

Safety data sheet
according to 1907/2006/EC, Article 31 Commission
regulation (EU) 2020/878

Printing date 04.05.2023

Version number 4.0 (replaces version 3.0)

Revision: 04.05.2023

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

1.1 Product identifier

• **Trade name:** Potassium fluoride, EssentQ®, Reag. Ph Eur

• **Article number:** PO0256

• **CAS Number:**

7789-23-3

• **EC number:**

232-151-5

• **Index number:**

009-005-00-2

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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• **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**



skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.

2.2 Label elements

• **Labelling according to Regulation (EC) No 1272/2008**

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

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· Hazard pictograms

GHS06

· Signal word Danger**· Hazard statements**

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.

· Precautionary statements

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

P280 Wear protective gloves / protective clothing.

P301+P310 IF SWALLOWED: 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.**SECTION 3: Composition/information on ingredients****· 3.1 Substances****· CAS No. Description**

7789-23-3 potassium fluoride

· Identification number(s)**· EC number:** 232-151-5**· Index number:** 009-005-00-2**SECTION 4: First aid measures****· 4.1 Description of first aid measures****· General information:**

Immediately remove any clothing soiled by the product.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

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

· After skin contact: 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.

Immediately flush the eyes with plenty of water, holding the eyelids open for 10-15 minutes. Then irrigate with normal isotonic saline solution for 5 minutes.

If the casualty wears contact lenses, they should be removed as long as they are not stuck to the eyes, otherwise additional damage may occur.

Prevent the affected person from rubbing or closing his/her eyes.

· After swallowing:

Rinse mouth and drink water (maximum 2 glasses) if conscious. Seek medical help immediately.

Do not induce vomiting, danger of perforation.

If the affected person vomits, keep the head down so that the vomit does not enter the lungs.

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4.2 Most important symptoms and effects, both acute and delayed

The main symptoms are described for the different cases of contact: skin, eyes, inhalation and ingestion.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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.

Use fire extinguishing methods suitable to surrounding conditions.

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 Not required.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to section 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**

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Do not eat, drink or smoke during use.

Wash hands after handling.

Information about fire - and explosion protection: Keep respiratory protective device available.

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.

See product label for storage temperature.

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

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SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:****7789-23-3 potassium fluoride**

WEL Long-term value: 2.5 mg/m³
as F

DNELs

DNEL for workers, cronic. Systematic effects:

- Inhalative: 3 mg/m³
- Dermic: 0.44 mg/kg body weight
- DNEL worker, acute. Local effects: Inhalative - 12 mg/m³
- DNEL worker, cronic. Local effects: Inhalative - 3 mg/m³

PNECs

PNEC (Fresh water): 0.89 mg/L
PNEC (Residual water depuration system): 51 mg/l
PNEC (Soil): 11 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.
Store protective clothing separately.
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.

Hand protection

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/face protection Not required.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state

Solid

Colour:

White

Odour:

Odourless

Odour threshold:

Not determined.

Melting point/freezing point:

857 °C

Boiling point or initial boiling point and boiling range

1,502 °C

Flammability

Product is not flammable.

Lower and upper explosion limit

Lower:

Not determined.

Upper:

Not determined.

Flash point:

Not applicable.

Decomposition temperature:

Not determined.

pH

6-7

Viscosity:

Kinematic viscosity

Not applicable.

Dynamic:

Not applicable.

Solubility

water at 18 °C:

923 g/l

Partition coefficient n-octanol/water (log value)

Not determined.

Vapour pressure at 20 °C:

0 hPa

Density and/or relative density

Density at 20 °C:

2.49 g/cm³

Relative density

Not determined.

Vapour density

Not applicable.

9.2 Other information

Appearance:

Form:

Crystalline powder

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

Ignition temperature:

Not determined.

Explosive properties:

Product does not present an explosion hazard.

Molecular weight

58.1 g/mol

Change in condition

Evaporation rate

Not applicable.

Information with regard to physical hazard classes

Explosives

Void

Flammable gases

Void

Aerosols

Void

Oxidising gases

Void

Gases under pressure

Void

Flammable liquids

Void

Flammable solids

Void

Self-reactive substances and mixtures

Void

Pyrophoric liquids

Void

Pyrophoric solids

Void

Self-heating substances and mixtures

Void

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- **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:**
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 hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Toxic if swallowed, in contact with skin or if inhaled.
- **LD/LC50 values relevant for classification:**

Oral	LD50	248 mg/kg (rat)
Dermal	LD50	300 mg/kg (rabbit)
Inhalative	LC50/4 h	0.5 mg/l (rat)
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** Substance is not listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
Toxicity to fish
LC50 - Oncorhynchus mykiss (rainbow trout) - 51 mg/L - 24 h
Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (large sea flea) - 10.5 mg/L - 24 h
- **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.
- **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:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

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Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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.

SECTION 14: Transport information**14.1 UN number or ID number****ADR, IMDG, IATA**

UN1812

14.2 UN proper shipping name**ADR**

1812 POTASSIUM FLUORIDE, SOLID

IMDG, IATA

POTASSIUM FLUORIDE, SOLID

14.3 Transport hazard class(es)**ADR, IMDG, IATA****Class**

6.1 Toxic substances.

Label

6.1

14.4 Packing group**ADR, IMDG, IATA**

III

14.5 Environmental hazards:**Marine pollutant:**

No

14.6 Special precautions for user

Warning: Toxic substances.

Hazard identification number (Kemler code):

60

EMS Number:

F-A,S-A

Stowage Category

A

Segregation Code

SG35 Stow "separated from" SGG1-acids

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

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

5 kg

Transport category

2

Tunnel restriction code

E

UN "Model Regulation":

UN 1812 POTASSIUM FLUORIDE, SOLID, 6.1, III

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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 -**
- **Seveso category H2 ACUTE TOXIC**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **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.

- **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
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - DNEL: Derived No-Effect Level (UK REACH)
 - PNEC: Predicted No-Effect Concentration (UK REACH)
 - LC50: Lethal concentration, 50 percent
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - Acute Tox. 3: Acute toxicity – Category 3