

DATE : 1 JAN 2019

VERSION NO. : 1

PAGE : 1 OF VARIABLE



Safety Data Sheet

1. Identification Of The Material & Supplier

Product Name : **Acetone**

Other Names(s) : Dimethyl Ketone; DMK; 2-Propanone; Propan-2-One

Chemical Formula : (CH₃)₂CO 61286 A5 21

Use or Description : Industrial Solvent

Suppliers Name : Hi-Tec Ink

Street Address : Unit 4 / 231 Annex Road , Christchurch 8053, New Zealand.

Telephone : +64 3 366 0100

Facsimile :

Emergency Telephone : National Poisons & Hazardous Chemicals
Information Centre : 0800 POISON (0800 764 766)
NZ Emergency Services : Dial 111 (if in doubt)
Geoffrey Blakey-Scholes : Bus +64 3 666-0100
Mobile 021 312 676

2. Hazards Identification

Hazard Classification:

3.1B - Highly flammable liquid and vapour.
6.4A (mild irritant) - Substance that causes eye irritation.
6.9 (Respiratory tract irritant) - Substance that may cause respiratory irritation.
6.9B (Repeated exposure) - Substance that cause damage to organs through prolonged or repeated exposure.
6.8B Substance that is suspected of damaging fertility or the unborn child.
6.1E (aspiration hazard) - Substance that may be harmful if swallowed and enters airways.

Hazard statement codes:

H225 Highly flammable liquid and vapour.
H320 Causes eye irritation.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H361 Suspected of damaging fertility or the unborn child.
H305 May be harmful if swallowed and enters airways.

Precautionary statement codes - prevention:

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
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 skin thoroughly after handling.
P280 Wear protective equipment as required.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well ventilated area.
P281 Use personal protective equipment as required.

Precautionary statement codes - Response:

P301+ P310 IF SWALLOWED: Immediately call a Poison Centre or doctor/physician.
P331 Do NOT induce vomiting.
P303 + P361+P353 IF ON SKIN Remove immediately all contaminated clothing. Rinse skin with water.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P304 + P340 IF INHALED: Remove 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 easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P370+P378 In case of fire use foam/carbon dioxide/dry chemical.
P312 Call a POISON CENTRE or doctor/physician if you feel unwell.
P308 + P313 If exposed or concerned: Get medical advice/attention.

Precautionary statement codes - Storage:

P403+P235 Store in a well ventilated area. Keep cool.
P405 Store locked up.

Precautionary statement codes - Disposal:

P501 Disposal of this substance must be in accordance with the Hazardous Substances (Disposal) Regulations 2001 with reference to all local Council regulations. This may also include any method of disposal that must be avoided.

3. Composition / Information On Ingredients

Potentially Hazardous Ingredients	% by weight (approx)	TLV (TWA)		STEL (TWA)		Note CAS No.
		mg/m3	ppm	mg/m3	ppm	
A5 - Acetone	100	1210	500			67 - 64 - 1

4. First Aid Measures

Inhalation	Move to fresh air, keep warm and at rest. Seek medical attention. If breathing has stopped apply artificial respiration at once. If breathing is laboured, ensure airways are clear and give oxygen through a face mask.
Skin Contact	Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention. Wash clothing before reuse.
Eye Contact	Flush effected eye(s) thoroughly with water for at least 15 minutes. Seek immediate medical attention.
Ingestion	If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Seek immediate medical assistance. Never give anything by mouth to an unconscious person.

**Health Hazard :
Information**

The following effects are likely should over exposure occur narcotic effects occur at levels above the TLV. Corneal damage will occur after prolonged contact. moderate eye irritation. moderate skin irritation respiratory irritation. Dizziness, nausea, and loss of consciousness. Material if aspirated into the lungs may cause chemical pneumonia.

5. Fire Fighting Measures

Extinguishing Media to be used

☒ Foam ☒ Dry Chemical ☒ Water Spray
☒ Carbon Dioxide ☐ Alcohol Foam ☐ Other...

Special Fire Fighting Procedures

Fire fighters must use recommended protective equipment and self contained breathing apparatus. Cool storage drums with water spray. Preventing run off from fire control or dilution from entering streams, sewers or drinking water supply.

Unusual Fire and Explosion Hazards

Above flash point, vapour/air mixtures are explosive. Vapours can flow along surfaces to distant ignition source and flash back. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated. This material may produce a floating fire hazard. Sensitive to static discharge.

6. Accidental Release Measures

Spill and Leak Procedure

Evacuate personnel to safe areas. Remove all sources of ignition. Do not breath vapours or spray mist. Wear self-contained breathing apparatus and protective suite. Shut off leaks if without risk. Keep people away from and upwind of spill / leak.
Remove leaking containers to a detached area. Bung spill area and absorb spilled product with inert material (e.g. sand, earth etc.) Transfer remaining product in leaking container to a new container and solid absorbent materials to separate container for disposal. Dispose of waste at an appropriate waste disposal facility in accordance with local authority bylaws, the Local Government Act 1974 and the regulations made therein.

7. Handling & Storage

Handling

Use in well ventilated area away from all ignition sources. Wear chemical-type goggles. Approved respiratory protective equipment must be used when vapour or mist concentrations exceed established Threshold Limit Value - 200ppm. Do not breath vapours or spray mist. Avoid contact with skin, eyes and clothing. Do not empty into drains. Keep from heat and sources of ignition. Intrinsically safe equipment (E.G. explosive-proof equipment) only must be used in areas where the chemical is being used. The use of compressed air for filling, discharging, mixing or handling is prohibited due to the vapour hazard. Containers must be earthed to avoid generation of static charges when agitating or transferring product.

Storage

Ground and bond all transfer and storage equipment. Drums must be grounded and bonded and equipped with self closing valves, pressure vacuum bungs and flame arresters. Outside or detached storage preferred. Store containers in a cool area away from all ignition sources. Containers of this material may be hazardous when empty since they retain product residues (vapours, liquid) observe all warnings and precautions listed for this product.

8. Exposure Control / Personal Protection

Recommended Personal Protective Equipment to be worn during use of product: (X)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Protective Overalls | <input checked="" type="checkbox"/> Synthetic Apron |
| <input checked="" type="checkbox"/> Safety Glasses | <input checked="" type="checkbox"/> Vapour Respirator |
| <input type="checkbox"/> Splash Goggles | <input type="checkbox"/> Dust & Vapour Respirator |
| <input type="checkbox"/> Face Shield | <input type="checkbox"/> Full Protective Suit |
| <input type="checkbox"/> Airline Hood or Mask | <input checked="" type="checkbox"/> Boots |
| <input checked="" type="checkbox"/> Gloves | <input checked="" type="checkbox"/> Other... |

9. Physical And Chemical Properties

Appearance and Odour

Clear, colourless liquid with sharp odour

Density

0.792

Viscosity

at 40°C cSt: 0.3

Vapour Pressure, mm Hg at 20°

194

Vapour Density (Air=1)

2

Melting Point/Freezing Point, °

-95

Aniline Point, ° (Mixed)

NE

Refractive Index, @ 20°

1.3591

Residue On Evaporation, mg/100ml

8 ppm

Boiling Range, °C

55 to 57

Flash Point° Method

-20 (ASTMD-56)

Evaporation Rate (BuAc=100)

946

% Volatile Matter (by weight)

100

Solubility in Water

Complete

Aromatics, %

NA

Colour

Clear

pH

NA

Flammability Limit, %vol**Lower (LEL)**

2.6

Upper (UEL)

12.8

Auto Ignition Temperature, °

465

NA = Not Applicable, NE = Not Established,
NR = Not Regulated Against D = Decomposes

10. Stability And Reactivity

Reactivity Data

Acetone is considered to be stable under normal conditions, however exposure to the following should be avoided: Extreme heat, halogens, strong acids, alkalis, and oxidisers.

Hazardous Decomposition Byproducts

Carbon Monoxide

Hazardous Polymerization

☒ Will Not Occur ☐ May Occur ☐ Other...

11. Toxicological Information

Acute Effects of Overexposure

Ingestion	Ingestion may cause nausea, vomiting and CNS depression with symptoms including drowsiness, dizziness, weakness, fatigue, headache, confusion and possible unconsciousness.
Skin Contact	Irritating due to defating action on skin. Causes redness, pain, drying and cracking of the skin.
Inhalation	Inhalation of vapours irritates the respiratory tract. May cause coughing, dizziness, dullness, and headache. Higher concentrations can produce central nervous system depression, narcosis, and unconsciousness.
Eye Contact	Vapours are irritating to the eyes. Splashes may cause severe irritation, with stinging, tearing, redness and pain.
Delayed Effects	Long term exposure by swallowing or repeated inhalation, may cause degenerative changes in the liver and other organs. Exposure to acetone in the work setting may add to any health effects caused by intake of alcoholic drinks, particularly in regard to narcotic and liver effects.
Mutagenic Effects	NR
Reproductive Effects	NR
Chronic Effects	NR

12. Ecological Information

Environmental fate:

When released into the the soil, Acetone is expected to readily biodegrade and will evaporate quickly.

When released into the the water, Acetone is expected to readily biodegrade and will evaporate quickly.

Acetone is not expected to bioaccumulate.

Environmental Toxicity:

This material is not expected to be toxic to aquatic life. The LC50/96 - hour values for fish are over 100 mg /l.

13. Disposal Considerations

Disposal Methods

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities.

Packaging may still contain fumes and vapours that are flammable and harmful. Ensure that empty packaging is allowed to dry.

Special Precautions for Landfill or Incineration.

This product is NOT suitable for disposal by either land fill or via municipal sewers, drains, natural stream or rivers.

14. Transport Information

IMCO No.	3.1	This material is classified as a class 3- Flammable Liquid according to NZS 5433:1999 Transport of Dangerous Goods on Land.
UN No.	1090	Must not be loaded in the same freight container or on the same vehicle with;
HAZCHEM	2YE	(Class 1) Explosives, (Class 2.1) Flammable gasses, (Class 2.3) Toxic gasses, (Class 4.2) Spontaneous combustible substances, (Class 5.1) Oxidising substances, (Class 5.2) Organic peroxide , (Class 7) Radioactive materials unless specifically exempted, (Class 4.3) Dangerous when wet substances.
D/Goods Class	3.1B	
UN Packing Group	II	

15. Regulatory Information

National **and or International Regulatory Information.**

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

Group Standard: SS586 : 2008

Additives, Process Chemicals and Raw Materials (Flammable) Group Standard 2006

Hazardous Category.

Harmful, Irritant

EPA New Zealand Approval Code: HSR001070; 2-Propanone

16. Other Information

Other Data.

IF PRINTED THIS MSDS SHEET IS UNCONTROLLED.

Hi - Tec Ink urges each customer or recipient of this MSDS to study it carefully to become aware of and the hazards associated with the product.

The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate to use and understand the data contained in this MSDS. To promote safe handling, each customer or recipient should:

- (1) notify its employees, agents, contractors and others whom it knows or believes will use this material or the information in this MSDS and any other information regarding hazards of safety;
- (2) furnish this same information to each of its customers for the product; and
- (3) request its customers to notify their employees, customers, and other users of the product of this information.

NOTE: The information and recommendations contained in this data sheet have been compiled from sources believed to be reliable and represent the best current opinion on the subject. No warranty, guarantee or representation is made by the company as to the absolute correctness or sufficiency of any representation contained in this data sheet and the company assumes no responsibility in connection therewith. Nor can it be assumed that all acceptable safety measures are contained in this data sheet or that other additional measures may not be required under particular or exceptional circumstances or conditions.