

Safety data sheet
 according to Regulation (EC) No 1907/2006, Article 31

Page 1/12

Printing date 03.07.2025

Revision: 03.07.2025

Version number 10.05 (replaces version 10.04)

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

- **1.1 Product identifier**
- **Trade name:** Acetic acid
- **Article number:** 1008
- **CAS Number:**
64-19-7
- **EC number:**
200-580-7
- **Index number:**
607-002-00-6
- **Registration number** 01-2119475328-30-XXXX
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Process category**
 - PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
 - PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
 - PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
 - PROC4 Chemical production where opportunity for exposure arises
 - PROC5 Mixing or blending in batch processes
 - PROC7 Industrial spraying
 - PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
 - PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
 - PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
 - PROC10 Roller application or brushing
 - PROC11 Non industrial spraying
 - PROC13 Treatment of articles by dipping and pouring
 - PROC15 Use as laboratory reagent
- **Environmental release category**
 - ERC2 Formulation into mixture
 - ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
 - ERC6a Use of intermediate
- **Application of the substance / the mixture**
 - Chemical analytics
 - Pharmaceutical analysis
 - Biochemistry
 - Molecular biology

(Contd. on page 2)

Trade name: Acetic acid

(Contd. of page 1)

Laboratory chemicals

· **1.3 Details of the supplier of the safety data sheet**· **Manufacturer/Supplier:**

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès (Barcelona)

Tel. (+34) 937 489 400

Fax. (+34) 937 489 401

e-mail: product.safety@itwreagents.com

· **Further information obtainable from:** email: product.safety@panreac.com· **1.4 Emergency telephone number:**

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

SECTION 2: Hazards identification· **2.1 Classification of the substance or mixture**· **Classification according to Regulation (EC) No 1272/2008**

Flam. Liq. 3 H226 Flammable liquid and vapour.

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

· **2.2 Label elements**· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

· **Hazard pictograms**

GHS02 GHS05

· **Signal word** Danger· **Hazard statements**

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

· **Precautionary statements**

P280

Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P303+P361+P353

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

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 POISON CENTER/doctor.

P321

Specific treatment (see on this label).

P405

Store locked up.

P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

EU

(Contd. on page 3)

Trade name: Acetic acid

(Contd. of page 2)

SECTION 3: Composition/information on ingredients

- **3.1 Substances**
- **CAS No. Description**
64-19-7 Acetic acid
- **Identification number(s)**
- **EC number:** 200-580-7
- **Index number:** 607-002-00-6
- **Specific concentration limits**
Skin Corr. 1A; H314: $C \geq 90 \%$
Skin Corr. 1B; H314: $25 \% \leq C < 90 \%$
Skin Irrit. 2; H315: $10 \% \leq C < 25 \%$
Eye Irrit. 2; H319: $10 \% \leq C < 25 \%$

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
Personal protection for the First Aider.
Involve doctor immediately.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Call a doctor immediately.
Cover wound with a sterile dressing.
Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
make victim drink water (maximum of 2 drinking glasses)
Call a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide and carbon dioxide
Combustible.
Forms explosive mixtures with air at ambient temperatures.
Vapours are heavier than air and may spread along floors.
Beware of backfiring.
Forms explosive mixtures with air on intense heating.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Cool endangered receptacles with water spray.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

(Contd. on page 4)

Trade name: Acetic acid

Contain escaping vapours with water.

(Contd. of page 3)

SECTION 6: Accidental release measures**· 6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Avoid substance contact.

Do not inhale steams/aerosols.

· 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.**· 6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Clean up affected area.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage**· 7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

· 7.2 Conditions for safe storage, including any incompatibilities**· Storage:****· Requirements to be met by storerooms and receptacles:** Provide acid-resistant floor.**· Information about storage in one common storage facility:** Store away from oxidising agents.**· Further information about storage conditions:**

Keep container tightly sealed.

Protect from heat and direct sunlight.

Open receptacle only under localised extractor facilities.

Store under lock and key and with access restricted to technical experts or their assistants only.

· Recommended storage temperature: Room Temperature**· Storage class:** 3**· 7.3 Specific end use(s)** No further relevant information available.**SECTION 8: Exposure controls/personal protection****· 8.1 Control parameters****· Ingredients with limit values that require monitoring at the workplace:****64-19-7 Acetic acid**IOELV Short-term value: 50 mg/m³, 20 ppmLong-term value: 25 mg/m³, 10 ppm

(Contd. on page 5)

Trade name: Acetic acid

(Contd. of page 4)

· **DNELs**

Dermal	Acute - local effects, worker	25 mg/kg
Inhalative	Long-term - local effects, worker	25 mg/m ³
	Acute - local effects, general population	25 mg/m ³
	Long-term - local effects, general population	25 mg/m ³

· **PNECs**

Aquatic compartment - freshwater	3.058 mg/L
Aquatic compartment - marine water	0.306 mg/L
Aquatic compartment - water, intermittent releases	30.58 mg/L
Aquatic compartment - sediment in freshwater	11.36 mg/kg
Aquatic compartment - sediment in marine water	1.136 mg/kg
Sewage treatment plant	85 mg/L
Ground	0.47 mg/kg

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Use suitable respiratory protective device only when aerosol or mist is formed.

· **Recommended filter device for short term use:** Filter AX

· **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact gloves made of the following materials are suitable:**

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.7 mm

Value for the permeation: Level ≥ 480 min

· **As protection from splashes gloves made of the following materials are suitable:**

Natural rubber, NR

Recommended thickness of the material: ≥ 0.6 mm

Value for the permeation: Level ≥ 30 min

(Contd. on page 6)

Trade name: Acetic acid

(Contd. of page 5)

· **Eye/face protection**



Tightly sealed goggles

· **Body protection:**

Use protective suit.

Acid resistant protective clothing

Flame retardant antistatic protective clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Physical state**

Liquid

· **Colour:**

Colourless

· **Odour:**

Pungent

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

17 °C

· **Boiling point or initial boiling point and boiling range**

118 °C

· **Flammability**

Not applicable.

Flammable.

· **Lower and upper explosion limit**

· **Lower:**

4 Vol %

· **Upper:**

16 Vol %

· **Flash point:**

39 °C

· **Auto-ignition temperature:**

463 °C

· **Decomposition temperature:**

Not determined.

· **pH**

2.5 (1%)

· **Viscosity:**

· **Kinematic viscosity**

Not determined.

· **Dynamic at 20 °C:**

1.53 mPas

· **Solubility**

· **water at 25 °C:**

603 g/l

· **Partition coefficient n-octanol/water (log value)**

-0.17005

· **Vapour pressure at 20 °C:**

16 hPa

· **Density and/or relative density**

· **Density at 20 °C:**

1.05 g/cm³

· **Relative density**

Not determined.

· **Vapour density**

Not determined.

· **9.2 Other information**

· **Appearance:**

· **Form:**

Fluid

· **Important information on protection of health and environment, and on safety.**

· **Ignition temperature:**

Not determined.

· **Explosive properties:**

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Solvent content:**

· **VOC (EC)**

100 %

(Contd. on page 7)

Trade name: Acetic acid

(Contd. of page 6)

· Molecular weight	60.05 g/mol
· Change in condition	
· Evaporation rate	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Heating
- **10.3 Possibility of hazardous reactions** Forms explosive gas mixture with air.
- **10.4 Conditions to avoid** Keep away from open flames, hot surfaces and sources of ignition.
- **10.5 Incompatible materials:**
 - strong oxidants
 - Bases
 - Light metals
 - iron
- **10.6 Hazardous decomposition products:** In the event of fire: See chapter 5
- **Additional information:**
 - Incompatible with:
 - metals
 - Forms explosive mixtures with air on intense heating.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:**
 - Quantitative data on the toxicological effect of this product are not available.

Components	Type	Value	Species
Oral	LD50	3,310 mg/kg (rat)	

(Contd. on page 8)

Trade name: Acetic acid

(Contd. of page 7)

Inhalative LC50/4 h 5,620 mg/l (mouse)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **After inhalation:** Strong caustic effect on skin and mucous membranes.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** Substance is not listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.

Type of test	Effective concentration	Method	Assessment
EC50/72 h	>300.8 mg/l (Algae)		
EC50/24 h	>300.8 mg/l (daphnia magna)		
LC50/96 h	>300.8 mg/l (fish)		
NOEC/72 h	>300.8 mg/l (Algae)		

- **12.2 Persistence and degradability** The product is easily biodegradable.

- **12.3 Bioaccumulative potential** -0.17 log Pow

- **Bioconcentration factor (BCF)** 3.16

- **12.4 Mobility in soil** No further relevant information available.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

- **12.7 Other adverse effects**

- **Additional ecological information:**

- **General notes:**

Do not allow product to reach ground water, water course or sewage system.

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

Must not reach sewage water or drainage ditch undiluted or unneutralised.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

Chemicals must be disposed of in compliance with the respective national regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packaging:**

- **Recommendation:**

Disposal must be made according to official regulations.

(Contd. on page 9)

Trade name: Acetic acid

(Contd. of page 8)

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· 14.1 UN number or ID number	UN2789
· ADR, IMDG, IATA	
· 14.2 UN proper shipping name	ACETIC ACID, GLACIAL
· ADR, IMDG, IATA	
· 14.3 Transport hazard class(es)	
· ADR	
	
· Class	8 (CF1) Corrosive substances.
· Label	8+3
· IMDG	
	
· Class	8 Corrosive substances.
· Label	8/3
· IATA	
	
· Class	8 Corrosive substances.
· Label	8 (3)
· 14.4 Packing group	II
· ADR, IMDG, IATA	
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Hazard identification number (Kemler code):	83
· EMS Number:	F-E,S-C
· Segregation groups	(SGG1) Acids
· Stowage Category	A
· Segregation Code	SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.

(Contd. on page 10)

Trade name: Acetic acid

(Contd. of page 9)

· **Transport/Additional information:**· **ADR**· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **Transport category**

2

· **Tunnel restriction code**

D/E

· **IMDG**· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":**

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

SECTION 15: Regulatory information· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Directive 2012/18/EU**· **Named dangerous substances - ANNEX I** Substance is not listed.· **Seveso category P5c FLAMMABLE LIQUIDS**· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t· **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)** Substance is not listed.· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40, 75· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

Substance is not listed.

· **REGULATION (EU) 2019/1148**· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

Substance is not listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.· **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

Substance is not listed.

· **REGULATION (EU) 2024/590 on substances that deplete the ozone layer** Substance is not listed.· **National regulations:**· **Other regulations, limitations and prohibitive regulations**· **Substances of very high concern (SVHC) according to REACH, Article 57** Substance is not listed.· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of previous version:** 01.07.2021

(Contd. on page 11)

EU

Trade name: Acetic acid

(Contd. of page 10)

· **Version number of previous version: 10.04**

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

· *** Data compared to the previous version altered.**

Annex: Exposure scenario

· **Short title of the exposure scenario** Formulation and packing/repacking of substances and mixtures

· **Sector of Use**

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

· **Process category**

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

PROC4 Chemical production where opportunity for exposure arises

PROC5 Mixing or blending in batch processes

PROC7 Industrial spraying

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC10 Roller application or brushing

PROC11 Non industrial spraying

PROC13 Treatment of articles by dipping and pouring

PROC15 Use as laboratory reagent

· **Environmental release category**

ERC2 Formulation into mixture

ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

ERC6a Use of intermediate

· **Description of the activities / processes covered in the Exposure Scenario**

See section 1 of the annex to the Safety Data Sheet.

· **Conditions of use**

· **Duration and frequency** 5 workdays/week.

· **Physical parameters**

· **Physical state** Fluid

· **Concentration of the substance in the mixture** Raw material.

(Contd. on page 12)

Trade name: Acetic acid

(Contd. of page 11)

- **Used amount per time or activity** ≤ 1 tons per day
- **Other operational conditions**
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**
Avoid contact with eyes.
Avoid contact with the skin.
- **Other operational conditions affecting consumer exposure** No special measures required.
- **Other operational conditions affecting consumer exposure during the use of the product**
Not applicable.
- **Risk management measures**
- **Worker protection**
- **Organisational protective measures** No special measures required.
- **Technical protective measures** Ensure that suitable extractors are available on processing machines
- **Personal protective measures**
Do not inhale gases / fumes / aerosols.
Avoid contact with the skin.
Avoid contact with the eyes.
Tightly sealed goggles
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Measures for consumer protection** Ensure adequate labelling.
- **Environmental protection measures**
- **Water**
Generally, prior to the introduction of wastewater into wastewater treatment plants a neutralisation is required.
- **Disposal measures** Ensure that waste is collected and contained.
- **Disposal procedures**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Waste type** Partially emptied and uncleaned packaging
- **Exposure estimation**
- **Consumer** Not relevant for this Exposure Scenario.
- **Guidance for downstream users** No further relevant information available.