shift and before eating, smoking and using the toilet. **DO NOT SMOKE IN WORK AREA!**

ACETONE

9 PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|--------------------------------------|-----------------------|---------------------------------------|-------------|
| APPEARANCE | Clear liquid | | |
| COLOUR | Colourless | | |
| ODOUR | Acetone, ketone. | | |
| SOLUBILITY | Miscible with water. | | |
| BOILING POINT (°C) | ~56 | RELATIVE DENSITY | 0.78 - 0.80 |
| FLASH POINT (°C) | - 18 CC (Closed cup). | AUTO IGNITION TEMPERATURE (°C) | 465 |
| FLAMMABILITY LIMIT - LOWER(%) | 2.6 | FLAMMABILITY LIMIT - UPPER(%) | 13.0 |

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use. Avoid: Contact with combustibles. Heat, sparks, flames.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

MATERIALS TO AVOID

Strong oxidising substances. Nitric acid (HNO₃). Sulphuric acid (H₂SO₄).

HAZARDOUS DECOMPOSITION PRODUCTS

None under normal conditions. During fire, toxic gases (CO, CO₂) are formed.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 5800 mg/kg (oral rat)

GENERAL INFORMATION

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

INHALATION

Vapours may cause drowsiness and dizziness. Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication.

INGESTION

Liquid irritates mucous membranes and may cause abdominal pain if swallowed. May cause nausea, headache, dizziness and intoxication. May cause liver and/or renal damage. Gastrointestinal symptoms, including upset stomach. Nausea, vomiting. Diarrhoea.

SKIN CONTACT

Repeated exposure may cause skin dryness or cracking. Prolonged and frequent contact may cause redness and irritation. May be absorbed through the skin.

EYE CONTACT

Irritating to eyes. Spray and vapour in the eyes may cause irritation and smarting. Repeated exposure may cause chronic eye irritation.

MEDICAL SYMPTOMS

Mild intoxication (incl. fatigue, lassitude, irritability, headache, nausea). Drowsiness, dizziness, disorientation, vertigo. Central nervous system depression.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

WATER HAZARD CLASSIFICATION

WGK 1

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

DISPOSAL METHODS

Environmental manager must be informed of all major spillages. Dispose of waste and residues in accordance with local authority requirements. Do not allow runoff to sewer, waterway or ground.

14 TRANSPORT INFORMATION

ACETONE



| | | | |
|-----------------------------|---------|-------------------------|-----------------------------|
| UK ROAD CLASS | 3 | | |
| PROPER SHIPPING NAME | ACETONE | | |
| UN NO. ROAD | UN1090 | UK ROAD PACK GR. | II |
| ADR CLASS NO. | 3 | ADR CLASS | Class 3: Flammable liquids. |
| ADR PACK GROUP | II | RID CLASS NO. | 3 |
| RID PACK GROUP | II | UN NO. SEA | UN1090 |
| IMDG CLASS | 3 | IMDG PACK GR. | II |
| UN NO. AIR | UN1090 | AIR CLASS | 3 |
| AIR PACK GR. | II | | |

15 REGULATORY INFORMATION

LABELLING



Irritant



Highly Flammable

RISK PHRASES

| | |
|-----|---|
| R11 | Highly flammable. |
| R36 | Irritating to eyes. |
| R66 | Repeated exposure may cause skin dryness or cracking. |
| R67 | Vapours may cause drowsiness and dizziness. |

SAFETY PHRASES

| | |
|-----|---|
| S2 | Keep out of the reach of children |
| S9 | Keep container in a well-ventilated place. |
| S16 | Keep away from sources of ignition - No smoking. |
| S26 | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40.

16 OTHER INFORMATION

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|---------------------------------|------------|
| REVISION DATE | 05/05/2006 |
| SAFETY DATA SHEET STATUS | Approved. |
| DATE | 26/06/1997 |
| SIGNATURE | BH |

ACETONE

DISCLAIMER

This information relates only to the specific material as supplied and may not be valid for such material if used in combination with any other material(s) or in any other process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. The data should not be construed as guaranteeing specific properties of the product described or its suitability for a particular application, nor does it make any warranty, either express or implied of merchantability for the product itself. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.