

SAFETY DATA SHEET

SDS

ACETONE

Infosafe No.: X0061 Version No.: 5.1 ISSUED Date : 24/10/2019 ISSUED by: DKSH Performance Materials New Zealand Limited

1. IDENTIFICATION

GHS Product Identifier ACETONE

Product Code 110845417

Company Name DKSH Performance Materials New Zealand Limited

Address

119 Carbine Road, Mt Wellington, Auckland, 1060 NEW ZEALAND

Telephone/Fax Number Telephone: +64 9 884 6380

Emergency phone number 0800 154 666

E-mail Address compliance.axieo@dksh.com

Recommended use of the chemical and restrictions on use Laboratory chemicals

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 hazard6.1E (Oral) - Substance that is acutely toxic6.3B Substance that is mildly irritating to the skin6.4A 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

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

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

P370+P378 In case of fire: Use carbon dioxide, dry chemical, foam, water fog or water mist for extinction.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

P332+P313 If skin irritation occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: 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 for disposal details.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Name	CAS	Proportion	
Acetone	67-64-1	100 %	

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.

SDS

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, foam, water fog or water mist. Alcohol resistant foam is preferred. If not available fine water spray/mist 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, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

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.

Cool closed containers exposed to fire with water spray.

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. 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. Place inert absorbent, noncombustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. 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, foodstuffs, clothing and incompatible materials such as oxidising agents. 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. 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

Substance	Regulations	Exposure Duration	Exposure Limit	Units	Notes
Acetone	NZ OELs List	TWA	500	ppm	(bio)
Acetone	NZ OELs List	TWA	1185	mg/m3	(bio)
Acetone	NZ OELs List	STEL	1000	ppm	(bio)
Acetone	NZ OELs List	STEL	2375	mg/m3	(bio)

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 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. Low boiling organic solvent: Type AX Brown

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 side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material. 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.

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

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Liquid			
Appearance Colourless liquid			
Colour			
Colourless			
Odour			

Not available

Decomposition Temperature

Not available Melting Point -95 °C

Boiling Point 56 °C

50 C

Solubility in Water Soluble

Specific Gravity Not available

pН

Not applicable

Vapour Pressure

Not available Vapour Density (Air=1)

Not available

Evaporation Rate Not available

Odour Threshold Not available

Viscosity

Refer to Section 9: Kinematic Viscosity and Dynamic Viscosity

Volatile Component Not available

Partition Coefficient: n-octanol/water

logPow: -0.24

Flash Point -20 °C

Flammability

Flammable Liquid

Auto-Ignition Temperature 465°C

Ignition temperature: 540°C

Flammable Limits - Lower 2.1-3%v/v

2.1-3%v/v

Flammable Limits - Upper 13%v/v

Explosion Properties

Vapors may form explosive mixtures with air.

Molecular Weight

58.08

Oxidising Properties

Not available

Kinematic Viscosity Not available

Dynamic Viscosity

Not available

Other Information Molecular Formula: C3H6O

10. STABILITY AND REACTIVITY

SDS

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. Contact with hot surfaces.

Incompatible materials

Strong oxidising agents.

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 Reacts with incompatible materials.

Hazardous Polymerization

Not available

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Toxicity data for material given below.

Acute Toxicity - Oral LD50 (rat): 5800 mg/kg

Acute Toxicity - Inhalation LC50 (rat): 76 mg/l/4h

Acute Toxicity - Dermal

LD50 (rabbit): 15800 mg/kg LD50 (rat): >7400 ng/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.

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. Test species: in vivo Result: negative Test method: AMES Test; OECD Test Guideline 471 Test species: in vitro Result: negative Test method: Mammalian Gene Cell Mutation; OECD Test Guideline 476

Carcinogenicity

Not considered to be a carcinogenic hazard.

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT-single exposure

SDS

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

91% biodegradability in 28 days

Persistence is unlikely, based on information available.

Mobility

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Will likely be mobile in the environment due to its volatility. Disperses rapidly in air.

Bioaccumulative Potential

logPow: -0.24 Bioconcentration Factor (BCF): 0.69 Bioaccumulation is unlikely.

Other Adverse Effects

Not available

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

Acute Toxicity - Fish

LC50 (Oncorhynchus mykiss): 5540 mg/l/96h LC50 (Alburnus alburnus): 11000 mg/l/96h LC50 (Leuciscus idus): 11300 mg/l/48h LC50 (Salmo gairdneri: 6100 mg/l/24h

Acute Toxicity - Daphnia

EC50 (Water flea): 8800 mg/l/48h EC50 (Water flea): 12700 mg/l/48h EC50 (Water flea): 12600 mg/l/48h

Acute Toxicity - Algae NOEC (algae)= 430 mg/l/96h

Acute Toxicity - Bacteria EC50 (Mircrotox): 14500 mg/l/15min

Hazardous to the Ozone Layer

Ozone Depletion Potential This product does not contain any known or suspected substance.

Other Information

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors. Persistent Organic Pollutant This product does not contain any known or suspected substance.

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. Product Disposal:

SDS

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 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** Ш **Hazchem Code** •2YE UN Number (Air Transport, ICAO) 1090 IATA/ICAO Proper Shipping Name ACETONE IATA/ICAO Hazard Class 3 IATA/ICAO Packing Group

IATA/ICAO Symbol Flammable Liquid **IMDG UN No** 1090 **IMDG Proper Shipping Name** ACETONE SOLUTIONS **IMDG Hazard Class** 3 **IMDG Pack. Group** Ш **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 New Zealand (NZIOC) All components of this product are listed on the Inventory or exempted.

16. OTHER INFORMATION

Date of preparation or last revision of SDS

SDS amendment: October 2020 15. Regulatory information SDS Reviewed: October 2019, Supersedes: November 2014

References

Workplace Exposure Standards and Biological Exposure Indices. 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. Adopted biological exposure determinants, 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. DKSH Performance Materials 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.

DKSH Performance Materials SDS WARNING: DKSH Performance Materials is aware that third parties are distributing documents purporting to be SDSs (or the like) in relation to DKSH Performance Materials products without any authorisation from DKSH Performance Materials accepts no responsibility for the distribution of an

9/10

SDS

Unauthorised SDS by a third party or for any information contained therein. All DKSH Performance Materials products must be used in accordance with the corresponding original and current SDS authorised by DKSH Performance Materials for use with that DKSH Performance Materials product ("Authorised SDS"). In the event that an SDS in relation to an DKSH Performance Materials product has expired and is not marked as obsolete, please contact DKSH Performance Materials immediately to obtain a current SDS. Further, if an DKSH Performance Materials product is used without the Authorised SDS and/or with an Unauthorised SDS, or an expired SDS which is not marked obsolete, DKSH Performance Materials hereby excludes absolutely and to the maximum extent permitted by law all liability whatsoever and howsoever arising under contract, tort (including negligence) or otherwise for all loss and/or damage including, but not limited to, for personal injury, sickness or death, damage to real property and/or chattels and all indirect and consequential loss (including loss of profits).

END OF SDS

© Copyright Chemical Safety International Pty Ltd

Copyright in the source code of the HTML, PDF, XML, XFO and any other electronic files rendered by an Infosafe system for Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.

- Copyright in the layout, presentation and appearance of each Infosafe SDS displayed is the intellectual property of Chemical Safety International Pty Ltd.
- The compilation of SDS's displayed is the intellectual property of Chemical Safety International Pty Ltd.
- Copying of any SDS displayed is permitted for personal use only and otherwise is not permitted. In particular the SDS's displayed cannot be copied for the purpose of sale or licence or for inclusion as part of a collection of SDS without the express written consent of Chemical Safety International Pty Ltd.

Jurisdiction: New zealand

Language: English