

SAFETY DATA SHEET

EASTMAN

Eastman(TM) Glacial Acetic Acid, USP

Customer PO: ZSAMPLE00000232531

Delivery number: 0091940334 / N01

Customer: 0004250558

PRD / SDSCA / EN / 0068

Version	Revision Date:	SDS Number:	Date of last issue: 04/25/2017
4.1	11/24/2023	150000014176	Date of first issue: 03/24/2011

SECTION 1. IDENTIFICATION

Product name : Eastman(TM) Glacial Acetic Acid, USP

Product code : P1368801

Other means of identification : No data available

Manufacturer or supplier's details

Company name of supplier : Eastman Chemical Canada, Inc.

Address : 1 First Canadian Place
100 King Street West, Suite 1600
Toronto ON M5X 1G5

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

Recommended use of the chemical and restrictions on use

Recommended use : Solvent

Restrictions on use : None known.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

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:**

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

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
acetic acid	acetic acid	64-19-7	>= 90 - <= 100

Eastman is committed to the safety, health and environment of our employees, our customers, and the communities we operate within. As part of this commitment, Eastman's Safety Data Sheets (SDS) are prepared in accordance with all applicable national and local regulations. The compositions of our documents reflect these requirements which include, but are not limited to, requirements under the Globally Harmonized System of Classification and Labeling (GHS). These compositions commonly

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involve the use of ranges versus specific analytical values. If you require a composition that is more specific, please refer to the Certificate of Analysis, sales specification, or contact your Customer Service Representative.

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. |
| In case of skin contact | : Call a physician or poison control center immediately.
Wash contaminated clothing before reuse.
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Destroy contaminated shoes.
Thoroughly clean shoes before reuse. |
| 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 center immediately. |
| Most important symptoms and effects, both acute and delayed | : Causes severe skin burns and eye damage. |
| Notes to physician | : Treat symptomatically. |

SECTION 5. FIREFIGHTING MEASURES

- | | |
|---|--|
| Suitable extinguishing media | : Water spray
Dry chemical
Carbon dioxide (CO2)
Foam |
| Unsuitable extinguishing media | : None known. |
| Specific hazards during fire-fighting | : Cool closed containers exposed to fire with water spray.
Flash back possible over considerable distance.
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

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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).

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Keep away from heat and sources of ignition.

Advice on safe handling : Avoid inhalation, ingestion and contact with skin and eyes. 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.

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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.

Hand protection

Remarks : Wear suitable gloves. Wash hands after handling.

Eye protection : Safety glasses with side-shields
Ensure that eyewash stations and safety showers are close to the workstation location.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless

Odour : pungent

Odour Threshold : not determined

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

Evaporation rate : not determined

Flammability (solid, gas) : Flammable.

Self-ignition : 463 °C

Upper explosion limit / Upper flammability limit : 19.9 %(V)

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Lower explosion limit / Lower flammability limit	:	4 %(V)
Vapour pressure	:	20.79 hPa (25 °C)
Relative vapour density	:	2.1
Relative density	:	1.0446 (25 °C)
Solubility(ies)		
Water solubility	:	602.9 g/l (25 °C)
Auto-ignition temperature	:	not determined
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 mm2/s
Explosive properties	:	Not classified
Oxidizing properties	:	Not classified
Surface tension	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	None reasonably foreseeable.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Stable
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	Carbon monoxide Carbon dioxide (CO2)

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

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Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Components:

acetic acid:

Acute oral toxicity : LD50 Oral (Rat): 3,320 mg/kg

Skin corrosion/irritation

Causes severe burns.

Product:

Remarks : No data available

Components:

acetic acid:

Species : Rabbit
Exposure time : 24 h
Result : Corrosive

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Remarks : No data available

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.

Product:

Remarks : No data available

Germ cell mutagenicity

Not classified based on available information.

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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.

Product:

Remarks : This information is not available.

Reproductive toxicity

Not classified based on available information.

Product:

Effects on fertility : Remarks: No data available

STOT - single exposure

Not classified based on available information.

Product:

Remarks : No data available

STOT - repeated exposure

Not classified based on available information.

Product:

Remarks : No data available

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

Species	:	Rat
NOAEL	:	290 mg/kg

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

Aspiration toxicity

Not classified based on available information.

Product:

No data available

Experience with human exposure

Product:

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

Further information

Product:

Remarks	:	None known.
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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
Toxicity to algae/aquatic plants	:	EC50 (Chlorella pyrenoidosa (algae)): 300.82 mg/l Exposure time: 72 h

Persistence and degradability

Components:

acetic acid:

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

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

BOD-20:
900 mg/g

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

Bioaccumulative potential

Components:

acetic acid:

Bioaccumulation : Bioconcentration factor (BCF): 3.16

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

Mobility in soil

Components:

acetic acid:

Distribution among environmental compartments : log Koc: 0.062
Method: QSAR model

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No.	: UN 2789
Proper shipping name	: Acetic acid, glacial
Class	: 8
Subsidiary risk	: 3
Packing group	: II

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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)
ERG Code : 132
Marine pollutant : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

TCSI : On the inventory, or in compliance with the inventory
TSCA : All substances listed as active on the TSCA inventory
AIIC : On the inventory, or in compliance with the inventory
DSL : All components of this product are on the Canadian DSL
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

Canadian lists

No substances are subject to a Significant New Activity Notification.

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

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL	:	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	:	Canada. British Columbia OEL
CA QC OEL	:	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for air-borne contaminants
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
CA AB OEL / TWA	:	8-hour Occupational exposure limit
CA AB OEL / STEL	:	15-minute occupational exposure limit
CA BC OEL / TWA	:	8-hour time weighted average
CA BC OEL / STEL	:	short-term exposure limit
CA QC OEL / TWA EV	:	Time-weighted average exposure value
CA QC OEL / STEV	:	Short-term exposure value

AIIC - Australian Inventory of Industrial Chemicals; 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; 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 Develop-

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ment; 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; TECI - Thailand Existing Chemicals Inventory; 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

Revision Date : 11/24/2023
Date format : mm/dd/yyyy

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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