

Printing date 30.07.2018 Revision: 30.10.2017

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

· 1.1 Product identifier

· Trade name: Acetic acid glacial, eluent additive for LC-MS

· Article number: AC0347

· 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
- · Process category

PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC15 Use as laboratory reagent

- · Application of the substance / the preparation: Laboratory reagent
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Scharlab, S.L.

C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa

08181 Sentmenat (Barcelona) SPAIN

Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65

email: scharlab@scharlab.com Internet Web Site: www.scharlab.com

· Regional representation:

Scharlab, S.L.

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email: scharlab@scharlab.com Internet Web Site: www.scharlab.com

- · Further information obtainable from: technical department
- · 1.4 Emergency telephone number:

Please contact the regional Scharlab distributor/dealer in your country During normal opening times: Scharlab, S.L. (+34) 93 715 18 11

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



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

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Acute Tox. 4 H312 Harmful in contact with skin.

- · 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 GHS07

- · Signal word Danger
- · Hazard statements

H226 Flammable liquid and vapour.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water/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).

P362+P364 Take off contaminated clothing and wash it before reuse.

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.

SECTION 3: Composition/information on ingredients

· 3.1 Chemical characterisation: Substances

• CAS No. Description 64-19-7 acetic acid

· Identification number(s)

• EC number: 200-580-7

· Index number: 607-002-00-6

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact: Immediately wash with water and soap and rinse thoroughly.

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After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

- · After swallowing: Drink plenty of water and provide fresh air. Call for 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

No further relevant information available.

- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Dilute with plenty of water.

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 item 13.

Ensure adequate ventilation.

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.

Prevent formation of aerosols.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · 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.

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.

· Protection of hands:



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

Eye protection:



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid Colourless
Odour: Acrid

Odour threshold: Not determined.

· pH-value: 2.5

· Change in condition

Melting point/freezing point: 16.6 °C

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Initial boiling point and boiling range: 118 °C

· Flash point: 39 °C

· Flammability (solid, gas): Not applicable.

· Ignition temperature: 485 °C

Decomposition temperature: Not determined.
 Auto-ignition temperature: Not determined.

• Explosive properties: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

· Explosion limits:

Lower: 4 Vol %
Upper: 17 Vol %

Vapour pressure at 20 °C: 16 hPa

Density at 20 °C: 1.05 g/cm³
Relative density Not determined.
Vapour density Not determined.
Evaporation rate Not determined.

· Solubility in / Miscibility with

water: Fully miscible.
Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic at 20 °C: 1.24 mPas Kinematic: Not determined.

• 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- · Acute toxicity

Harmful in contact with skin.

· LD/LC50 values relevant for classification:

Oral LD50 3,310 mg/kg (rat)

Dermal LD50 1,060 mg/kg (rabbit)

- · Primary irritant effect:
- · Skin corrosion/irritation

Causes severe skin burns and eye damage.

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- · Serious eye damage/irritation
- Causes severe skin burns and eye damage.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- Recommendation

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.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- · 14.1 UN-Number
- · ADR, IMDG, IATA

14.2 UN proper shipping name

UN2789

- · ADR
- · IMDG, IATA

2789 ACETIC ACID, GLACIAL ACETIC ACID, GLACIAL

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· 14.3 Transport hazard class(es)

· ADR





· Class 8 Corrosive substances.

· Label 8+

· IMDG





· Class 8 Corrosive substances.

· Label 8/3

· IATA





Class 8 Corrosive substances.

Label 8 (3)

· 14.4 Packing group

· ADR, IMDG, IATA

· 14.5 Environmental hazards:

· Marine pollutant: No

• 14.6 Special precautions for user Warning: Corrosive substances.

Danger code (Kemler):
EMS Number:
Segregation groups
Stowage Category

83
F-E,S-C
Acids
A

· 14.7 Transport in bulk according to Annex II

of Marpol and the IBC Code Not applicable.

· Transport/Additional information:

· ADR

Limited quantities (LQ)
Transport category
Tunnel restriction code

· 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 (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 40

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· 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.

· Classification according to Regulation (EC) No 1272/2008

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

- · Department issuing SDS: product safety department
- · Contact: msds@scharlab.com
- · 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 européen sur le transport 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity - Category 4

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

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Annex: Exposure scenario 1

- · 1 Short title of the exposure scenario Industrial use
- · Sector of Use

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

- · Process category PROC15 Use as laboratory reagent
- Environmental release category

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

Description of the activities / processes covered in the Exposure Scenario
 See section 1 of the annex to the Safety Data Sheet.

- · 2 Conditions of use
- · Duration and frequency 5 workdays/week.
- · Worker Regular use with exposure up to 8 hrs. per workday.
- Environment

Wastewater is to be treated by a municipal STP. Municipal STP discharge rate <2E3 m3/d.

· Physical parameters

The data on the physical - chemical properties in the Exposure Scenario is based on the properties of the preparation.

- · Physical state Fluid
- · Concentration of the substance in the mixture Raw material.
- · Used amount per time or activity 2 tons per year
- · Other operational conditions
- · Other operational conditions affecting environmental exposure No special measures required.
- · Other operational conditions affecting worker exposure

Ensure adequate ventilation, especially in closed rooms.

Do not breathe gas/fume/vapour/aerosol.

Keep away from sources of ignition - No smoking.

Gloves required during a shift

Avoid contact with eyes.

Avoid contact with the skin.

· Other operational conditions affecting consumer exposure during the use of the product

The consumer has to be advised of the maximum permissible frequency and duration of use in the instructions for use.

The directions for use must indicate the limits for proper use.

- · Risk management measures
- · Worker protection
- · Organisational protective measures

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

· Technical protective measures

Ensure that suitable extractors are available on processing machines

Provide explosion-proof electrical equipment.

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.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

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· Measures for consumer protection

Ensure adequate labelling.

Keep locked up and out of the reach of children.

· Environmental protection measures

· Water

Generally, prior to the introduction of wastewater into wastewater treatment plants a neutralisation is required.

· Notes In case of unintended release of the product: See section 6 of the Safety Data Sheet.

· Disposal measures

Disposal must be made according to official regulations.

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
- · 3 Exposure estimation

· Worker (dermal)

The exposure estimation was carried out in accordance with ECETOC TRA.

Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra. PROC 15: 0.034 (mg/kg/d)

· Worker (inhalation)

The exposure estimation was carried out in accordance with ECETOC TRA.

Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra.

PROC 15: 2.502 (mg/m3)

Environment

The estimation of environmental exposure was carried out in accordance with EUSES.

The maximum exposure to expect on freshwater (pelagic) 0.101 mg/L. RCR: 0.033

The maximum exposure to expect on freshwater (sediment) 0.374 mg/L. RCR: 0.033

The maximum exposure to expect on marine water (pelagic) 0.01 mg/L. RCR: 0.031

The maximum exposure to expect on marine water (sediment) 0.035 mg/L. RCR: 0.031

The maximum exposure to expect on effluent 0.126 mg/L. RCR: 0.001

The maximum exposure to expect on agricultural soil 0.005 mg/L. RCR: 0.01

Detailed information on the estimation of the environmental exposure can be found at http://ecb.jrc.ec.europa.eu/euses/.

· 4 - Guidance for downstream users

Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.

Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.

For the risk assessment, the tools recommended by ECHA can be used.

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Annex: Exposure scenario 2

- · 1 Short title of the exposure scenario Laboratory use
- · Sector of Use

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

- · Process category PROC15 Use as laboratory reagent
- · Environmental release category

ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

• Description of the activities / processes covered in the Exposure Scenario See section 1 of the annex to the Safety Data Sheet.

- · 2 Conditions of use
- · Duration and frequency 5 workdays/week.
- · Worker Regular use with exposure up to 8 hrs. per workday.
- Physical parameters

The data on the physical - chemical properties in the Exposure Scenario is based on the properties of the preparation.

- · Physical state Fluid
- · Concentration of the substance in the mixture Raw material.
- · Used amount per time or activity 2 tons per year
- · Other operational conditions
- · Other operational conditions affecting environmental exposure No special measures required.
- · Other operational conditions affecting worker exposure

Ensure adequate ventilation, especially in closed rooms.

Do not breathe gas/fume/vapour/aerosol.

Keep away from sources of ignition - No smoking.

Gloves required during a shift

Avoid contact with eyes.

Avoid contact with the skin.

· Other operational conditions affecting consumer exposure during the use of the product

The consumer has to be advised of the maximum permissible frequency and duration of use in the instructions for use.

The directions for use must indicate the limits for proper use.

- · Risk management measures
- · Worker protection
- · Organisational protective measures

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

· Technical protective measures

Ensure that suitable extractors are available on processing machines

Provide explosion-proof electrical equipment.

· 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.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

Measures for consumer protection

Ensure adequate labelling.

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Keep locked up and out of the reach of children.

· Environmental protection measures

· Water

Generally, prior to the introduction of wastewater into wastewater treatment plants a neutralisation is required.

· Notes In case of unintended release of the product: See section 6 of the Safety Data Sheet.

· Disposal measures

Disposal must be made according to official regulations.

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
- · 3 Exposure estimation

· Worker (dermal)

The exposure estimation was carried out in accordance with ECETOC TRA.

Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra. PROC 15: 0.034 (mg/kg/d)

· Worker (inhalation)

The exposure estimation was carried out in accordance with ECETOC TRA.

Detailed information on the exposure estimation can be found at http://www.ecetoc.org/tra.

PROC 15: 5.004 (mg/m3)

Environment

The estimation of environmental exposure was carried out in accordance with EUSES.

The maximum exposure to expect on freshwater (sediment) 0.333 mg/L. RCR: 0.029

The maximum exposure to expect on marine water (pelagic) 0.008 mg/L. RCR: 0.028

The maximum exposure to expect on marine water (sediment) 0.031 mg/L. RCR: 0.028

The maximum exposure to expect on freshwater (pelagic) 0.09 mg/L. RCR: 0.029

The maximum exposure to expect on effluent 0.017 mg/L. RCR: 0

The maximum exposure to expect on agricultural soil 0.004 mg/L. RCR: 0.01

Detailed information on the estimation of the environmental exposure can be found at http://ecb.irc.ec.europa.eu/euses/.

· 4 - Guidance for downstream users

Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.

Whether the downstream user uses the substance / the mixture within the scope of the Exposure Scenario can be determined by means of a technical assessment.

For the risk assessment, the tools recommended by ECHA can be used.