

Eastman(TM) Glacial Acetic Acid, Food Grade, Kosher

Version 4.0 Revision Date: 04/25/2017 SDS Number: 150000014218 Date of last issue: 12/22/2011
Date of first issue: 03/24/2011
SDSCA / PRD / 0001

SECTION 1. IDENTIFICATION

Product name : Eastman(TM) Glacial Acetic Acid, Food Grade, Kosher
Product code : EAN 900763. 19702-00, P1970200, P1970201, P1970207, 82000099

Manufacturer or supplier's details

Company name of supplier : Eastman Chemical Company

Address : 200 South Wilcox Drive
Kingsport TN 37660-5147

Telephone : (423) 229-2000

Emergency telephone number : CHEMTREC: +1-800-424-9300, +1-703-527-3887 CCN7321

Initial Supplier Identifier
Données relatives au fournisseur

Univar Solutions Canada Ltd.

64 Arrow Road
North York, ON M9M 2L9
Telephone: 1-866-686-4827

Recommended use of the chemical and restrictions on use

Recommended use : Solvent

Restrictions on use : None known.

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids : Category 3

Skin corrosion : Category 1A

Serious eye damage : Category 1

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.

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P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 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/doctor.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance name : acetic acid

CAS-No. : 64-19-7

Components

Chemical name	CAS-No.	Concentration (% w/w)
acetic acid	64-19-7	100

SECTION 4. FIRST AID MEASURES

If inhaled : Remove to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
Get immediate medical advice/ attention.

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- | | |
|---|---|
| In case of skin contact | : Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Call a physician or poison control centre immediately.
Wash contaminated clothing before reuse.
Destroy or thoroughly clean contaminated shoes. |
| In case of eye contact | : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
Call a physician or poison control centre immediately.
Remove person to fresh air. If signs/symptoms continue, get medical attention. |
| Most important symptoms and effects, both acute and delayed | : Causes serious eye damage.
Causes severe burns. |

SECTION 5. FIREFIGHTING MEASURES

- | | |
|---|---|
| Suitable extinguishing media | : Use water spray to extinguish.
Dry chemical
Carbon dioxide (CO2)
Alcohol-resistant foam |
| Unsuitable extinguishing media | : None known. |
| Specific hazards during fire-fighting | : Prevent buildup of vapors or gases to explosive concentrations. |
| Further information | : Flammable liquid and vapour. |
| Special protective equipment for firefighters | : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | |
|---|--|
| Personal precautions, protective equipment and emergency procedures | : Wear appropriate personal protective equipment.
Local authorities should be advised if significant spillages cannot be contained. |
| Environmental precautions | : Avoid release to the environment. |
| Methods and materials for containment and cleaning up | : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Neutralize spill area and washings with soda ash or lime. |

SECTION 7. HANDLING AND STORAGE

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Advice on safe handling : Do not taste or swallow.
 : Use only with adequate ventilation.
 : Wash thoroughly after handling.

Conditions for safe storage : Keep container tightly closed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
acetic acid	64-19-7	TWA	10 ppm 25 mg/m3	CA AB OEL
		STEL	15 ppm 37 mg/m3	CA AB OEL
		TWA	10 ppm	CA BC OEL
		STEL	15 ppm	CA BC OEL
		TWAEV	10 ppm 25 mg/m3	CA QC OEL
		STEV	15 ppm 37 mg/m3	CA QC OEL
		TWA	10 ppm	ACGIH
		STEL	15 ppm	ACGIH

Engineering measures : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Respiratory protection : If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
 Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable.
 Respirator type:
 For high airborne concentrations, use an approved supplied-air respirator. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas warning properties are poor, or if air purifying filter rating may be exceeded.

Hand protection

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Remarks	: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves.
Eye protection	: Safety glasses with side-shields
Skin and body protection	: Any specific clothing information provided is based on published literature and manufacturer data. Body protection suitability and breakthrough time will differ depending on the specific use conditions. Clothing to be considered for this material may include sleeves, aprons, pants depending on the use and likelihood of skin contact. Please refer to the hand protection section for material type.
Protective measures	: Ensure that eye flushing systems and safety showers are located close to the working place.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: colourless
Odour	: pungent
pH	: 2.4, Concentration: 60 g/l
Melting point/freezing point	: 16.64 °C
Boiling point/boiling range	: 117.9 °C
Flash point	: 39 °C
Flammability (solid, gas)	: Flammable.
Upper explosion limit	: 19.9 %(V)
Lower explosion limit	: 4 %(V)
Vapour pressure	: 20.79 hPa (25 °C)
Relative vapour density	: 2.1

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Relative density	: 1.0446 (25 °C)
Solubility(ies)	
Water solubility	: 602.9 g/l (25 °C)
Partition coefficient: n-octanol/water	: log Pow: -0.17 (20 °C)
Decomposition temperature	: Thermal stability not tested. Low stability hazard expected at normal operating temperatures.
Viscosity	
Viscosity, dynamic	: 1.056 mPa.s (25 °C)
Viscosity, kinematic	: 1.011 mm ² /s
Explosive properties	: Not classified
Oxidizing properties	: Not classified
Surface tension	: Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: None reasonably foreseeable.
Chemical stability	: Not fully evaluated.
Possibility of hazardous reactions	: Not fully evaluated.
Conditions to avoid	: Heat, flames and sparks.
Incompatible materials	: Strong oxidizing agents
Hazardous decomposition products	: Carbon monoxide Carbon dioxide (CO ₂)

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified based on available information.

Components:**acetic acid:**

Acute oral toxicity	: LD50 Oral (Rat): 3,320 mg/kg
Acute inhalation toxicity	: LC50 (Rat): > 16000 ppm Exposure time: 4 h

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Acute dermal toxicity : LD50 Dermal (Rabbit): 1,060 mg/kg

Skin corrosion/irritation

Causes severe burns.

Components:**acetic acid:**

Species: Rabbit

Exposure time: 24 h

Result: Corrosive

Serious eye damage/eye irritation

Causes serious eye damage.

Components:**acetic acid:**

Species: Rabbit

Result: Corrosive

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Components:**acetic acid:**

Genotoxicity in vitro	: Test Type: Salmonella typhimurium assay (Ames test) Metabolic activation: +/- activation Method: Bacterial Reverse Mutation Assay Result: negative
	: Test Type: Chromosome aberration test in vitro Metabolic activation: +/- activation Method: In vitro Mammalian Chromosome Aberration Test Result: negative
Genotoxicity in vivo	: Test Type: Micronucleus test Species: Rat Application Route: inhalation (vapour) Result: negative Remarks: Read-across from a similar material

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

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Components:**acetic acid:**

Effects on foetal development	: Species: Rat
	Application Route: Ingestion
	345 mg/kg

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity**Components:****acetic acid:**

Species: Rat
NOAEL: 290 mg/kg
Application Route: Oral Study

Species: Rat
NOAEL: 30 mg/kg
Application Route: Dermal Study

Aspiration toxicity

Not classified based on available information.

Information on likely routes of exposure**Product:**

Inhalation	: Remarks: None known.
Skin contact	: Remarks: Causes skin burns.
Eye contact	: Remarks: Causes serious eye damage.
Ingestion	: Remarks: None known.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:****acetic acid:**

Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 300.82 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: EC50 (daphnid): > 300.82 mg/l Exposure time: 48 h

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Toxicity to algae : EC50 (Chlorella pyrenoidosa (aglae)): 300.82 mg/l
Exposure time: 72 h

Persistence and degradability**Components:****acetic acid:**

Biodegradability : Result: Readily biodegradable.
Biodegradation: 96 %
Exposure time: 20 d

Biochemical Oxygen De- : BOD-5:
mand (BOD) 340 - 880 mg/g

BOD-20:
900 mg/g

Chemical Oxygen Demand : 1,030 mg/g
(COD)

Bioaccumulative potential**Components:****acetic acid:**

Bioaccumulation : Bioconcentration factor (BCF): 3.16

Partition coefficient: n- : Pow: 0.49
octanol/water log Pow: -0.31

Mobility in soil**Components:****acetic acid:**

Distribution among environ- : log Koc: 0.062
mental compartments Method: QSAR model

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION**International Regulations**

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IATA-DGR

UN/ID No.	: UN 2789
Proper shipping name	: Acetic acid, glacial
Class	: 8
Subsidiary risk	: 3
Packing group	: II
Labels	: Corrosive, Flammable Liquids
Packing instruction (cargo aircraft)	: 855
Packing instruction (passenger aircraft)	: 851

IMDG-Code

UN number	: UN 2789
Proper shipping name	: ACETIC ACID, GLACIAL
Class	: 8
Subsidiary risk	: 3
Packing group	: II
Labels	: 8 (3)
EmS Code	: F-E, S-C
Marine pollutant	: no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**TDG**

UN number	: UN 2789
Proper shipping name	: ACETIC ACID, GLACIAL
Class	: 8
Subsidiary risk	: 3
Packing group	: II
Labels	: 8 (3)
Marine pollutant	: no

SECTION 15. REGULATORY INFORMATION**The components of this product are reported in the following inventories:**

CH INV	: On the inventory, or in compliance with the inventory
DSL	: On the inventory, or in compliance with the inventory
AICS	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
ISHL	: On the inventory, or in compliance with the inventory

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KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
TCSI	: On the inventory, or in compliance with the inventory
TSCA	: On the inventory, or in compliance with the inventory

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION**Full text of other abbreviations**

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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