Safety Data Sheet ACETONE Revision 1 Revision Date 09/11/11



# **CENTRAL CHEMICAL SUPPLIES LTD**

# SAFETY DATA SHEET ACETONE

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

Product name Acetone

REACH registration no. 01-2119471330-49

# 1.2 Relevant identified uses of the substance or mixture and uses advised against

Chemical for the automotive industry Paint solvents and thinners Solvent based adhesives Intermediate product Pharmaceutics

# 1.3 Details of the supplier of the safety data sheet

Supplier: Central Chemical Supplies Ltd

44 Hall Road Donaghcloney Craigavon Co.Armagh Northern Ireland BT66 7LJ

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# **SECTION 2: HAZARDS IDENTIFICATION**

# 2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008

EUH066

Flammable liquids, Category 2

Eye Irritation, Category 2

H225: Highly flammable liquid and vapour
H319: Causes serious eye irritation
Specific target organ toxicity – single

H336: May cause drowsiness or dizziness

Exposure, Category 3

Classification in accordance with Regulation 67/548/EEC or 1999/45/EC
Highly flammable
Irritant
R36: Irritating to eyes

R66: Repeated exposure may cause skin dryness or cracking.

R67: Vapours may cause drowsiness and dizziness.

# 2.2 Label elements

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

Product identifier: 606-001-00-8 (Acetone)

Hazard Pictograms:





Signal Word: Danger

Hazard Statements: H225 Highly flammable liquid and vapour H319 Causes serious eye irritation

H336 May cause drowsiness or dizziness

EUH066 Repeated exposure may cause skin dryness or cracking

**Precautionary Statements:** 

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing.

Rinse skin with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses if present and easy to do so. Continue rinsing.

P312 Call a Poison Centre or doctor/physician if you feel unwell. P337+P313 If eye irritation persists, get medical advice/attention.

P370+P378 In case of fire, use... for extinction.

P403+P235 Store in a well ventilated place. Keep cool.

P405 Store locked up

P501 Dispose of contents/container to hazardous or special waste collection point.

# 2.3 Other hazards

Inhalation of vapours may cause mild irritation to the mucous membrane.

May be absorbed into the body by inhalation and through the skin.

Repeated exposure may cause irreversible damage to the central nervous system (solvent induced neurotoxicity).

The substance may cause effects on the: Gastrointestinal tract, Symptoms of poisoning, Headache, nausea, dizziness, unconsciousness.

#### **SECTION 3: COMPOSITION /INFORMATION ON INGREDIENTS**

# 3.1 Substances

Chemical name: Acetone
Concentration: >99%
CAS No. 67-64-1
EC No. 200-662-2

#### **SECTION 4: FIRST AID MEASURES**

#### 4.1 Description of first aid measures

General Advice

Move the victim to fresh air. Keep victim warm and at rest. If unconscious place in recovery position and seek medical advice.

#### If Inhaled

Remove from exposure. Keep warm and at rest and provide fresh air. Give oxygen or artificial respiration if needed. Seek medical advice immediately.

#### In Case of Skin Contact

Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. Obtain medical attention

#### In Case of Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. Seek medical advice immediately.

#### If Swallowed

If swallowed, seek medical advice immediately and show this container or label. DO NOT induce vomiting. Rinse mouth, ingest activated charcoal.

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

No information available.

# 4.3 Indication of any immediate medical attention and special treatment needed

Treatment

Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours. Artificial respiration and/or oxygen may be necessary. Risk of pulmonary oedema.

# **SECTION 5: FIREFIGHTING MEASURES**

# 5.1 Extinguishing media

Water spray jet, Carbon dioxide, Dry powder, Alcohol-resistant foam

#### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting:

Incomplete combustion may produce: Carbon monoxide, carbon dioxide. Vapours may for explosive mixtures with air.

#### 5.3 Advice for fire fighters

Special protective equipment for fire fighters:

Wear self-contained breathing apparatus and protective suit. Complete suit protection against chemicals. Flame retardant protective clothing.

Further information: Remove all sources of ignition. Cool containers/tanks with water spray.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

# 6.1 Personal precautions, protective equipment and emergency procedures

Remove persons to safety. Use personal protective clothing.

# **6.2 Environmental precautions**

Do not discharge into the drains/surface waters/groundwater. Local authorities should be advised if significant spillages cannot be contained.

# 6.3 Methods and material for containment and cleaning up

Ensure adequate ventilation, especially in confined areas. Large spills should be collected mechanically (remove by pumping) for disposal.

Small Amounts: Soak up with inert absorbent material, remove all sources of ignition, non-sparking tools should be used, vapours are heavier than air and may spread along floors, pay attention to flashback, the product evaporates readily.

#### 6.4 Reference to other sections

For personal protection see section 8.

# **SECTION 7: HANDLING AND STORAGE**

# 7.1 Precautions for safe handling

Advice on Safe Handling

Ensure adequate ventilation. Provide exhaust ventilation close to floor level. Refill and handle product only in closed system. Avoid formation of aerosol. Do not breathe vapours/dust. Avoid contact with skin, eyes and clothing. Avoid exposure – obtain special instructions before use. Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. East access to emergency shower and eye wash facility is required.

Advice on Protection Against Fire and Explosion

Keep away from heat and sources of ignition. No smoking. Take precautionary measures against static discharges. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.

# 7.2 Conditions for safe storage, including any incompatibilities

Storage areas and containers:

Keep containers tightly closed in a cool, well-ventilated place. Keep in a dry place. Protect from sunlight. Keep product and empty container away from heat and sources of ignition. Locate bulk storage outdoors.

Common Advice on Storage:

Do not store together with oxidising agents.

# 7.3 Specific end use(s)

Solvent

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1 Control parameters

**Exposure Limit Values** 

Acetone

CAS No. 67-64-1 EC No. 200-662-2

2000/39/EWG

Acetone

TWA 1210 mg/m<sup>3</sup> 500 ml/m<sup>3</sup>

List of approved workplace exposure limits (WELs)/EH40

Acetone

TWA 1810 mg/m³ 500 ml/m³ STEL 3620 mg/m³ 1500 ml/m³

#### 8.2 Exposure controls

**Engineering Measures:** 

Use only explosion-proof equipment. Provide adequate ventilation.

Personal Protective Equipment

Respiratory protection: In case of insufficient ventilation or long-term effect use breathing apparatus.

Short Term: filter apparatus, filter AX, otherwise environment independent

breathing apparatus.

Hand Protection: In case of intensive contact, wear protective gloves (EN 374). Sufficient

protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective glove should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design

operations thus to avoid permanent use of protective gloves.

Appropriate material Butyl
Material thickness 0.6 – 0.8mm
Breakthrough time >480 min

Eye Protection: Safety glasses with side shields conforming to EN 166.

Skin and Body Protection: Light protective clothing, anti-static. Use solvent-resistant protective clothing.

Flame retardant protective clothing

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

# 9.1 Information on basic physical and chemical properties

Appearance: liquid
Colour: colourless
Odour: sweet, aromatic
Odour Threshold: 19.8ppm

pH: 7, Concentration 10.00g/l

Melting point:

Boiling point:

Flash point:

Evaporation rate:

Flammability (solid, gas):

Lower explosion limit:

-94.7°C

56°C

-17°C

2.0, ether = 1

Highly flammable

2.5% (V)

Upper explosion limit:

Vapour pressure:

Relative vapour density:

Relative density:

14.3 (V)

14.3 (V)

240 hPa, 20 °C

800 hPa, 50 °C

2.1, 20 °C

Relative density:

0.79, 20 °C

Relative density: 0.79, 20 °C
Density: 0.79 g/cm3

Water solubility: completely soluble

Solubility in other solvents: Solvent: Fat solubility, 20 °C, miscible with most organic

solvents

9.2 Other information

Molecular Weight: 58.08g/mol

#### **SECTION 10: STABILITY AND REACTIVITY**

#### 10.1 Reactivity

Reacts with the following substances: Bases

#### 10.2 Chemical stability

Vapours may form explosive mixtures with air. Vapours are heavier then air and may spread along floors. Pay attention to flashback.

#### 10.3 Possibility of hazardous reactions

No dangerous reactions known under conditions of normal use

# 10.4 Conditions to avoid

Keep away from heat and sources of ignition. Keep away from exposure to light.

#### 10.5 Incompatible materials

Materials to Avoid: May attack plastics, rubbers and coatings. Keep away from bases, oxidising agents and amines.

# 10.6 Hazardous decomposition products

Carbon monoxide, Carbon dioxide

# **SECTION 11: TOXICOLOGICAL INFORMATION**

#### 11.1 Information on toxicological effects

Acute oral toxicity: LD50: 5.800 mg/kg, rat, OECD Test Guideline 401

Acute Inhalation Toxicity: LC50: 76 mg/l, 4h, rat (female) Acute Dermal Toxicity: LD50: >15.800 mg/kg, rabbit (male)

Skin Corrosion/Irritation: Contact with skin may cause irritation. Prolonged skin contact may defat

the skin and produce dermatitis.

Serious eye damage/eye irritation: Irritating to eyes Respiratory or skin sensitization: No known effect

Genotoxicity in vitro: Ames test, OECD Test Guideline 471

In vitro assay, OECD Test Guideline 476, In vitro tests did not show

mutagenic effects.

In vivo assay, mouse, oral, In vivo tests did not show mutagenic effects. Genotoxicity in vivo:

Carcinogenicity: mouse (female), exposure time 1 yr, dermal, negative

Reproductive Toxicity: Fertility and developmental toxicity tests did not reveal any effect on

reproduction.

STOT – single exposure: STOT – repeated exposure: Assessment; May cause drowsiness or dizziness.

Repeated exposure may result in irreversible damage to the central

nervous system (solvent-induced neurotoxicity). Liver and kidney injuries may occur. The substance may cause effects on the blood and bone marrow. Prolonged skin contact may defat the skin and produce

dermatitis.

Assessment: The substance or mixture is not classified as specific

target organ toxicant, repeated exposure.

No aspiration toxicity classification Aspiration Toxicity:

Further Information: May be absorbed into the body by inhalation and through the skin.

Effects due to ingestion may include gastrointestinal disturbance.

#### **SECTION 12: ECOLOGICAL INFORMATION**

# 12.1 Toxicity

Toxicity to fish: LC50: 5.540mg/l, 96h, Oncorhynchus mykiss (rainbow trout), static test,

Fresh water

LC50: 11.000mg/l, 96h, bleak (Alburnus alburnus), static test, marine

water.

Toxicity to daphnia and other

Aquatic invertebrates: Toxicity to algae:

LC50: 8.800mg/l,48h, Daphnia pulex (water flea), static test, fresh water

LC50: 2.100mg/l, 24h, Artemia salina, static test, marine water NOEC: 530mg/l, 8d, Microcystis aeruginosa, static test, fresh water NOEC: 430mg/l, 96h, Prorocentrum minimum, marine water

Toxicity to bacteria: EC12: 1.000mg/l, 30min, bacteria, respiration inhibition of activated

sludge

Toxicity to fish (Chronic

Toxicity): no data available

Toxicity to daphnia and other

Aquatic invertebrates

(Chronic toxicity): NOEC: 2.212mg/l, 28d, Daphnia magna (water flea), flow through test,

fresh water.

# 12.2 Persistence and degradability

Biodegradability: 91%, OECD Test Guideline 301

Readily biodegradable

Theoretical oxygen demand 84%

Activated sludge 100%

Abiotic degradation: Prone to photochemical degradation, reacting with

OH radicals and ozone.

# 12.3 Bio accumulative potential

Bioaccumulation: Bioaccumulation not expected: Partition coefficient (n-octanol/water)

Log Kow<4.

#### 12.4 Mobility in soil

Mobility: Soil: High mobility

Water: The product evaporates readily.

# 12.5 Results of PBT and vPvB assessment

Assessment: This substance is not considered to be persistent, bioaccumulating nor

Toxic (PBT). This substance is not considered to be very persistent nor

very bioaccumulating (vPvB).

# 12.6 Other adverse effects

Additional ecological information: The product should not be allowed to enter drains, water courses or the

.soil

# **SECTION 13: DISPOSAL CONSIDERATIONS**

# 13.1 Waste treatment methods

Dispose of as hazardous waste in compliance with local and national regulations. Do not dispose of together with household waste. List of suggested waste codes/waste designations in accordance with the EWC: 07 01 04 (other organic solvents, washing liquids and mother liquors)

# **SECTION 14: TRANSPORT INFORMATION**

# <u>14.1 UN number</u>

ADR: 1090 IMDG: 1090

# 14.2 UN Proper shipping name

ADR: ACETONE IMDG: ACETONE

# 14.3 Transport hazard class(es)

ADR: 3 IMDG: 3

# 14.4 Packing group

ADR

Packaging group: II
Hazard identification No: 33
Labels: 3

Tunnel restriction code: Transport in bulk

**IMDG** 

Packaging group:

EmS Number: F-E, S-D

#### 14.5 Environmental hazards

ADR

Environmentally hazardous: no

**IMDG** 

Marine pollutant: no

# 14.6 Special precautions for user

No specific instructions needed.

# 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Ship type: N/A Pollution category: Z

# **SECTION 15: REGULATORY INFORMATION**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Major Accident Hazard Legislation: 96/82/EC Update: 2003

Highly flammable Category: 7b

Water containing class: WGK 1 slightly water endangering

(Germany)

Other regulations: Take note of Dir 94/33/EC on the protection of young people at

work

# **15.2 Chemical Safety Assessment**

A chemical safety Assessment has been carried out for this substance.

# **SECTION 16: OTHER INFORMATION**

Issued by Quality Control

Risk Phrases in Full:

R11 Highly Flammable R36 Irritating to eyes

R66 Repeated exposure may cause skin dryness or cracking

R67 Vapours may cause drowsiness and dizziness

Hazard Statements in Full:

H225 Highly flammable liquid and vapour
 H319 Causes serious eye irritation
 H336 May cause drowsiness or dizziness

#### Disclaimer

The information contained in this document is intended to describe the product only in terms of health, safety and environmental requirements for the purposes of its safe handling, use and disposal and is to the best of Central Chemical Supplies Limited knowledge and belief correct. Central Chemical Supplies Limited

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