Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Reference number: 00005

Issue date: 03-08-2022 Revision date: 03-08-2026 Supersedes version of: 16-02-2017 Version: 1.0



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form Substance

ACETIC ACID GLACIAL AR Trade name

EC Index-No. 607-002-00-6 EC-No. 200-580-7 CAS-No. 64-19-7 Product code B-00015 Type of product Acids Formula C2H4O2

Chemical structure

Synonyms : Ethanoic acid, Methanecarboxylic acid

1.2. Relevant identified uses of the substance or mixture and uses advised against

1,2,1, Relevant identified uses

Industrial/Professional use spec : Industrial

For professional use only

Use of the substance/mixture : Laboratory chemicals

Manufacture of substances

Solvents

1,2,2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bio-Chem Chemicals 5455, Nicholson Road Science Market, Ambala Cantt. 133001 Haryana (India)

+91-82952 41953

info@biofinechemical.com - www.biofinechemical.com

1.4. Emergency telephone number

Emergency number : +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3 H226 Skin corrosion/irritation, Category 1, Sub-Category 1A H314

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes severe skin burns and eye damage.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS02

GHS05

Signal word (CLP) : Danger

Hazard statements (CLP) : H226 - Flammable liquid and vapour.

H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP) : P280 - Wear protective clothing, eye protection, face protection, protective gloves.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a doctor.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type Mono-constituent Name ACETIC ACID GLACIAL

CAS-No. 64-19-7 EC-No. 200-580-7 EC Index-No. 607-002-00-6

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible). Call a physician immediately.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air

and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately First-aid measures after skin contact

call a POISON CENTER/doctor. Call a physician immediately.

First-aid measures after eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Call a physician

immediately.

First-aid measures after ingestion Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Do not

induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after skin contact . Burns

Symptoms/effects after eye contact : Causes serious eye damage. Serious damage to eyes.

Symptoms/effects after ingestion . Burns

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

Explosion hazard : May form flammable/explosive vapour-air mixture.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames.

No smoking.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. No open flames, no sparks, and

no smoking. Avoid contact with skin and eyes. Do not breathe dust, fume, gas, mist, spray,

vapours.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew

with proper protection. For further information refer to section 8: "Exposure

controls/personal protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or

diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapours are flammable.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Precautions for safe handling

: Ensure good ventilation of the work station. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Do not breathe dust, fume, gas, mist, spray, vapours. Avoid contact during pregnancy/while nursing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures

Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, lighting, ventilating equipment. Comply with applicable regulations.

Storage conditions

: Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Incompatible products

: Strong bases, Strong acids.

Incompatible materials

: Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):







Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

No additional information available

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

8,2,2,4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: LiquidAppearance: Clear liquid.Molecular mass: 60.05 g/molColour: Colourless.Odour: strong, vinegar-like.

Odour threshold : strong, vinegar-like.

Odour threshold : No data available
pH : 2.4 (1.0 M solution)

Relative evaporation rate (butylacetate=1) : 0.97
Melting point : 16.2 °C

Freezing point : No data available
Boiling point : 117 – 118 °C
Flash point : 40 °C
Auto-ignition temperature : 485 K

Decomposition temperature : No data available

Flammability (solid, gas) : Flammable liquid and vapour.

Vapour pressure : 15.2 hPa at 20°C

Relative vapour density at 20 °C : 2.1

Relative density : No data available Density : 1.049 g/cm³

Solubility : Water: Miscible in water

Partition coefficient n-octanol/water (Log Pow) : -0.17 at 25°C - Bioaccumulation is not expected

Viscosity, kinematic : 1.163 mm²/s
Viscosity, dynamic : 1.22 cP
Explosive properties : No data available

Oxidising properties : No data available : No data available

Lower explosive limit (LEL) : 4 vol % Upper explosive limit (UEL) : 19.9 vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates: Corrosive vapours. Flammable liquid and vapour.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

10.2. Chemical stability

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks. Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases. Thermal decomposition generates: Corrosive vapours.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

: Not classified Acute toxicity (oral) Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) Not classified

Skin corrosion/irritation : Causes severe skin burns.

pH: 2.4 (1.0 M solution)

Serious eye damage/irritation : Assumed to cause serious eye damage

pH: 2.4 (1.0 M solution)

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-single exposure Not classified

: Based on available data, the classification criteria are not met Additional information

STOT-repeated exposure Not classified

Additional information Based on available data, the classification criteria are not met

Aspiration hazard Not classified

Additional information Based on available data, the classification criteria are not met

ACETIC ACID GLACIAL AR (64-19-7)

Viscosity, kinematic 1.163 mm²/s

Potential adverse human health effects and

: Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

symptoms

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short-term

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

: Not classified

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

12.2. Persistence and degradability

ACETIC ACID GLACIAL AR (64-19-7)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

ACETIC ACID GLACIAL AR (64-19-7)		
Partition coefficient n-octanol/water (Log Pow)	-0.17 at 25°C - Bioaccumulation is not expected	
Bioaccumulative potential	Not established.	

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

Additional information : Handle empty containers with care because residual vapours are flammable. Flammable

vapours may accumulate in the container.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1 UN number

 UN-No. (ADR)
 : UN 2789

 UN-No. (IMDG)
 : UN 2789

 UN-No. (IATA)
 : UN 2789

 UN-No. (ADN)
 : UN 2789

 UN-No. (RID)
 : UN 2789

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ACETIC ACID, GLACIAL
Proper Shipping Name (IMDG) : ACETIC ACID, GLACIAL
Proper Shipping Name (IATA) : Acetic acid, glacial
Proper Shipping Name (ADN) : ACETIC ACID, GLACIAL
Proper Shipping Name (RID) : ACETIC ACID, GLACIAL

Transport document description (ADR) : UN 2789 ACETIC ACID, GLACIAL, 8 (3), II, (D/E) Transport document description (IMDG) : UN 2789 ACETIC ACID, GLACIAL, 8 (3), II

Transport document description (IATA)

Transport document description (ADN)

Transport document description (RID)

UN 2789 ACETIC ACID, GLACIAL, 8 (3), II

Transport document description (RID)

UN 2789 ACETIC ACID, GLACIAL, 8 (3), II

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8 (3)
Danger labels (ADR) : 8, 3



IMDG

Transport hazard class(es) (IMDG) : 8 (3)
Danger labels (IMDG) : 8, 3



IATA

Transport hazard class(es) (IATA) : 8 (3)
Danger labels (IATA) : 8, 3



ADN

Transport hazard class(es) (ADN) : 8 (3)
Danger labels (ADN) : 8, 3



RID

Transport hazard class(es) (RID) : 8 (3)
Danger labels (RID) : 8, 3



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : CF1

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Limited quantities (ADR) : 1I Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02
Mixed packing provisions (ADR) : MP15
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions : TP2

(ADR)

Tank code (ADR) : L4BN
Vehicle for tank carriage : FL
Transport category (ADR) : 2
Special provisions for carriage - Operation (ADR) : S2
Hazard identification number (Kemler No.) : 83

Orange plates :

83 2789

Tunnel restriction code (ADR) : D/E
EAC code : •2P
APP code : A(fl)

Transport by sea

Limited quantities (IMDG) : 1 L Excepted quantities (IMDG) E2 Packing instructions (IMDG) P001 IBC packing instructions (IMDG) IBC02 Tank instructions (IMDG) T7 Tank special provisions (IMDG) TP2 EmS-No. (Fire) : F-E EmS-No. (Spillage) S-C Stowage category (IMDG) Α

Segregation (IMDG) : SGG1, SG36, SG49

Properties and observations (IMDG) : Colourless flammable liquid with a pungent odour. When pure, crystallizes below 16°C.

Flashpoint: 40°C c.c. (pure product) 60°C c.c. (80% solution) Explosive limits: 4% to 17% Miscible with water. Corrosive to lead and most other metals. Corrosive to skin, eyes

and mucous membranes.

MFAG-No : 132

Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) Y840 PCA limited quantity max net quantity (IATA) : 0.5L PCA packing instructions (IATA) : 851 PCA max net quantity (IATA) : 1L CAO packing instructions (IATA) 855 CAO max net quantity (IATA) : 30L ERG code (IATA) : 8F

Inland waterway transport

Classification code (ADN) : CF1
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2

Equipment required (ADN) : PP, EP, EX, A

Ventilation (ADN) : VE01 Number of blue cones/lights (ADN) : 1

Rail transport

Classification code (RID) : CF1
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2
Packing instructions (RID) : P001, IBC02
Mixed packing provisions (RID) : MP15
Portable tank and bulk container instructions (RID) : T7

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Portable tank and bulk container special provisions : TP2

(RID)

Tank codes for RID tanks (RID) : L4BN
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE6
Hazard identification number (RID) : 83

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	
3(a)	ACETIC ACID GLACIAL AR	
3(b)	ACETIC ACID GLACIAL AR	
40.	ACETIC ACID GLACIAL AR	

REACH Annex XIV (Authorisation List)

ACETIC ACID GLACIAL AR is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

ACETIC ACID GLACIAL AR is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

ACETIC ACID GLACIAL AR is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

ACETIC ACID GLACIAL AR is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

ACETIC ACID GLACIAL is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 93).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed SZW-lijst van mutagene stoffen : The substance is not listed SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed SZW-lijst van reprotoxische stoffen – : The substance is not listed

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Denmark

Class for fire hazard : Class II-1 Store unit : 5 liter

Classification remarks : R10 <H226;H314>; Emergency management guidelines for the storage of flammable liquids

must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

Switzerland

Storage class (LK) : LK 3 - Flammable liquids

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Abbreviations and acronyms:	
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE

COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and

amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:	
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.