

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 07.06.2021

Version number 2.0

Revision: 02.06.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** Acetonitrile with 0,1% formic acid, LC-MS**Article number:** AC0373**1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

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:

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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:**

Toxicological Information National Institute of Toxicology and Forensic Sciences: + 34 91 562 04

20. The information will be provided (24h/365 days)

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. 2 H225 Highly flammable liquid and vapour.



GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

Eye Irrit. 2 H319 Causes serious eye irritation.

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

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

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• Hazard pictograms



GHS02 GHS07

• Signal word

Danger

• Hazard-determining components of labelling:

acetonitrile

• Hazard statements

H225 Highly flammable liquid and vapour.

H312+H332 Harmful in contact with skin or if inhaled.

H319 Causes serious eye irritation.

• Precautionary statements

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

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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.

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

• 3.2 Chemical characterisation: Mixtures

• **Description:** Mixture of substances listed below with nonhazardous additions.

• Dangerous components:

CAS: 75-05-8	acetonitrile	50-100%
EINECS: 200-835-2	⚠ Flam. Liq. 2, H225; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irrit. 2, H319	
Reg.nr.: 01-2119471307-38-XXXX		
CAS: 64-18-6	formic acid	≤0.1%
EINECS: 200-579-1	⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 3, H331; ⚠ Skin Corr. 1A, H314; ⚠ Acute Tox. 4, H302	
Reg.nr.: 01-2119491174-37-XXXX		

• **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

• 4.1 Description of first aid measures

• General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** 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:** Mouth respiratory protective device.

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).
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:** Store in a cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.

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Store in cool, dry conditions in well sealed receptacles.

- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**

75-05-8 acetonitrileWEL Short-term value: 102 mg/m³, 60 ppmLong-term value: 68 mg/m³, 40 ppm**64-18-6 formic acid**WEL Long-term value: 9.6 mg/m³, 5 ppm

- **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.
 - 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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

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SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General Information****Appearance:****Form:**

Fluid

Colour:

Colourless

Odour:

Ether-like

Odour threshold:

Not determined.

pH-value:

Not determined.

Change in condition**Melting point/freezing point:**

-46 °C

Initial boiling point and boiling range:

81 °C

Flash point:

2 °C

Flammability (solid, gas):

Not applicable.

Ignition temperature:

525 °C

Decomposition temperature:

Not determined.

Auto-ignition temperature:

Product is not selfigniting.

Explosive properties:

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

Explosion limits:**Lower:**

4.4 Vol %

Upper:

16 Vol %

Vapour pressure at 20 °C:

97 hPa

Density at 20 °C:0.7826 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:**

Not determined.

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.

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- **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 or if inhaled.
- **LD/LC50 values relevant for classification:**
75-05-8 acetonitrile

Oral	LD50	617 mg/kg (mouse)
		1.68-8.53 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4 h	6.022 mg/l (mouse)
		26.8 mg/l (rat)
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, 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 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **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.

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- **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** UN1993
 - **ADR, IMDG, IATA**
 - **14.2 UN proper shipping name** 1993 FLAMMABLE LIQUID, N.O.S.
 - **ADR** (ACETONITRILE)
 - **IMDG, IATA** FLAMMABLE LIQUID, N.O.S. (ACETONITRILE)
 - **14.3 Transport hazard class(es)**
 - **ADR, IMDG, IATA**
- 
- **Class** 3 Flammable liquids.
 - **Label** 3
 - **14.4 Packing group** II
 - **ADR, IMDG, IATA**
 - **14.5 Environmental hazards:**
 - **Marine pollutant:** No
 - **14.6 Special precautions for user** Warning: Flammable liquids.
 - **Hazard identification number (Kemler code):** 33
 - **EMS Number:** F-E, S-E
 - **Stowage Category** B
 - **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
 - **Transport/Additional information:**
-
- **ADR**
 - **Limited quantities (LQ)** 1L
 - **Transport category** 2
 - **Tunnel restriction code** D/E
 - **UN "Model Regulation":** UN 1993 FLAMMABLE LIQUID, N.O.S. (ACETONITRILE), 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** None of the ingredients is listed.
- **Seveso category** P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5000 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50000 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
- None of the ingredients is listed.

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- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not 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.

- **Relevant phrases**

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.

- **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 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
ELINCS: European List of Notified 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. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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Annex: Exposure scenario**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.**Physical parameters****Physical state** Fluid**Concentration of the substance in the mixture** The substance is main component.**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.

Do not breathe gas/vapour/aerosol.

Take precautionary measures against static discharge.

Keep away from sources of ignition - No smoking.

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**

Provide explosion-proof electrical equipment.

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

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.

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.**Environmental protection measures****Water** No special measures required.**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****Consumer** Not relevant for this Exposure Scenario.**4 - Guidance for downstream users** No further relevant information available.