# Safety Data Sheet according to Regulation (EC) No. 878/2020

Date of Compilation/Revision: 14.05.2025.

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

**1.1. Product identifier** 7Artists Glass Etching paste
Type of substance: CLP Mixture
UFI: 5300-P0FW-200R-GFYH
**1.2. Relevant identified uses of the substance or mixture and uses advised against**
Glass etching paste for hobby purposes
**1.3. Details of the supplier of the safety data sheet**
Optio Cycle GmbH
10117 Berlin, Leipziger Platz 15, Németország
Email: optiocycle@gmail.com
Weblap: www.optiocycle.de
**1.4. Emergency telephone number**
https://echa.europa.eu/documents/10162/23019181/emergency_phone_numbers_en.pdf/d911af43-4bcf-9371-a59d-a20736d91e7d

## SECTION 2: Hazards identification

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

| | |
|---|---|
| Met. Corr. 1 H290 | May be corrosive to metals. |
| Acute Tox. 4 H302 | Harmful if swallowed |
| Skin Corr. 1B H314 | Causes severe skin burns and eye damage |
| Eye Dam. 1 H318 | Causes serious eye damage. |

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

**Hazard pictograms**

**Signal Word:** Danger

**Hazard Statements**
H290 May be corrosive to metals.
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage

**Precautionary Statements**
P264 Wash the hands and the face thoroughly after handling.
P270 Do no eat, drink or smoke when using this product.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P310 Immediately call a POISON CENTER/doctor.
P405 + P234 Store locked up. Keep only in original container.
P501 Dispose of contents/ container in accordance with the local regulations

UFI: 5300-P0FW-200R-GFYH
**Hazardous components which must be listed on the label:**
ammonium bifluoride, sulfuric acid
**2.3. Other hazards**
The raw material/ mixture does not contain any ingredients that are 0.1 % or higher concentrations of persistent, very bio-accumulative and toxic PTB or very persistent very bioaccumulative vPvB substance is considered.
Ecological information and toxicological information:
This substance/mixture does not contain ingredients that which have properties that damage the endocrine system 0.1% or higher levels of REACH point f) of Article 57 of the Regulation, (EU) 2017/2100 Commission Delegated Regulation or (EU) According to Commission Regulation 2018/605.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**
The details below includes all impurities and by-products that contribute to the product classification or that have an occupational exposure limits.

Hazardous Substance(s): ammonium bifluoride (SCL:Skin Irrit. 2 H315: 0,1 - < 1 %, Eye Irrit. 2 H319: 0,1 - < 1 %, Skin Corr. 1B H314 >= 1 %)
concentration: 5- 15%
EC-No.: 215-676-4
CAS-No.: 1341-49-7
Index No: 009-009-00-4
Classification according to Regulation (EC) No 1272/2008 : Acute Tox. 3* H301 (ATE oral: 130 mg/kg), Skin Corr. 1B H314, Eye Dam. 1+ H318
Registration number : 01-2119489180-38-xxxx

Substance with Community workplace exposure limit: silica, synthetic amorphous silica, pyrogenic (smoked) amorphous silica
concentration: < 2%
EC-No.: 238-878-4
CAS-No.: 14808-60-7
Classification according to Regulation (EC) No 1272/2008 : --

Hazardous Substance(s): Sulphuric acid (Substance with Community workplace exposure limit) (SCL: Skin Corr. 1A H314: c ≥ 15 %; Skin Irrit. 2 H315: 5 ≤ c < 15 %, Eye Irrit. 2 H319: 5 ≤ c < 15 %, Met. Corr. 1 H290: c ≥ 0,3 %) Note B
concentration: < 1%
EC-No.: 231-639-5
CAS-No.: 7664-93-9
Index No: 016-020-00-8
Classification according to Regulation (EC) No 1272/2008 : Met. Corr. 1+ H290, Skin Corr. 1A H314,, Eye Dam. 1+ H318
Registration number : 01-2119458838-20- XXXX

* minimum classification for a category
+ Harmonized classification supplementing with manufacturer's classification

(*) Indicates that the given entry is subject to individual concentration limits for acute toxicity in accordance with Directive 67/548/EEC. These concentration limit values cannot correspond to the concentration limit values according to this regulation, especially if a minimum classification has been made. However, when the * symbol is indicated, the classification of the classification item in terms of acute toxicity may cause special concern.

Note B: Certain substances (acids, alkalis, etc.) are in the form of aqueous solutions of different concentrations and should therefore be labeled differently as the degree of danger varies depending on the concentration. The items supplemented with Note B has a general description : … % nitric acid. In this case, the supplier of the substance must indicate the concentration of the

solution on the label. Unless otherwise stated, it is to be assumed that the percentage concentration is expressed as a percentage by weight.

Refer to Section 16 for full details of the hazard statements and Notas.

## SECTION 4: First aid measures

### 4.1. Description of necessary first-aid measures

**General**

In all cases of doubt, or when symptoms persist, seek medical attention.
If possible, the MSDS should be shown. Take off all contaminated clothing immediately.

**Inhalation:**

Remove the injured person from the danger zone to fresh air and keep at rest.
If symptoms persist or worsen, seek medical attention.

**Eye contact:**

Call a doctor/seek medical attention immediately. Protect the uninjured eye. Flush the affected eye with plenty of water for at least 15 minutes, lifting the lower and upper eyelids – remove contact lenses, if present and easy to do. Cover the affected eye with gauze/clean tissue.

**Skin contact:**

Take off all contaminated clothing immediately. Wash with soap and plenty of water or take a shower. Cover with gauze/clean cloth and seek medical attention immediately.

**Ingestion:**

Seek medical attention immediately. Rinse the victim's mouth with water, but stop if the victim feels pain. Keep the airway clear. Do not induce vomiting! Do not give milk or alcoholic beverages.

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

See section 2 for expected effects! We have no information about symptoms yet..

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

Burns require immediate medical attention to prevent the development of difficult-to-heal wounds and ulcers.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media**

Product itself is not combustible; define extinguishing measures according to neighbouring conditions.
Not to be used : High power water jet.

### 5.2. Special hazards arising from the substance or mixture

The product is not flammable. During combustion or thermal decomposition, hazardous vapors and gases - hydrogen fluoride, nitrogen oxides (NOx), ammonia, sulfur oxides (SOx) may be formed.

### 5.3. Advice for firefighters

Wear full acid-resistant protective clothing and self-contained breathing apparatus. Cool closed containers at risk with water spray. Collect contaminated extinguishing water separately and do not discharge into drains or sewers.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment (see section 8). Avoid direct contact with the product, do not step into spilled product. Eliminate sources of ignition. Keep unauthorized persons away. Ventilate the area..

### 6.2. Environmental precautions

Absorb spilled material to prevent damage to surrounding materials. Do not allow to enter surface or ground water, drains or sewers.

### 6.3. Methods and materials for containment and cleaning up

For small spills, soak up with a cloth and dispose of the cloth safely.
Stop the spill if safe to do so. Eliminate sources of ignition.
Contain and recover the spilled material if possible. Soak up the residue with dry sand,
earth or similar inert absorbent material and collect in acid-resistant containers for later disposal.
Wash the contaminated area with plenty of water.

**6.4. Reference to other sections**
See Section 7 for safe handling.
Use personal protective equipment recommended in section 8.
For disposal see section 13.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**
Use personal protective equipment (see section 8). Avoid direct contact, ingestion and inhalation of the product. Remove contaminated clothing and wash before reuse.
General occupational hygiene advice: General occupational hygiene measures should be used to ensure safe handling of the product. Do not eat, drink or smoke when using the product. Wash hands and face thoroughly after handling and using the product..
**7.2. Conditions for safe storage, including any incompatibilities**
Store locked up. Store in original/acid-resistant/acid-resistant lined packaging. Store in a cool, dry, well-ventilated place, away from incompatible materials.
**7.3. Specific end use(s)**
See section 1.2

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**
**Components with workplace control parameters**
**CAS 1341-49-7 ammonium bifluoride :**
1 mg/m3 with reference to the inhalable fraction (TRGS 900)
Commission Directive 2000/39/EC
Scope: Fluorides, inorganic
8 hours limit value: 2,5 mg/m³
**CAS-No.: 7664-93-9** Sulphuric acid
Directive 2009/161/EU
**Recommended indicative occupational exposure limit value** for the European Union
A national occupational exposure limit value has to be set.
8 hours limit value: 0,05 mg/m³ (mist)
**Concentrations of host and fibrous dusts in mg/m3**
Permissible concentrations of airborne dust in mg/m3
**Crystalline silica (including quartz, cristobalite, tridymite and other forms) respirable dust**
Directive 2019/130/EC (EU6)
8 hours limit value: 0,1 mg/m³
**DNEL**
**ammonium bifluoride**
worker: Long-term exposure- systemic effects, Inhalation: 2,3 mg/m3
worker: Acute exposure- systemic effects, Inhalation: 3,8 mg/m3
consumer: Long-term exposure – systemic, Inhalation: 0,045 mg/m3
consumer: Long-term exposure – systemic, oral: 0,015 mg/kg bw/day
**PNEC**
**ammonium bifluoride**
freshwater: 1,3 mg/l
STP: 76 mg/l
Soil: 22 mg/kg
**8.2. Exposure controls**
**Appropriate engineering controls**
Local and/or general exhaust ventilation is recommended. Provide a safety shower and eyewash station in the work area.
**Personal protective equipment**
**Eye/face protection**
Tightly fitting safety glasses with side shields, face shield.
**Hand, skin and body protection**
Use protective equipment (e.g. acid-resistant protective gloves according to EN 374 - MSZ EN 374-2:2015 (e.g. nitrile rubber /material thickness: 0.35 mm/ - breakthrough time ≥ 8 h, acid-resistant protective clothing covering the entire body).

**Respiratory protection**
Not required for normal use. Where use generates intense dust, vapour or aerosol, use suitable respiratory protection with P2 filter.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

(a) Physical state liquid , paste
(b) Colour white
(c) Odour characteristic
(d) Melting point/freezing point not determined
(e) Boiling point or initial boiling point and boiling range not determined
(f) Flammability non-flammable (> 61 C)
(g) Lower and upper explosion limit Not applicable (non-flammable / non-explosive liquid).
(h) Flash point non-flammable (> 61 C)
(i) Auto-ignition temperature not determined
(j) Decomposition temperature not determined
(k) pH ca. 3,5 - 4,5 (100%)
(l) Kinematic viscosity not determined
(m) Solubility no, or slightly soluble in water
(n) Partition coefficient n-octanol/water (log value) Not applicable (mixture).
(o) Vapour pressure not determined
(p) Density and/or relative density 2,64 g/cm3
(q) Relative vapour density not determined
(r) Particle characteristics not applicable for fluid. It does not contain nanoparticles.

**9.2 Other information**
No further relevant information available.

## SECTION 10: Stability and reactivity

**10.1. Reactivity**
May be corrosive to metals.
**10.2. Chemical stability**
No decomposition if stored and applied as directed.
**10.3. Possibility of hazardous reactions**
No dangerous reaction in normal use.
**10.4. Conditions to avoid**
Heat and ignition sources
**10.5. Incompatible materials**
Strong acids, strong bases, metals.
**10.6. Hazardous decomposition products**
During combustion or thermal decomposition, hazardous vapors and gases - hydrogen fluoride, nitrogen oxides (NOx), ammonia, sulfur oxides (SOx) may be formed.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

(a) acute toxicity: Harmful if swallowed
Components
Ammonium bifluoride
LD 50/oral/rat 130 mg/kg
Sulphuric acid
LD50 (oral, male and female rat): 2140 mg/kg (ECHA).
(b) skin corrosion/irritation: The product causes burns to the skin and mucous membranes.
Ammonium bifluoride: Corrosive. Causes burns to skin and mucous membranes.
Sulphuric acid: Extremely corrosive and destructive to tissue (rabbit, IUCLID).
(c) serious eye damage/irritation: Causes severe eye damage (ammonium bifluoride , sulfuric acid)
(d) respiratory or skin sensitisation: Based on available data, the classification criteria are not met

Ammonium bifluoride: Does not cause hypersensitivity.
(e) germ cell mutagenicity: Based on available data, the classification criteria are not met
Ammonium bifluoride: In vitro and in vivo studies did not show mutagenic effects. Not classified as mutagenic.
(f) carcinogenicity: Based on available data, the classification criteria are not met
Ammonium bifluoride: Not classified as carcinogenic.
Quartz: The increased risk of lung cancer only occurs with inhalation of significant amounts of crystalline silica. The only increased risk of lung cancer has been found in individuals with silicosis.
(g) reproductive toxicity: Based on available data, the classification criteria are not met
Ammonium bifluoride: Not considered to be toxic to reproduction
(h) STOT-single exposure: Based on available data, the classification criteria are not met
(i) STOT-repeated exposure: Based on available data, the classification criteria are not met
Quartz: Prolonged and/or high
exposure to dust containing respirable crystalline silica can cause silicosis, a nodular pulmonary fibrosis caused by the deposition of fine, respirable, crystalline silica particles in the lungs. There is considerable evidence to support the fact that the increased risk of cancer is limited to people who already have silicosis. Workers should be protected from silicosis by complying with the prescribed occupational exposure limits and, where necessary, implementing additional risk management measures.
(j) aspiration hazard: Based on available data, the classification criteria are not met
Ammonium bifluoride: Corrosive to the respiratory tract.

**11.2. Information on other hazards**

No toxicological tests have been performed on the product. We do not yet have any information about symptoms.
Does not contain any endocrine disrupting components ≥ 0.1%.

## SECTION 12: Ecological information

**12.1. Toxicity**

There are no data available on the preparation itself.
Based on available data, the classification criteria are not met
**Components:**
ammonium bifluoride:
LC50 (fish; 96 h): 421.4 mg/l.
EC50 (Trichoptera aquatic larvae, 96 h):
26-48 mg/l (US-EPA, read-across).

**12.2. Persistence and degradability**

Inorganic substance. The methods for determining biodegradability are not applicable to inorganic substances.

**12.3. Bioaccumulative potential**

Ammonium Bifluoride: May accumulate in water organizations.

**12.4. Mobility in soil**

Ammonium bifluoride:
Soil: The substance spreads in an aqueous environment.

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

This mixture is not considered to be persistent, bioaccumulating nor toxic (PBT)., This mixture is not considered to be very persistent nor very bioaccumulating (vPvB).

**12.6. Endocrine disrupting properties**

This substance/mixture does not contain ingredients that which have properties that damage the endocrine system 0.1% or higher levels of REACH point f) of Article 57 of the Regulation, (EU) 2017/2100 Commission Delegated Regulation or (EU) According to Commission Regulation 2018/605.

**12.7. Other adverse effects**

Harmful effect on aquatic organisms depends on the pH change.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

Dispose of in accordance with local regulations.

Contaminated packaging : In accordance with local and national regulations. Dispose of as unused product.
Do not allow into drains or water courses..

**SECTION 14: Transport information**

14.1. UN number or ID number 3264
14.2. UN proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Ammonium hydrogendifluoride, Sulphuric acid).
14.3. Transport hazard class(es) 8, C1
Label(s): 8
Hazard identification number: 80
Road Tunnel Restrictions: E
Transport category (1.1.3.6.): 2
14.4. Packing group II
Packing instructions: P001 – IBC02; MP15
Limited Quantity (LQ): 1 liter
Discounted quantity: E2
Tank transport: L4BN – TU42, AT vehicle
14.5. Environmental hazards No
14.6. Special precautions for user Corrosive liquid
Special requirements: 274 – V12
14.7. Maritime transport in bulk according to IMO instruments Not applicable

**SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
According to the local regulation.
**15.2. Chemical safety assessment**
Chemical safety assessment has not been carried out

**SECTION 16: Other information**

LIST OF RELEVANT H-PHRASES IN SECTION 3
**H-Phrases**

H290 May be corrosive to metals.
H301 Toxic if swallowed
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
H315 Causes skin irritation
H318 Causes serious eye damage
H319 Causes serious eye irritation

**Data Sources:**
The previously-classified hazardous materials list
Internet database of chemical substances
Safety data sheets of components

**Abbreviations:**

| | |
|---|---|
| Acute Tox. | Acute Toxicity |
| Skin Corr. | Skin Corrosion |
| Skin Irrit. | Skin irritation |
| Eye Dam. | Eye Damage |
| Eye Irrit. | Eye Irritation |
| Met. Corr. | Metal Corrosion |

SCL: Specific Concentration limit

| | |
|---|---|
| EEA / EGT | The European Economic Area |
| EEC / EGK | European Economic Community |
| EC / EK | European Community |
| EU | European Union |
| CAS | Chemical Abstracts Service |
| ECHA | The European Chemicals Agency |
| UN / ENSZ | United Nations |
| REACH | Registration, Evaluation, Authorisation and restriction of Chemicals |
| CLP | Regulation on Classification, Labelling and Packaging of Substances and Mixtures |
| ADR | Accord relatif au transport international des marchandises Dangereuses par Route |
| RID | Réglement international concernant le transport des marchandises dangereuses par chemin de fer |
| ADN | Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure |
| IMDG | International Maritime Code for Gangerous Goods |
| IMO | International Maritime Organization |
| IATA | International Air Transport Association |
| ICAO | International Civil Aviation Organization |
| DNEL | Derived No Effect Level |
| PNEC | Predicted No Effect Concentration |
| bw kg / ttkg | body weight in kilograms |
| EN | European Norm / European Standard |
| OECD | Organisation for Economic Co-operation and Development |
| EPA | The Environmental Protection Agency |
| $EC_{50}$ | Effective concentration 50 % |
| EC… | Effective concentration ... % |
| $EbC_{50}$ | $EC_{50}$ value measured on algal biomass |
| $ErC_{50}$ | The concentration at which a 50 % inhibition of growth rate is observed |
| $LC_{50}$ | Lethal Concentration 50 % |
| $LD_{50}$ | Lethal dose 50 percent |
| LOAEL | Lowest observable adverse effect level |
| LOEC | Lowest Observed Effect Concentration |
| NOAEC | No observable adverse effect concentration |
| NOAEL | No observable adverse effect level |
| NO NOEC | No Observed-effect concentration |
| HPLC | High Performance Liquid Chromatography |
| RAC | The Committee for Risk Assessment |
| BCF / BKF | Bioconcentration factor |
| log $K_{O/V}$ / log Pov | Logarithm of the partition octanol-water. |
| $K_{OC}$ | Partition coefficient of organic carbon |
| PBT | Persistent, Bioaccumulative, Toxic |
| vPvB | very Persistent, very Bioaccumulative |
| POP | Persistent Organic Pollutant |
| EPC / EPT | The European Parliament and the Council |

This product Safety Data Sheet provides health, safety, and regulatory information. The information contained in this Safety Data Sheet is based on data available to us at the date of issue , and is provided in good faith, and believed to be accurate and reliable at the date of issue, however, no warranty, express or implied is provided. The product is to be used in applications consistent. For any other uses, exposures should be evaluated so that the appropriate handling practices and training programs can be established to ensure safe working conditions and operations. It is the buyer's/user's responsibility to satisfy itself that the product is suitable for the intended use, and to ensure that its activities comply with all federal, state, provincial, or local laws and regulations. Regulatory requirements are subject to change and may differ between European Member States and Nations.Individuals handling this product should be informed of the recommended safety precautions and should have access to this information.