

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Material Name	:	Pure Remover
Recommended Uses	:	Industrial Solvent.Restricted to professional users.
Supplier	:	Aleas s.n.c. di Gaspari Pier Francesco & C. Loc. Campocuiano, SNC 62024 Esanatoglia (MC) Italy
Telephone	:	+39 0737 889170
Fax	:	+39 0737 889170

2. HAZARDS IDENTIFICATION

HAZARDOUS SUBSTANCE. DANGEROUS GOODS.

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.

Classified as a Dangerous Good according to NZS 5433; 1999.

Ingredients	:	Acetone
Hazardous Substances Classification	:	3.1B, 6.1E, 6.3B, 6.4A
Symbol(s)	:	F Highly flammable. Xi Irritant.
R-phrases(s)	:	R11 Highly flammable. R36 Irritating to eyes. R66 Repeated exposure may cause skin dryness or cracking. R67 Vapours may cause drowsiness and dizziness.
S-phrases(s)	:	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.
Health Hazards	:	Vapours may cause drowsiness and dizziness. Slightly irritating to respiratory system. Repeated exposure may cause skin dryness or cracking. Irritating to eyes. Harmful: may cause lung damage if swallowed. Exposure may enhance the toxicity of other materials. See Chapter 11 for details.
Signs and Symptoms	:	Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.
Safety Hazards	:	Highly flammable.
Environmental Hazards	:	Not classified as dangerous under EC criteria.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Material Formal Name : Propan-2-one
CAS No. : 67-64-1
INDEX No. : 606-001-00-8
EINECS No. : 200-662-2

Hazardous Components

Chemical Name	CAS	EINECS	Symbol(s)	R-phrases(s)	Conc.
Acetone	67-64-1	200-662-2	F, Xi	R11; R36; R66; R67	100.00 %

Additional Information : Refer to chapter 16 for full text of EC R-phrases.

4. FIRST AID MEASURES

Inhalation : Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin Contact : Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.
Eye Contact : Immediately flush eyes with large amounts of water for at least 15 minutes while holding eyelids open. Transport to the nearest medical facility for additional treatment.
Ingestion : If swallowed, do not induce vomiting; transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
Advice to Physician : Potential for chemical pneumonitis. Consider: gastric lavage with protected airway, administration of activated charcoal.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Specific Hazards : Containers exposed to intense heat from fires should be cooled with large quantities of water. The vapour is heavier than air, spreads along the ground and distant ignition is possible.
Extinguishing Media : Alcohol-resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Protective Equipment for Firefighters : Wear full protective clothing and self-contained breathing apparatus. Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.
Additional Advice : All storage areas should be provided with adequate fire fighting facilities. Keep adjacent containers cool by spraying with water.
Hazchem Code : 2[Y]E - For fire fighting, use water fog, or in the absence of fog a fine mist may be used. Risk of explosion. Breathing apparatus, firefighting gear and chemically impervious protective gloves should be worn. Prevent spillage from entering drains or watercourses. Evacuation of people from the neighbourhood of an incident should be considered.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Material Safety Data Sheet. Observe all relevant local and international regulations.

- Protective measures** : Isolate hazard area and deny entry to unnecessary or unprotected personnel. Stay upwind and keep out of low areas. Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Ventilate contaminated area thoroughly.
- Clean Up Methods** : For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
- Additional Advice** : Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Local authorities should be advised if significant spillages cannot be contained. Vapour may form an explosive mixture with air. See Chapter 13 for information on disposal.

7. HANDLING AND STORAGE

- General Precautions** : Avoid breathing of or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
- Handling** : Avoid inhaling vapour and/or mists. Avoid contact with skin, eyes, and clothing. Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/sec until fill pipe submerged to twice its diameter, then ≤ 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling
-

- Storage** : operations.
: Must be stored in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Keep away from aerosols, flammables, oxidizing agents, corrosives and from other flammable products which are not harmful or toxic to man or to the environment. The vapour is heavier than air. Beware of accumulation in pits and confined spaces. Vapours from tanks should not be released to atmosphere. Breathing losses during storage should be controlled by a suitable vapour treatment system. Bulk storage tanks should be diked (bundled).
- Product Transfer** : Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Keep containers closed when not in use. Do not use compressed air for filling, discharging or handling.
- Recommended Materials** : For containers, or container linings use mild steel, stainless steel. For container paints, use epoxy paint, zinc silicate paint. Packaging must comply with requirements of Hazardous Substances (Packaging) Regulations 2001.
- Container Advice** : Containers, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers.
- Additional Information** : Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Ensure that all local regulations regarding handling and storage facilities are followed.
Approved Handler: Test certificate required

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Material	Source	Type	ppm	mg/m3	Notation
Acetone	NZ OEL	TWA	500 ppm	1,185 mg/m3	
	NZ OEL	STEL	1,000 ppm	2,375 mg/m3	
	NZ OEL				Exposure can also be estimated by biological monitoring.

- Exposure Controls** : The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Provide adequate ventilation in storage areas. Use sealed systems as far as possible. Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Local exhaust ventilation is recommended. Firewater monitors and deluge systems are recommended. Eye washes and showers for emergency use.
- Personal Protective** : Personal protective equipment (PPE) should meet

Equipment	recommended national standards. Check with PPE suppliers.
Respiratory Protection	: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for organic gases and vapours [boiling point <65°C (149°F)] meeting EN371. Where respiratory protective equipment is required, use a full-face mask. Where air-filtering respirators are unsuitable (e.g., airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.
Hand Protection	: Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: Nitrile rubber. PVC. Viton.
Eye Protection	: Chemical splash goggles (chemical monogoggles).
Protective Clothing	: Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.
Monitoring Methods	: Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Examples of sources of recommended air monitoring methods are given below or contact supplier. Further national methods may be available. National Institute of Occupational Safety and Health (NIOSH), USA: Manual of analytical Methods http://www.cdc.gov/niosh/nmam/nmammenu.html Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha-slc.gov/dts/sltc/methods/toc.html Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hsl.gov.uk/search.htm

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Clear Liquid.
Odour	: Characteristic
pH	: Not applicable.
Boiling point	: 56 °C / 133 °F
Melting / freezing point	: -94 °C / -137 °F
Flash point	: -18 °C / 0 °F (IP 170)
Explosion / Flammability limits in air	: ca. 2.1 - 13 % (V)
Auto-ignition temperature	: 540 °C / 1,004 °F (ASTM D-2155)
Vapour pressure	: 24.7 kPa at 20 °C / 68 °F
Specific gravity	: Data not available.
Density	: 790 - 792 kg/m ³ at 20 °C / 68 °F (ASTM D-4052)
Water solubility	: at 20 °C / 68 °F Completely miscible.

Solubility in other solvents	: Data not available.
n-octanol/water partition coefficient (log Pow)	: 0.2
Dynamic viscosity	: 0.33 mPa.s at 20 °C / 68 °F
Vapour density (air=1)	: 2 at 20 °C / 68 °F
Electrical conductivity	: 20 µS/m at 20 °C / 68 °F (ASTM D-4308)
Coefficient of expansion	: 0.0014 / °C
Dielectric constant	: 21.4 at 20 °C / 68 °F
Heat of vapourisation	: 525 kJ/kg °C
Refractive index	: 1.359 at 20 °C / 68 °F (ASTM D-1218)
Specific heat	: 2.14 kJ/kg °C at 20 °C / 68 °F
Saturated Vapour concentration (in air)	: 590 g/m ³ at 20 °C / 68 °F (estimated value(s))
Thermal conductivity	: 0.16 W/m °C at 20 °C / 68 °F
Evaporation rate (nBuAc=1)	: 5.6 (ASTM D 3539, nBuAc=1) 2 (DIN 53170, di-ethyl ether=1)
Surface tension	: 22.8 mN/m at 20 °C / 68 °F
Molecular weight	: 58.08 g/mol

10. STABILITY AND REACTIVITY

Stability	: Stable under normal conditions of use.
Conditions to Avoid	: Avoid heat, sparks, open flames and other ignition sources.
Materials to Avoid	: Strong oxidising agents.
Hazardous	: None expected under normal use conditions.
Decomposition Products	

11. TOXICOLOGICAL INFORMATION

Basis for Assessment	: Information given is based on product testing.
Acute Oral Toxicity	: Low toxicity: LD50 >2000 mg/kg , Rat Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.
Acute Dermal Toxicity	: Low toxicity: LD50 >2000 mg/kg , Rabbit
Acute Inhalation Toxicity	: Low toxicity: LC50 >20 mg/l / 4 hours, Rat High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Skin Irritation	: Not irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.
Eye Irritation	: Irritating to eyes.
Respiratory Irritation	: Inhalation of vapours or mists may cause irritation to the respiratory system.
Sensitisation	: Not a skin sensitiser.
Repeated Dose Toxicity	: Low systemic toxicity on repeated exposure.
Mutagenicity	: Not mutagenic.
Carcinogenicity	: Not expected to be carcinogenic.
Reproductive and Developmental Toxicity	: Not expected to impair fertility. Causes slight foetotoxicity. Effects were seen at high doses only.
Additional Information	: Exposure may enhance the toxicity of other materials. May potentiate the peripheral neurotoxicity of n-hexane, and the

liver and kidney toxicity of some chlorinated hydrocarbons such as carbon tetrachloride.

12. ECOLOGICAL INFORMATION
Acute Toxicity

- | | | |
|----------------------------------|---|---|
| Fish | : | Low toxicity: LC/EC/IC50 > 1000 mg/l |
| Aquatic Invertebrates | : | Low toxicity: LC/EC/IC50 > 1000 mg/l |
| Algae | : | Low toxicity: LC/EC/IC50 > 1000 mg/l |
| Microorganisms | : | Low toxicity: LC/EC/IC50 > 1000 mg/l |
| Mobility | : | If product enters soil, it will be mobile and may contaminate groundwater.
Dissolves in water. |
| Persistence/degradability | : | Readily biodegradable. |
| Bioaccumulation | : | Not expected to bioaccumulate significantly. |

13. DISPOSAL CONSIDERATIONS

- | | | |
|---------------------------|---|--|
| Material Disposal | : | Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.
This should be done in accordance with the Hazardous Substances (Disposal) Regulations 2001. |
| Container Disposal | : | Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Send to drum recoverer or metal reclaimer. |
| Local Legislation | : | Local regulations may be more stringent than regional or national requirements and must be complied with.
The preferred method of disposal is treatment by a specialist local service provider. |

14. TRANSPORT INFORMATION
NZS 5433

UN number	1090
Proper shipping name	ACETONE
Class	3
Packing group	II
Hazchem Code	2[Y]E

IMDG

Identification number	UN 1090
Proper shipping name	ACETONE
Class / Division	3
Packing group	II
Marine pollutant:	No

IATA (Country variations may apply)

UN No.	: 1090
Proper shipping name	: Acetone
Class / Division	: 3

Packing group : II

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Toxic Substance Class	:	S4	
AICS	:	Listed.	
DSL	:	Listed.	
INV (CN)	:	Listed.	
ENCS (JP)	:	Listed.	(2)-542
TSCA	:	Listed.	
EINECS	:	Listed.	200-662-2
KECI (KR)	:	Listed.	KE-29367
PICCS (PH)	:	Listed.	

16. OTHER INFORMATION

R-phrases(s)

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

MSDS Version Number : 2.1**MSDS Effective Date** : 25.11.2005**MSDS Revisions** : A vertical bar (|) in the left margin indicates an amendment from the previous version.**MSDS Regulation** :**Uses and Restrictions** : Industrial Solvent.
Restricted to professional users.**MSDS Distribution** : The information in this document should be made available to all who may handle the product**Disclaimer** : 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.