

ACETONE

Infosafe No.: X0061

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ISSUED Date : 12/11/2014

ISSUED by: Axieo Operations (New Zealand)
Limited

1. IDENTIFICATION

GHS Product Identifier

ACETONE

Product Code

AACET10009

Company Name

Axieo Operations (New Zealand) Limited

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NEW ZEALAND**Telephone/Fax Number**

Telephone: +64 9 259 3760

Emergency phone number

0800 154 666

E-mail Address

compliance@axieo.com

Recommended use of the chemical and restrictions on use

Solvent used in the processing of resins, lacquers, waxes, adhesives, inks, paints and plastics.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.

Classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2012 Transport of Dangerous Goods on Land.

3.1B Flammable liquid: high hazard

6.1E (Oral) - Substance that is acutely toxic

6.3B Substance that is mildly irritating to the skin

6.4A Substance that is irritating to the eyes

Signal Word (s)

DANGER

Hazard Statement (s)

H225 Highly flammable liquid and vapour.

H303 May be harmful if swallowed.

H316 Causes mild skin irritation.

H319 Causes serious eye irritation.

Pictogram (s)

Flame, Exclamation mark



Precautionary statement – Prevention

- P102 Keep out of reach of children.
- P103 Read label before use.
- P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P264 Wash contaminated skin thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response

GENERAL

- P101 If medical advice is needed, have product container or label at hand.
- P370+P378 In case of fire: Use carbon dioxide, dry chemical or foam for extinction.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P331 Do NOT induce vomiting.

EYES

- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 If eye irritation persists: Get medical advice/attention.

SKIN

- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P332+P313 If skin irritation occurs: Get medical advice/attention.

Precautionary statement – Storage

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

Precautionary statement – Disposal

- P501 In the case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Regulations 2001. This may also include any method of disposal that must be avoided. See Section 13 of the SDS for disposal details.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion
Acetone	67-64-1	100 %

Preparation Description

Acetone

4. FIRST-AID MEASURES

Inhalation

If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

Ingestion

Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye contact

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre or a doctor at once. (0800 764 766)

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide, dry chemical or foam. Alcohol resistant foam is preferred. If not available normal foam can be used.

Unsuitable Extinguishing Media

Do not use water jet.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes and gases including carbon monoxide and carbon dioxide.

Specific Hazards Arising From The Chemical

Highly flammable liquid and vapour. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard. Vapours are heavier than air and spread at floor level.

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Avoid breathing in mists or vapours and skin or eye contact. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Do not dilute material but contain. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Take precautionary measures against static discharge. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Wear appropriate personal protective equipment and clothing to prevent exposure. Handle and use the material in a well-ventilated area, away from sparks, flames and other ignition sources. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Work from suitable, labelled, fire-resistant containers. Open containers carefully as they may be under pressure. Keep containers tightly closed. Flameproof equipment is necessary in areas where the product is being used. Take precautionary measures against static discharges. Earth or bond all equipment. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Protect from sunlight. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect

regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Use explosion-proof equipment. Explosive gas-air vapour mixtures may form. Ensure that storage conditions comply with applicable local and national regulations. For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids. Reference should also be made to all applicable local and national regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

Substance	Regulations	Exposure Duration	Exposure Limit	Units	Notes
Acetone	NZ OELs List	TWA	500	ppm	
Acetone	NZ OELs List	TWA	1185	mg/m ³	
Acetone	NZ OELs List	STEL	1000	ppm	
Acetone	NZ OELs List	STEL	2375	mg/m ³	

Biological Limit Values

Determinant: Acetone in urine

BEI®: 50mg/l

Sampling time: end of shift.

Source: American Conference of Industrial Hygienists (ACGIH)

Appropriate Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1:2009 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection

Safety glasses with full face shield should be used. Eye protection devices should conform to relevant regulations.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material such as butyl rubber or natural rubber. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Footwear

Footwear: rubber

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Hygiene Measures

Keep away from food, drink and animal feeding stuffs. Remove all contaminated clothing immediately. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Liquid

Appearance

Colourless mobile liquid

Colour

Colourless

Odour

Characteristic: sweet, fruity

Decomposition Temperature

Not available

Melting Point

-95 - -94.7°C

Boiling Point

55.8 - 56.6°C

Solubility in Water

100g/100ml

Fully miscible

Solubility in Organic Solvents

Soluble in most organic solvents

Specific Gravity

0.791 (20°C) (water = 1)

pH

5-6

Vapour Pressure

187-247hPa (20°C)

Vapour Density (Air=1)

2.0

Evaporation Rate

Not available

Odour Threshold

13ppm (approximate)

Viscosity

Refer to Section 9: Kinematic Viscosity and Dynamic Viscosity

Volatile Component

100%

Partition Coefficient: n-octanol/water

log Kow = -0.24

Surface tension

Not available

Flash Point

-20 - -17°C (Closed Cup)

Flammability

Flammable Liquid

Auto-Ignition Temperature

465°C

Ignition temperature: 540°C

Flammable Limits - Lower

2.1-3%v/v

Flammable Limits - Upper

13%v/v

Explosion Properties

Product is not explosive. Explosive gas-air vapour mixtures may form.

Molecular Weight

58.08

Oxidising Properties

Not available

Kinematic Viscosity

Not available

Dynamic Viscosity

0.32 - 0.33mPa.s (20°C)

Other Information

Refractive index: 1.358 - 1.359

10. STABILITY AND REACTIVITY

Reactivity

Refer to Section 10: Possibility of hazardous reactions

Chemical Stability

Stable under normal conditions of storage and handling.

Conditions to Avoid

Heat, open flames and other sources of ignition.

Incompatible materials

Strong oxidising agents. Acids.

Hazardous Decomposition Products

Thermal decomposition may result in the release of toxic and/or irritating fumes including: carbon monoxide and carbon dioxide.

Possibility of hazardous reactions

Can react violently with oxidising materials. Reacts violently with bromoform and chloroform in the presence of alkalis or in contact with alkaline surfaces. Decomposes violently in contact with nitric/sulfuric acid mixtures.

Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Available toxicity data is given below.

Acute Toxicity - Oral

LD50 (rat): 5800 - 9750mg/kg

Acute Toxicity - Inhalation

LC50 (rat): >16,000ppm/4hr

LC50 (rat): 76mg/l/4h (approximate)

LC50 (rat): >20mg/l/4h

Acute Toxicity - Dermal

LD50 (rabbit): >20ml/kg

Result: slight irritant

LD50 (rabbit): 20000mg/kg

LD50 (rabbit): 7800mg/kg

Ingestion

May be harmful if swallowed. Ingestion of this product may cause irritation to the mouth, throat, oesophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

Inhalation

Inhalation of product vapours may cause irritation of the nose, throat and respiratory system.

Skin

Causes mild skin irritation. Skin contact will cause redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye

Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Eye Irritation

Species: rabbit

Result: irritating

Respiratory sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ cell mutagenicity

Not considered to be a mutagenic hazard.

Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Not considered to be a carcinogenic hazard.

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT-single exposure

Not expected to cause toxicity to a specific target organ.

STOT-repeated exposure

Not expected to cause toxicity to a specific target organ.

Aspiration Hazard

Not expected to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The available ecological data is given below.

Persistence and degradability

Readily degradable

84% 20 days

91% 28 days (OECD 301 B)

Theoretical oxygen demand: 2.20g oxygen/g

COD (Chemical Oxygen Demand): 1.12-2.07g oxygen/g

COD (Chemical Oxygen Demand): 2100mg/g

BOD (Biochemical Oxygen Demand)-5: 0.31-1.85g oxygen/g

BOD (Biochemical Oxygen Demand)-20: 1.78g oxygen/g

BOD (Biochemical Oxygen Demand) 5 days: 1900mg/g

Mobility

Volatile

Bioaccumulative Potential

log Kow = -0.24

No bioaccumulation potential.

Bioconcentration Factor (BCF): <10

Other Adverse Effects

Not available

Environmental Protection

Do not discharge this material into waterways, drains and sewers.

Acute Toxicity - Fish

LC50 (Fathead minnow): 7280-8120mg/l/96h

LC50 (Oncorhynchus mykiss): 5540mg/l/96h

EC50 (Lepomis macrochirus): 8300mg/l/96h

LC/EC/IC 50 (Fish): >100mg/l

Acute Toxicity - Daphnia

LC50 (Daphnia): >10,000mg/l/24h

EC50 (Daphnia): >10,000mg/l/24h

LC50 (Daphnia magna): 12600mg/l/48h

EC50 (Daphnia magna): 8800mg/l

Acute Toxicity - Algae

NOEC (Pseudokirchneriella subcapitata): 4740mg/l/48h

LC/EC/IC 50 (Algae): >100mg/l

Acute Toxicity - Bacteria

NOEC (Pseudomonas putida): 1700mg/l/16h

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Dispose of waste according to applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain flammable residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Advise flammable nature. Controlled incineration is recommended.

Product Disposal:

Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. In this specific case the product is a solvent-based, flammable substance and therefore can be sent to an approved high temperature incineration plant for disposal. Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed. Do not dispose into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected. In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the EPA New Zealand website under specific group standards.

Container Disposal:

The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service. Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous. In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

14. TRANSPORT INFORMATION

Transport Information

This product is classified as Dangerous Goods Class 3 Flammable Liquids

Must not be loaded in the same freight container or on the same vehicle with:

Class 1: Explosives

Division 2.1: Flammable gases

Division 2.3: Toxic gases

Division 4.2: Spontaneously combustible substances

Division 5.1: Oxidising substances

Division 5.2: Organic peroxides

Class 7: Radioactive materials unless specifically exempted

Must not be loaded in the same freight container; and on the same vehicle must be separated horizontally by at least 3 metres unless all but one are packed in separate freight containers with:

Division 4.3: Dangerous when wet substances

Goods of packing group II or III may be loaded in the same freight container or on the same vehicle if transported in segregation devices with:

Division 4.2: Spontaneously combustible substances

Division 4.3: Dangerous when wet substances

Division 5.1: Oxidising substances

Division 5.2: Organic peroxides

U.N. Number

1090

UN proper shipping name

ACETONE

Transport hazard class(es)

3

Packing Group

II

Hazchem Code

•2YE

UN Number (Air Transport, ICAO)

1090

IATA/ICAO Proper Shipping Name

ACETONE

IATA/ICAO Hazard Class

3

IATA/ICAO Packing Group

II

IATA/ICAO Symbol

Flammable Liquid

IMDG UN No

1090

IMDG Proper Shipping Name

ACETONE SOLUTIONS

IMDG Hazard Class

3

IMDG Pack. Group

II

IMDG Marine pollutant

No

IMDG EMS

F-E,S-D

Transport in Bulk

Not available

Special Precautions for User

Not available

15. REGULATORY INFORMATION

Regulatory information

Classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.
HSNO (CCID) Name: 2-Propanone

HSNO Approval Number

HSR001070

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS Reviewed: November 2014, Supersedes: December 2009

References

Workplace Exposure Standards and Biological Exposure Indices, Department of Labour, Health & Safety.

Transport of Dangerous goods on land NZS 5433.

Preparation of Safety Data Sheets - Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1 09-06).

Assigning a hazardous substance to a group standard.

American Conference of Industrial Hygienists (ACGIH)

Contact Person/Point

IMPORTANT ADVICE: An SDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. The information contained in this SDS is believed to be correct but is not guaranteed. Prior to using the product(s) referred to in this SDS, each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace, including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the supplier listed in section 1 of the SDS. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request. Axieo does not accept any other liability either directly or indirectly for any losses suffered in connection with the use and application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

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END OF SDS

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