

SAFETY DATA SHEET

ACETONE

Infosafe No.: 5APG1
ISSUED Date : 23/12/2022
ISSUED by: ITW POLYMERS & FLUIDS

Section 1 - Identification

Product Identifier

ACETONE

Product Code

1.00014

Company Name

ITW POLYMERS & FLUIDS

Address

100 Hassall Wetherill Park
NEW SOUTH WALES 2164 AUSTRALIA

Telephone/Fax Number

Tel: +61 2 9757 8800

Emergency Phone Number

Chemwatch 1800 951 288|+61 2 9186 1132 CHEMWATCH EMERGENCY RESPONSE +61 1800 951 288|+61 3 9573 3188

E-mail Address

orders@itwpf.com.au

Recommended use of the chemical and restrictions on use

Relevant identified uses

Solvent for fats, oils, waxes, resins, rubber, plastics, lacquers. Used in manufacture of methyl isobutyl ketone, mesityl oxide, acetic acid, diacetone alcohol, isoprene. Used in solvent extraction processes. Solvent in the manufacture of explosives and rayon.

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Other Names

Name	Product Code
ACETONE	100014
C3-H6-O	
CH3COCH3	
PROPANONE	
PYROACETIC ACID	
PYROACETIC ETHER	
2-PROPANONE	
BETA-KETOPROPANE	
METHYL KETONE	
PROPAN-2-ONE	
DIMETHYL KETONE	
KETONE, DIMETHYL KETONE PROPANE	
DIMETHYL FORMALDEHYDE	
RF SERVICES	
RCRA WASTE NO. U002	
EM000739	
APS RETL00020006 UCH00002546 RDEH06009000; SPOL00000585 AR00000006 UL00000007 M&B00004946	
ASHLAND ACETONE ECD MOBIL 878033 971934	
J.T.BAKER CHEM-SUPPLY	
DAVID CRAIG ACETONE 500ML	
101405	
DAVID CRAIG ACETONE 100ML	
ACETONE	11831
ACETONE	101404

Additional Information

Emergency telephone number

Association / Organisation :

Emergency telephone numbers : 1800 951 288

Other emergency telephone numbers : +61 2 9186 1132

Association / Organisation : EMERGENCY RESPONSE

Emergency telephone numbers : +61 1800 951 288

Other emergency telephone numbers : +61 3 9573 3188

Once connected and if the message is not in your preferred language then please dial 01

Other Information

Website: www.aamtech.com.au

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New Zealand

Autoserv NZ Ltd

2/38 Trugood Drive, East Tamaki, Auckland

Tel: 0800 438 996

Email: warehouse@autoserv.co.nz

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

Classification [1] : Flammable Liquids Category 2, Serious Eye Damage/Eye Irritation Category 2A, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3

Signal Word (s)

DANGER

Hazard Statement (s)

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

AUH066 Repeated exposure may cause skin dryness or cracking.

Pictogram (s)

Flame, Exclamation mark



Precautionary Statement – Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P271 Use only outdoors or in a well-ventilated area.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.

Precautionary Statement – Response

P370+P378 In case of fire: Use alcohol resistant foam or normal protein foam to extinguish.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

Precautionary Statement – Storage

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

P405 Store locked up.

Precautionary Statement – Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

Precautionary Statement – General

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

Other Information

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

Legend: 1. Classified by ; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Section 3 - Composition and Information on Ingredients

Ingredients

Name	CAS	Proportion
Acetone	67-64-1	95-99.5 %weight

Other Information

Substances

Legend: 1. Classified by ; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L; * EU IOELVs available

Mixtures

See section above for composition of Substances

Section 4 - First Aid Measures

Inhalation

If fumes or combustion products are inhaled remove from contaminated area.

Lay patient down. Keep warm and rested.

Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.

Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

Transport to hospital, or doctor.

Ingestion

If swallowed do NOT induce vomiting.

If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

Observe the patient carefully.

Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.

Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.

Seek medical advice.

If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

Skin

If skin contact occurs:

Immediately remove all contaminated clothing, including footwear.

Flush skin and hair with running water (and soap if available).

Seek medical attention in event of irritation.

Eye

If this product comes in contact with the eyes:

Wash out immediately with fresh running water.

Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

Seek medical attention without delay; if pain persists or recurs seek medical attention.

Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Indication of immediate medical attention and special treatment needed if necessary

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

For acute or short term repeated exposures to acetone:

Symptoms of acetone exposure approximate ethanol intoxication.

About 20% is expired by the lungs and the rest is metabolised. Alveolar air half-life is about 4 hours following two hour inhalation at levels near the Exposure Standard; in overdose, saturable metabolism and limited clearance, prolong the elimination half-life to 25-30 hours.

There are no known antidotes and treatment should involve the usual methods of decontamination followed by supportive care.

[Ellenhorn and Barceloux: Medical Toxicology]

Management:

Measurement of serum and urine acetone concentrations may be useful to monitor the severity of ingestion or inhalation.

Inhalation Management:

Maintain a clear airway, give humidified oxygen and ventilate if necessary.

If respiratory irritation occurs, assess respiratory function and, if necessary, perform chest X-rays to check for chemical pneumonitis.

Consider the use of steroids to reduce the inflammatory response.

Treat pulmonary oedema with PEEP or CPAP ventilation.

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Dermal Management:

Remove any remaining contaminated clothing, place in double sealed, clear bags, label and store in secure area away from patients and staff.

Irrigate with copious amounts of water.

An emollient may be required.

Eye Management:

Irrigate thoroughly with running water or saline for 15 minutes.

Stain with fluorescein and refer to an ophthalmologist if there is any uptake of the stain.

Oral Management:

No GASTRIC LAVAGE OR EMETIC

Encourage oral fluids.

Systemic Management:

Monitor blood glucose and arterial pH.

Ventilate if respiratory depression occurs.

If patient unconscious, monitor renal function.

Symptomatic and supportive care.

The Chemical Incident Management Handbook:

Guy's and St. Thomas' Hospital Trust, 2000

BIOLOGICAL EXPOSURE INDEX

These represent the determinants observed in specimens collected from a healthy worker exposed at the Exposure Standard (ES or TLV):

Determinant: Acetone in urine

Sampling Time: End of shift

Index: 50 mg/L

Comments: NS

NS: Non-specific determinant; also observed after exposure to other material

Section 5 - Firefighting Measures

Suitable Extinguishing Media

Alcohol stable foam.

Dry chemical powder.

BCF (where regulations permit).

Carbon dioxide.

Specific Methods

Alert Fire Brigade and tell them location and nature of hazard.

May be violently or explosively reactive.

Wear breathing apparatus plus protective gloves in the event of a fire.

Prevent, by any means available, spillage from entering drains or water course.

Specific hazards arising from the chemical

Fire Incompatibility: Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Fire/Explosion Hazard:

Liquid and vapour are highly flammable.

Severe fire hazard when exposed to heat, flame and/or oxidisers.

Vapour may travel a considerable distance to source of ignition.

Heating may cause expansion or decomposition leading to violent rupture of containers.

Combustion products include:

carbon dioxide (CO₂)

other pyrolysis products typical of burning organic material.

Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

Hazchem Code

•2YE

Decomposition Temperature

Not Available

Section 6 - Accidental Release Measures

Clean-up Methods - Small Spillages

Remove all ignition sources.
Clean up all spills immediately.
Avoid breathing vapours and contact with skin and eyes.
Control personal contact with the substance, by using protective equipment.

Clean-up Methods - Large Spillages

Clear area of personnel and move upwind.
Alert Fire Brigade and tell them location and nature of hazard.
May be violently or explosively reactive.
Wear breathing apparatus plus protective gloves.

Other Information

Personal Protective Equipment advice is contained in Section 8 of the SDS.

Section 7 - Handling and Storage

Precautions for Safe Handling

Safe handling
Containers, even those that have been emptied, may contain explosive vapours.
Do NOT cut, drill, grind, weld or perform similar operations on or near containers.
DO NOT allow clothing wet with material to stay in contact with skin
Avoid all personal contact, including inhalation.
Wear protective clothing when risk of exposure occurs.
Use in a well-ventilated area.
Prevent concentration in hollows and sumps.
Contains low boiling substance:
Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.
Check for bulging containers.
Vent periodically
Always release caps or seals slowly to ensure slow dissipation of vapours

Other information

Store in original containers in approved flame-proof area.
No smoking, naked lights, heat or ignition sources.
DO NOT store in pits, depression, basement or areas where vapours may be trapped.
Keep containers securely sealed.

Conditions for safe storage, including any incompatibilities

Suitable container
Packing as supplied by manufacturer.
Plastic containers may only be used if approved for flammable liquid.
Check that containers are clearly labelled and free from leaks.
For low viscosity materials (i) : Drums and jerry cans must be of the non-removable head type. (ii) : Where a can is to be used as an inner package, the can must have a screwed enclosure.
For materials with a viscosity of at least 2680 cSt. (23 deg. C)
For manufactured product having a viscosity of at least 250 cSt.

Storage incompatibility

Acetone:
may react violently with chloroform, activated charcoal, aliphatic amines, bromine, bromine trifluoride, chlorotriazine, chromic(IV) acid, chromic(VI) acid, chromium trioxide, chromyl chloride, hexachloromelamine, iodine heptafluoride, iodoform, liquid oxygen, nitrosyl chloride, nitrosyl perchlorate, nitril perchlorate, perchloromelamine, peroxomonosulfuric acid, platinum, potassium tert-butoxide, strong acids, sulfur dichloride, trichloromelamine, xenon tetrafluoride
reacts violently with bromoform and chloroform in the presence of alkalis or in contact with alkaline surfaces.
may form unstable and explosive peroxides in contact with strong oxidisers, fluorine, hydrogen peroxide (90%), sodium perchlorate, 2-methyl-1,3-butadiene
can increase the explosive sensitivity of nitromethane on contact flow or agitation may generate electrostatic charges due to low

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conductivity

dissolves or attacks most rubber, resins, and plastics (polyethylenes, polyester, vinyl ester, PVC, Neoprene, Viton)

Ketones in this group:

are reactive with many acids and bases liberating heat and flammable gases (e.g., H₂).

react with reducing agents such as hydrides, alkali metals, and nitrides to produce flammable gas (H₂) and heat.

are incompatible with isocyanates, aldehydes, cyanides, peroxides, and anhydrides.

react violently with aldehydes, HNO₃ (nitric acid), HNO₃ + H₂O₂ (mixture of nitric acid and hydrogen peroxide), and HClO₄ (perchloric acid).

Avoid reaction with oxidising agents

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values

INGREDIENT DATA

Source: Australia Exposure Standards

Ingredient: acetone

Material name: Acetone

TWA: 500 ppm / 1185 mg/m³

STEL: 2375 mg/m³ / 1000 ppm

Peak: Not Available

Notes: Not Available

Emergency Limits:

Ingredient: acetone

TEEL-1: Not Available

TEEL-2: Not Available

TEEL-3: Not Available

Ingredient: acetone

Original IDLH: 2,500 ppm

Revised IDLH: Not Available

Engineering Controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Respiratory Protection

Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.

The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor: up to 10

Maximum gas/vapour concentration present in air p.p.m. (by volume): 1000

Half-face Respirator: AX-AUS / Class 1

Full-Face Respirator: -

Required minimum protection factor: up to 50

Maximum gas/vapour concentration present in air p.p.m. (by volume): 1000

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Half-face Respirator: -
Full-Face Respirator: AX-AUS / Class 1

Required minimum protection factor: up to 50
Maximum gas/vapour concentration present in air p.p.m. (by volume): 5000
Half-face Respirator: Airline *
Full-Face Respirator: -

Required minimum protection factor: up to 100
Maximum gas/vapour concentration present in air p.p.m. (by volume): 5000
Half-face Respirator: -
Full-Face Respirator: AX-2

Required minimum protection factor: up to 100
Maximum gas/vapour concentration present in air p.p.m. (by volume): 10000c
Full-Face Respirator: AX-3

Required minimum protection factor: 100+
Half-face Respirator: -
Full-Face Respirator: Airline**

** - Continuous-flow or positive pressure demand.

A(All classes) = Organic vapours, B AUS or B1 = Acid gases, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO₂), G = Agricultural chemicals, K = Ammonia(NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 deg C)

Eye and Face Protection

Safety glasses with side shields.

Chemical goggles.

Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Hand Protection

Wear chemical protective gloves, e.g. PVC.

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Personal hygiene is a key element of effective hand care.

Personal Protective Equipment

Other protection

Overalls.

PVC Apron.

PVC protective suit may be required if exposure severe.

Eyewash unit.

Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.

For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).

Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot and shall dissipate static electricity from the body to reduce the possibility of ignition of volatile compounds.

Footwear

Wear safety footwear or safety gumboots, e.g. Rubber

Section 9 - Physical and Chemical Properties

Properties	Description	Properties	Description
Form	Liquid	Appearance	Clear, colourless, highly volatile, highly flammable liquid with characteristic sweet odour; mixes with water. Mixes in alcohol, ether, most hydrocarbons and oils.
Odour	Not Available	Melting/Freezing Point	-95.4°C
Boiling Point	56°C	Decomposition Temperature	Not Available
Solubility in Water	Miscible	pH	Not Applicable (as supplied) Not Applicable as a solution (1%)
Vapour Pressure	24 kPa @ 20 C	Relative Vapour Density (Air=1)	2.0
Evaporation Rate	11 BuAc=1 V Fast	Odour Threshold	Not Available
Viscosity	Not Available	Volatile Component	100%vol
Partition Coefficient: n-octanol/water (log value)	Not Available	Surface Tension	Not Available
Flash Point	-17°C	Flammability	HIGHLY FLAMMABLE.
Auto-Ignition Temperature	465 °C	Explosion Limit - Upper	12.8%
Explosion Limit - Lower	2.6%	Explosion Properties	Not Available
Molecular Weight	58.08 g/mol	Oxidising Properties	Not Available
Initial boiling point and boiling range	56°C	Relative Density	0.79 @ 20 C (Water =1)

Other Information

Taste: Not Available

Gas group: Not Available

VOC g/L: Not Available

Section 10 - Stability and Reactivity

Reactivity

See section 7

Chemical Stability

Unstable in the presence of incompatible materials.

Product is considered stable.

Hazardous polymerisation will not occur.

Possibility of hazardous reactions

See section 7

Conditions to Avoid

See section 7

Incompatible Materials

See section 7

Hazardous Decomposition Products

See section 5

Section 11 - Toxicological Information

Toxicology Information

acetone

TOXICITY

Dermal (rabbit) LD50: 20000 mg/kg[2]

Inhalation(Mouse) LC50; 44 mg/L4h[2]

Oral (Rat) LD50: 5800 mg/kg[2]

IRRITATION

Eye (human): 500 ppm - irritant

Eye (rabbit): 20mg/24hr -moderate

Eye (rabbit): 3.95 mg - SEVERE

Eye: adverse effect observed (irritating)[1]

Skin (rabbit): 500 mg/24hr - mild

Skin (rabbit):395mg (open) - mild

Skin: no adverse effect observed (not irritating)[1]

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

ACETONE

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

For acetone:

The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitizer, but it removes fat from the skin, and it also irritates the eye. Animal testing shows acetone may cause macrocytic anaemia. Studies in humans have shown that exposure to acetone at a level of 2375 mg/cubic metre has not caused neurobehavioural deficits.

Acute Toxicity: Data either not available or does not fill the criteria for classification

Ingestion

Large ingestions may produce coma, respiratory depression, and rarely, convulsions.

Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733)

Accidental ingestion of the material may be damaging to the health of the individual.

Inhalation

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.

Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.

There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

Effects of exposure to acetone by inhalation include central nervous system depression, light-headedness, unintelligible speech, inco-ordination, stupor, low blood pressure, fast heart rate, metabolic acidosis, high blood sugar and ketosis. Rarely, there may be convulsions and death of kidney tubules.

Ketone vapours irritate the nose, throat and mucous membrane. High concentrations depress the central nervous system, causing headache, vertigo, poor concentration, sleep and failure of the heart and breathing.

Skin

Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.

Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.

There is some evidence to suggest that the material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.

Open cuts, abraded or irritated skin should not be exposed to this material

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.

Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

Skin Corrosion/Irritation

Data either not available or does not fill the criteria for classification

Eye

There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain.

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The liquid may produce eye discomfort and is capable of causing temporary impairment of vision and/or transient eye inflammation, ulceration

Serious Eye Damage/Irritation

Data available to make classification

Respiratory Sensitisation

Data either not available or does not fill the criteria for classification

Skin Sensitisation

Data either not available or does not fill the criteria for classification

Carcinogenicity

Data either not available or does not fill the criteria for classification

Reproductive Toxicity

Data either not available or does not fill the criteria for classification

STOT - Single Exposure

Data available to make classification

STOT - Repeated Exposure

Data either not available or does not fill the criteria for classification

Aspiration Hazard

Data either not available or does not fill the criteria for classification

Mutagenicity

Data either not available or does not fill the criteria for classification

Chronic Effects

Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Workers exposed to acetone for long periods showed inflammation of the airways, stomach and small bowel, attacks of giddiness and loss of strength. Exposure to acetone may enhance the liver toxicity of chlorinated solvents.

Section 12 - Ecological Information

Ecological Information

Toxicity

acetone

ENDPOINT: NOEC(ECx)

TEST DURATION (HR): 12h

SPECIES: Fish

VALUE: 0.001mg/L

SOURCE: 4

ENDPOINT: LC50

TEST DURATION (HR): 96h

SPECIES: Fish

VALUE: 3744.6-5000.7mg/L

SOURCE: 4

ENDPOINT: EC50

TEST DURATION (HR): 72h

SPECIES: Algae or other aquatic plants

VALUE: 5600-10000mg/l

SOURCE: 4

ENDPOINT: EC50

TEST DURATION (HR): 96h

SPECIES: Algae or other aquatic plants

VALUE: 9.873-27.684mg/l

SOURCE: 4

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ENDPOINT: EC50
TEST DURATION (HR): 48h
SPECIES: Crustacea
VALUE: 6098.4mg/L
SOURCE: 5

Legend: Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

For Ketones: Ketones, unless they are alpha, beta--unsaturated ketones, can be considered as narcosis or baseline toxicity compounds.

Aquatic Fate: Hydrolysis of ketones in water is thermodynamically favourable only for low molecular weight ketones. Reactions with water are reversible with no permanent change in the structure of the ketone substrate. Ketones are stable to water under ambient environmental conditions.

For Acetone:

log Kow : -0.24;

Half-life (hr) air : 312-1896;

Half-life (hr) H2O surface water : 20;

Henry's atm m³ /mol : 3.67E-05

BOD 5: 0.31-1.76,46-55%

COD: 1.12-2.07

ThOD: 2.2BCF: 0.69.

Environmental Fate: The relatively long half-life allows acetone to be transported long distances from its emission source.

Atmospheric Fate: Acetone preferentially locates in the air compartment when released to the environment. In air, acetone is lost by photolysis and reaction with photochemically produced hydroxyl radicals; the estimated half-life of these combined processes is about 22 days.

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient: acetone

Persistence: Water/Soil: LOW (Half-life = 14 days)

Persistence: Air: MEDIUM (Half-life = 116.25 days)

Mobility

Ingredient: acetone

Mobility: HIGH (KOC = 1.981)

Bioaccumulative Potential

Ingredient: acetone

Bioaccumulation: LOW (BCF = 0.69)

Section 13 - Disposal Considerations

Waste Disposal

Product / Packaging disposal

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

Reduction

Reuse

Recycling

Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.

DO NOT allow wash water from cleaning or process equipment to enter drains.

It may be necessary to collect all wash water for treatment before disposal.

In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.

Where in doubt contact the responsible authority.

Recycle wherever possible.

Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.

Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or Incineration in a licensed apparatus (after admixture with suitable combustible material).

Decontaminate empty containers.

Section 14 - Transport Information

UN Number

1090

Proper Shipping Name

ACETONE

Transport Hazard Class

3

Packing Group

II

Hazchem Code

•2YE

IERG Number

14

IATA UN Number

1090

IATA Proper Shipping Name

ACETONE

IATA Transport Hazard Class

3

IATA Packing Group

II

IMDG UN Number

1090

IMDG Proper Shipping Name

ACETONE

IMDG Transport Hazard Class

3

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IMDG Packing Group

II

Marine Pollutant

NO

Additional Information

Labels Required:

Land transport (ADG):

UN number: 1090

UN proper shipping name: ACETONE

Transport hazard class(es):

Class: 3

Subrisk: Not Applicable

Packing group: II

Environmental hazard: Not Applicable

Special precautions for user:

Special provisions: Not Applicable

Limited quantity: 1 L

Air transport (ICAO-IATA / DGR):

UN number: 1090

UN proper shipping name: Acetone

Transport hazard class(es):

ICAO/IATA Class: 3

ICAO / IATA Subrisk: Not Applicable

ERG Code: 3H

Packing group: II

Environmental hazard: Not Applicable

Special precautions for user:

Special provisions: Not Applicable

Cargo Only Packing Instructions: 364

Cargo Only Maximum Qty / Pack: 60 L

Passenger and Cargo Packing Instructions: 353

Passenger and Cargo Maximum Qty / Pack: 5 L

Passenger and Cargo Limited Quantity Packing Instructions: Y341

Passenger and Cargo Limited Maximum Qty / Pack: 1 L

Sea transport (IMDG-Code / GGVSee)

UN number: 1090

UN proper shipping name: Acetone

Transport hazard class(es):

IMDG Class: 3

IMDG Subrisk: Not Applicable

Packing group: II

Environmental hazard: Not Applicable

Special precautions for user:

EMS Number: F-E , S-D

Special provisions: Not Applicable

Limited Quantities: 1 L

Transport in bulk according to Annex II of MARPOL and the IBC code:

Product name: Oxygenated aliphatic hydrocarbon mixture

Pollution Category: Z

Ship Type: 3

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code:

Product name: acetone

Group: Not Available

Transport in bulk in accordance with the ICG Code:

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Product name: acetone
Ship Type: Not Available

Section 15 - Regulatory Information

Regulatory Information

Safety, health and environmental regulations / legislation specific for the substance or mixture
acetone is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5

Australian Inventory of Industrial Chemicals (AIIC)

National Inventory Status

National Inventory : China - IECSC

Status : Yes

National Inventory : Europe - EINEC / ELINCS / NLP

Status : Yes

National Inventory : Japan - ENCS

Status : Yes

National Inventory : Korea - KECI

Status : Yes

National Inventory : New Zealand - NZIoC

Status : Yes

National Inventory : Taiwan - TCSI

Status : Yes

National Inventory : Mexico - INSQ

Status : Yes

National Inventory : Vietnam - NCI

Status : Yes

National Inventory : Russia - FBEPH

Status : Yes

Legend:

Yes = All CAS declared ingredients are on the inventory

No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

Poisons Schedule

S5

Australian Inventory of Industrial Chemicals (AIIC)

National Inventory : Australia - AIIC / Australia Non-Industrial Use

Status : Yes

Global Inventory Status

Country/Region Inventory	Status Description	Country/Region Inventory	Status Description
Canada (DSL/NDSL)	National Inventory : Canada - DSL Status : Yes National Inventory : Canada - NDSL	Philippines (PICCS)	National Inventory : Philippines - PICCS Status : Yes

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Country/Region Inventory	Status Description	Country/Region Inventory	Status Description
	Status : No (acetone)		
USA (TSCA)	National Inventory : USA - TSCA Status : Yes		

Section 16 - Any Other Relevant Information

Contact Person/Point

Australia:

24 HOUR EMERGENCY CONTACT (Chemical Safety International): 1 800 638 556

Poisons Information Centre (Australia): 13 11 26

New Zealand:

24 HOUR EMERGENCY CONTACT (Chemical Safety International): 0800 154 666

NZ National Poisons Centre (24 Hour): 0800 764 766

DISCLAIMER:

This Safety Data Sheet summarises at the date of issue to the best of our knowledge, the health and safety hazards of the product and how to safely handle and use the product.

As ITW AAMTech cannot anticipate or control the conditions under which the product is used, customers are encouraged, prior to usage, to assess and control the risks associated with their use of the product.

Data sheets from unauthorised sources may contain information that is no longer current or accurate.

This SDS is valid for 5 years from date of issue. However, this version may be revoked and revised at any time, and users should contact ITW AAMTech to ensure they are in possession of the latest version.

Empirical Formula & Structural Formula

CH₃COCH₃

User Codes

User Title Label	User Codes
Wis Numbers	00435166
Wis Numbers	00752556
Wis Numbers	00754554
Wis Numbers	05235395

Other Information

Version No: 6.1

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Hazard Alert Code: 3

S.GHS.AUS.EN

Chemical Name : acetone

Other means of identification : Not Available

CAS number : 67-64-1

SDS Version Summary

Version : 5.1

Date of Update : 03/09/2020

Sections Updated : Expiration. Review and Update

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Version : 6.1

Date of Update : 23/12/2022

Sections Updated : Classification review due to GHS Revision change.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This SDS has been transcribed into Infosafe GHS format from an original, issued by the manufacturer on the date shown. Any disclaimer by the manufacturer may not be included in the transcription.

END OF SDS

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