

SAFETY DATA SHEET

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

Product name: **ACETONE**
Supplier: **LABSCAN LIMITED,
T24-26 STILLORGAN INDUSTRIAL PARK, STILLORGAN,
CO. DUBLIN, IRELAND.**
Emergency telephone number: **+353 1 295 2684** Fax No: **+353 1 295 2685**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation

Chemical Name	CAS-No	EEC-No	Class	Weight %
ACETONE	67-64-1	606-001-00-8	F; R11 Xi; R36 R66 R67	100

3. HAZARDS IDENTIFICATION

Most important hazards: Highly flammable.
Irritating to eyes, respiratory system and skin.
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Specific hazards The vapour has narcotic effect and in high concentrations induces unconsciousness which can be fatal. In use, may form flammable/explosive vapour-air mixture.

4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus.

Skin contact: Remove contaminated clothing and wash affected skin with soap and water. If signs of poisoning appear, treat as for inhalation. Wash contaminated clothing before re-use. Contaminated combustible material, e.g. clothing ignites more readily and burns fiercely.

Eye contact: If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes. Obtain medical attention.

Product name: **ACETONE**

Ingestion: Rinse mouth. Do not induce vomiting. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus. Obtain medical attention.
Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Extinguish preferably with dry chemical, foam, Carbon dioxide blanket. In the event of fire, cool tanks with water spray.

Extinguishing media which must not be used for safety reasons:

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards:

Hazardous gases produced in fire under conditions that produce incomplete combustion may consist of carbon monoxide. The vapour is heavier than air and spreads along ground. Flash back possible over considerable distance.

Special protective equipment for firefighters:

Wear self-contained breathing apparatus and protective suit.

Specific methods:

Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Evacuate personnel to safe areas. Remove all sources of ignition. Wear self-contained breathing apparatus and protective suit. Shut off leaks if without risk. Vapours may form explosive mixture with air. Keep people away from and upwind of spill/leak.

Environmental precautions:

Contain or absorb leaking liquid with sand or earth. Consult an expert. Prevent liquid entering sewers, basements and workpits; vapour may create explosive atmosphere. If substance has entered a water course or sewer or contaminated soil or vegetation, advise police.

Methods for cleaning up:

Spillage: May react with combustible substances creating fire or explosion hazard and formation of toxic fumes. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Transfer to covered steel drums. Dispose of promptly.

Product name: **ACETONE**

Review Date 16/06/2005

REF: LS3501

7. HANDLING AND STORAGE

Handling: Keep container tightly closed. Handle under a hood. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only in area provided with appropriate exhaust ventilation. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Do not empty into drains.

Storage: Keep tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Store in original container (+15C-+25C). Electrical equipment should be protected to the appropriate standard.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name:	National occupational exposure limits:
ACETONE	TLV/TWA 8hr 1780 mg/m ³ 750 ppm STEL 3560 mg/m ³

Engineering measures to reduce exposure

The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Ventilation hoods and fans required when working with organic solvents or in hot melt applications.

Personal protection equipment:

- **Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment.
- **Hand protection:** Butyl rubber (full contact). Splash contact: Latex gloves (ketone resistant). 89/686/EEC and EN374.
- **Eye protection:** Goggles giving complete protection to eyes.
- **Skin and body protection:** Rubber or plastic boots. Chemical resistant apron / complete suit protecting against chemicals.

Hygiene measures:

Keep working clothes separately. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Formula:	CH₃COCH₃
Form:	liquid,
Colour:	clear,
Odour:	characteristic,
pH:	(°C) no data available (g/l H ₂ O)
Boiling point/range:	55.8-56.6 °C
Melting point/range:	-95 °C
Decomposition temperature:	no data available °C
Flash point:	-18 closed cup °C

Product name: **ACETONE**

Autoignition temperature:	540	°C
Flammability (solid, gas):	Highly flammable	
Explosive properties:		
Explosion limits:	- lower 2.5	vol. %
	- upper 13	vol. %
Oxidizing properties:	no data available	
Vapour pressure:	(20 °C) 241	hPa
Relative density:	(20 °C) >= 0.791 g/ml	
	<=	
Bulk density:	791	kg/m ³
Solubility:		
Water solubility	(20 °C) completely soluble	g/l)
Solubility in other solvents	miscible with most organic solvents	
Partition coefficient (n-octanol/water)	0.2 log P _{ow}	
Viscosity:	(20 °C) 0.33	mPa.s

10. STABILITY AND REACTIVITY

Stability:	Stable at normal conditions.
Conditions to avoid:	Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).
Materials to avoid:	alkali hydroxides, halogens, halogenated hydrocarbons/alkali hydroxides, halogen-halogen compounds, oxidizing agent (i.e. CrO ₃ , peroxi compounds, nitric acid, nitrating acid), halogen oxiddes, alkali metals, nitrosyl compounds, metals and ethanolamine.
Hazardous decomposition products:	carbon oxides, peroxides.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	LD50/oral/rat = 5800 mg/kg LD50/dermal/rabbit = 20000 mg/kg LC50/inhalation/rat = 76mg/l/4h
Sensitization:	Irritant effect on eyes. slight irritant to skin. slight irritant to respiratory system.
Long term toxicity:	Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons.
Chronic toxicity:	Non-carcinogenic. Non-toxic to the reproductive system. Non-mutagenic (mammalian and bacterial cells). Chronic exposure may cause permanent damage of health

Product name: **ACETONE****12. ECOLOGICAL INFORMATION**

Mobility: Completely miscible with water.

Persistence / degradability:
Readily biodegradable, according to appropriate OECD test (91%/28d).
BOD 1.85g/g, COD 2.07g/g, TOD 2.2g/g.

Bioaccumulation: Bioaccumulation not applicable.

Ecotoxicity: LC50/96h/rainbow trout = 5540 mg/L⁻¹
LC50/96h/L. macrochirus = 8300 mg/L
LC50/24h/daphnia = 12600-12700mg/l
Algal toxicity :7500 mg/l/8d (S. quadicauda).
Bacterial Toxicity: 530 mg/l/8d (M. aeruginosa).
Protozoa : 28mg/l/72h(E. sulcatum)

13. DISPOSAL CONSIDERATIONS**Waste from residues / unused products:**

Can be incinerated, when in compliance with local regulations.
Contact waste disposal services.

Contaminated packaging:

Empty containers can be landfilled after cleaning, when in compliance with local regulations.

14. TRANSPORT INFORMATION**ADR/RID**

Proper shipping name:	ACETONE	Item:	3(b)
Class:	3	HI/UN No:	33/1090
Packaging group:	II		

IMO

Proper shipping name:	ACETONE	IMDG Page:	3102
Class:	3.1	MFAG:	300
EmS:	3-06	UN-No:	1090
Packaging group:	II		
Marine pollutant:	not		

ICAO

Proper shipping name:	ACETONE	UN/ID No:	1090
Class:	3		
Packaging group:	II		

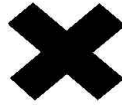
15. REGULATORY INFORMATION

Classification according to European directive on classification of hazardous preparations
2001/58/EC

- Contains: ACETONE

Product name: **ACETONE****- Symbol(s):**

F - Highly flammable.



Xi - Irritant

R -phrase(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 -phrase(s):

S 9 - 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

16. OTHER INFORMATION

Recommended restrictions: Take notice of labels and material safety data sheets for the working chemicals Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

Recommended use: General purpose solvent.

Further information: Contact Labscan Limited

REVISION DATE: **20/08/2002**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text