

SAFETY DATA SHEET



Revision date: 19-Apr-2024

Revision Number 8

Section 1: Identification

Product identifier

Product Name ACETIC ACID GLACIAL

Product Code(s) 000030360001

Synonyms Glacial acetic acid; Ethanoic acid; Ethylic Acid; Methane carboxylic acid; Vinegar acid; Acetic acid BP; Acetic acid 99%.

Recommended use Manufacture of acetic anhydride, acetates, chloroacetic acid, plastics, pharmaceuticals, dyes, and insecticides; photographic chemical; food additive; latex coagulant; oil-well acidiser; textile printing.

Supplier

Ixom Central Pacific Ltd
Company Number: 1030
Street Address: Lots 3&4 Wailada Industrial Estate
Lami
Fiji
Telephone Number: +67 9 336 1144
Facsimile: +67 9 336 1500

Emergency telephone number +61 3 9663 2130 (International, Australia, All Hours)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

GHS Classification

Corrosive to metals	Category 1
Flammable liquids	Category 3
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Label elements

Corrosion
Flame



Signal word

DANGER

Hazard statements

H226 - Flammable liquid and vapor

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

Precautionary Statements - Prevention

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

Keep container tightly closed.

Keep only in original packaging.

Ground and bond container and receiving equipment.

Use explosion-proof electrical/ ventilating / lighting/ .? / equipment.

Use only non-sparking tools.

Take action to prevent static discharges.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash face, hands and any exposed skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/clothing and eye/face protection.

Precautionary Statements - Response

Specific treatment (see First aid on this SDS).

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

Immediately call a POISON CENTER or doctor/physician.

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

Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish..

Absorb spillage to prevent material damage.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool.

Store locked up.

Store in corrosion resistant container with a resistant inner liner.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

Other hazards which do not result in classification

Chemical name	CAS No.	Weight-%
Acetic acid	64-19-7	>=99

Description of first aid measures**General advice**

For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Emergency telephone number

Poisons Information Center, Australia: 13 11 26
Poisons Information Center, New Zealand: 0800 764 766

Inhalation

Remove to fresh air. Oxygen or artificial respiration if needed. Seek immediate medical attention/advice.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

Ingestion

Rinse mouth thoroughly with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed**Symptoms**

May cause redness and tearing of the eyes. Erythema (skin redness). Burning. Irritation/Corrosion.

Effects of Exposure

No information available.

Indication of any immediate medical attention and special treatment needed**Note to physicians**

Treat symptomatically. Can cause corneal burns.

Suitable Extinguishing Media**Suitable extinguishing media**

Alcohol resistant foam is the preferred firefighting medium but, if it is not available, fine water spray or water fog can be used. Water spray, fog or alcohol-resistant foam.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire. Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical**Specific hazards arising from the chemical**

Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Flammable. Most vapors are heavier than air. Vapors may spread along ground and collect in low or confined areas (sewers, basements, tanks). Pay attention to flashback.

Hazardous combustion products

Carbon oxides.

Special protective actions for fire-fighters**Special protective equipment and precautions for fire-fighters**

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Hazchem code

•2P

Personal precautions, protective equipment and emergency procedures**Personal precautions**

Do not eat, drink or smoke when using this product. Attention! Corrosive material. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Evacuate personnel to safe areas. Do not touch or walk through spilled material. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Stop leak if you can do it without risk. Take precautionary measures against static discharges. Use personal protective equipment as required. Wash thoroughly after handling. All equipment used when handling the product must be grounded.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use only non-sparking tools.

Precautions for safe handling

Advice on safe handling Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking. All equipment may need to be explosion-proof based on a risk assessment. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Ensure adequate ventilation. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking and explosion proof. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use personal protection equipment. Wash thoroughly after handling. KEEP OUT OF REACH OF CHILDREN AND PETS.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store away from foodstuffs and sources of heat or ignition. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use.

Incompatible materials Oxidizing agent. Metals. Bases. Amines. Strong alkalis.

Control parameters**Exposure Limits**

Chemical name	Australia	New Zealand	ACGIH TLV
Acetic acid 64-19-7	TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³	TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³	TWA: 10 ppm STEL: 15 ppm
Chemical name	European Union	United Kingdom	Germany DFG
Acetic acid 64-19-7	-	TWA: 10 ppm TWA: 25 mg/m ³ STEL: 20 ppm STEL: 50 mg/m ³	TWA: 10 ppm TWA: 25 mg/m ³ Peak: 20 ppm Peak: 50 mg/m ³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes,

which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls

Engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location. Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



Eye/face protection	Tight sealing safety goggles. If splashes are likely to occur: Face protection shield.
Skin and body protection	Boots. Apron. Overalls.
Hand protection	Elbow-length impervious gloves.
Respiratory protection	If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
Environmental exposure controls	No information available.
Thermal hazards	No information available.

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Color	Colourless
Odor	Pungent
Odor threshold	24.3 ppm

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	2.4 @ 60 g/L	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	17°C	None known

Boiling point / boiling range	118°C	None known
Flash point	39°C	CC (closed cup)
Evaporation rate	0.97 (n-Butyl acetate=1)	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	19.9% vol	
Lower flammability or explosive limits	4.0% vol	
Vapor pressure	ca. 19 hPa @20°C	None known
Vapor density	2.07 (air=1)	None known
Relative density	1.045 @25°C	None known
Water solubility	Miscible in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	-0.17 (n-Octanol/water)	None known
Autoignition temperature	463°C	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	1.056 mPa.s @25°C	None known

Other informationReactivity

Reactivity Corrosive to metals.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Conditions to avoid Heat, flames and sparks.

Incompatible materials

Incompatible materials Oxidizing agent. Metals. Bases. Amines. Strong alkalis.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

Information on likely routes of exposure

Product Information No adverse health effects expected if the chemical is handled in accordance with this Safety

Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:

Inhalation	May cause irritation.
Eye contact	Causes serious eye damage.
Skin contact	Causes severe burns.
Ingestion	Can burn mouth, throat, and stomach.
Symptoms	Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). Burning.

Acute toxicity**Numerical measures of toxicity - Product Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Acetic acid	= 3310 mg/kg (Rat)	= 1060 mg/kg (Rabbit)	= 11.4 mg/L (Rat) 4 h

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Causes severe burns.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory or skin sensitization	Not a skin sensitizer.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Chronic effects:	Chronic overexposure to acetic acid may result in pharangitis, catarrhal bronchitis, and erosion of the teeth.

Ecotoxicity**Aquatic ecotoxicity** Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Acetic acid	-	LC50: =79mg/L (96h, Pimephales promelas) LC50: =75mg/L (96h, Lepomis macrochirus)	-	EC50: =65mg/L (48h, Daphnia magna)

Terrestrial ecotoxicity There is no data for this product.**Persistence and degradability****Persistence and degradability** Readily biodegradable.**Bioaccumulative potential****Bioaccumulation** There is no data for this product.**Component Information**

Chemical name	Partition coefficient
Acetic acid	-0.17

Mobility**Mobility** No information available.**Other adverse effects****Other adverse effects** No information available.**Waste treatment methods****Waste from residues/unused products** Refer to Waste Management Authority. Dispose of material through a licensed waste contractor.**Contaminated packaging** Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

See section 8 for more information

ADG

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN number or ID number 2789
Proper shipping name ACETIC ACID, GLACIAL
Transport hazard class(es) 8
Subsidiary hazard class 3

Packing group II
Hazchem code •2P

IATA Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number 2789
UN proper shipping name ACETIC ACID, GLACIAL
Transport hazard class(es) 8
Subsidiary hazard class 3
Packing group II

IMDG Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number 2789
UN proper shipping name ACETIC ACID, GLACIAL
Transport hazard class(es) 8
Subsidiary hazard class 3
Packing group II
IMDG EMS Fire F-E
IMDG EMS Spill S-C
Marine pollutant Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available

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

National regulations

Australia

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number 6

Australian Industrial Chemicals Introduction Scheme (AICIS)

Contact supplier for inventory compliance status

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Acetic acid - 64-19-7	Present	-

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

Chemical name	Illicit Drug Precursors/Reagents
Acetic acid - 64-19-7	Category 3

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Acetic acid - 64-19-7	10 tonne/yr Threshold category 1

International Inventories

AIIC	This material is listed on the Australian Inventory of Industrial Chemicals.
NZIoC	This material is listed on the New Zealand Inventory of Chemicals.
TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.

Legend:**AIIC- Australian Inventory of Industrial Chemicals****NZIoC - New Zealand Inventory of Chemicals****TSCA - United States Toxic Substances Control Act Section 8(b) Inventory****DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List****EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances****ENCS - Japan Existing and New Chemical Substances****IECSC - China Inventory of Existing Chemical Substances****KECL - Korean Existing and Evaluated Chemical Substances****PICCS - Philippines Inventory of Chemicals and Chemical Substances****International Regulations****The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable**The Stockholm Convention on Persistent Organic Pollutants** Not applicable**The Rotterdam Convention** Not applicable

Reason(s) For Issue:	Revised Primary SDS Change in NZ classification
Prepared By	This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).
Revision date:	19-Apr-2024

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorization:
 PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
 vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
 STOT: Specific Target Organ Toxicity
 ATE: Acute Toxicity Estimate
 LC50: 50% Lethal Concentration
 LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGl(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 Australian Industrial Chemicals Introduction Scheme (AICIS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

End of Safety Data Sheet

Region	Template name	Revision Note:
Australia	UGHS	2.0

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poison Schedule Number 6

Chemical name	Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)	Poison Schedule Number
Acetic acid - 64-19-7	5: >30 % except its salts and derivatives;in preparations except when included in Schedule 2 or 6, or for therapeutic use 6: >80 % except its salts and derivatives;except when included in Schedule 2 2: >80 % except salts and derivatives of Acetic acid;for therapeutic use	2 5 6

Auth Group Chemicals
Generic Supplier Ixom Operations Pty Ltd
PPE Code D:OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.
Marine Pollutant No
Deletion Flag (Y=Deleted, N=Active) N
Haz Indicator Aus Y

IXOM Label Data

Signal word DANGER
SAFETY DIRECTIONS Avoid contact with skin and eyes and avoid breathing dust/vapour or spray mist. Wear overalls, impervious gloves, chemical goggles, and full face shield. Ensure adequate ventilation when using. If inhalation risk exists wear organic vapour respirator. Store in a cool, dry, well ventilated place. Store away from foodstuffs and sources of heat or ignition. Store away from incompatible materials (refer to SDS). Keep containers closed when not in use.
FOR SPILLS Shut off ignition sources. Slippery when spilt. Wear protective equipment. Absorb with sand or soil. Collect and seal in properly labelled drums or other suitable containers. Use non-sparking tools.
CONTAINS AU >=99% ACETIC ACID
Reason(s) For Issue: Revised Primary SDS
Additional Info Statement Change in NZ classification
 ADDITIONAL INFORMATION IS LISTED IN THE SAFETY DATA SHEET.

Pictograms

Physical Hazards



Physical Hazards



Hazard statements

H226 - Flammable liquid and vapor H290 - May be corrosive to metals H314 - Causes severe skin burns and eye damage

Scanned SDS Data

Synonyms

Glacial acetic acid; Ethanoic acid; Ethylic Acid; Methane carboxylic acid; Vinegar acid; Acetic acid BP; Acetic acid 99%.

Revision date:	19-Apr-2024
CAS No.	64-19-7
UN number or ID number	2789
Transport hazard class(es)	8
Subsidiary hazard class	3
Packing group	II
Proper shipping name	ACETIC ACID, GLACIAL
Poison Schedule Number	6
Hazchem code	•2P

Australia SDS version information - UGHS

UL release:
GHS Revision 7
2023 Q4

Australia Label version information - AULB

UL release:
2023 Q4

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)