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

### 1.1. Product identifier

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product form</td>
<td>Substance</td>
</tr>
<tr>
<td>Trade name</td>
<td>FLUOPRAY™ SSF</td>
</tr>
<tr>
<td>Chemical name</td>
<td>Disodium hexafluorosilicate</td>
</tr>
<tr>
<td>CAS No</td>
<td>16893-85-9</td>
</tr>
<tr>
<td>Product code</td>
<td>PR-014GHS</td>
</tr>
<tr>
<td>Formula</td>
<td>Na2SiF6</td>
</tr>
<tr>
<td>Synonyms</td>
<td>Sodium hexafluorosilicate; Sodium fluorosilicate</td>
</tr>
</tbody>
</table>

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture:  
- Opalizing agent
- Textile industries
- brazing, soldering flux for aluminium
- Ceramic tiles
- Latex
- Water fluoridation

### 1.3. Details of the supplier of the safety data sheet

PRAYON S.A.  
Rue Joseph Wauters, 144  
Engis, B-4480 - Belgique-Belgium  
T +32 (0)4 273 92 11 - F +32 (0)4 273 96 35  
Reachcustomer@prayon.be - www.prayon.be

### 1.4. Emergency telephone number

Emergency number: CHEMTREC 1-800-424-9300

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**GHS-US classification**  
- Acute Tox. 3 (Oral) H301  
- Acute Tox. 3 (Dermal) H311  
- Acute Tox. 3 (Inhalation:gas) H331  

Full text of H-phrases: see section 16

### 2.2. Label elements

**GHS-US labelling**  

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard pictograms</td>
<td>GHS06</td>
</tr>
<tr>
<td>Signal word</td>
<td>Danger</td>
</tr>
</tbody>
</table>
| Hazard statements    | H301 - Toxic if swallowed  
                       | H311 - Toxic in contact with skin  
                       | H331 - Toxic if inhaled             |
| Precautionary statements | P261 - Avoid breathing spray, mist, fume, gas, dust, vapours  
                          | P280 - Wear protective gloves, protective clothing, eye protection, face protection  
                          | P301+P310 - If swallowed: Immediately call a POISON CENTER, a doctor  
                          | P302+P352 - If on skin: Wash with plenty of hands, forearms and face  
                          | P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
                          | P405 - Store locked up                |

### 2.3. Other hazards

No additional information available
2.4. **Unknown acute toxicity (GHS-US)**
Not applicable

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
</table>
| Sodium fluorosilicate | (CAS No) 16893-85-9 | >= 95 | Acute Tox. 3 (Oral), H301  
Acute Tox. 3 (Dermal), H311  
Acute Tox. 3 (Inhalation), H331 |

Full text of H-phrases: see section 16

#### 3.2. Mixture
Not applicable

### 4.1. Description of first aid measures

**First-aid measures after inhalation**: Remove victim to fresh air. If breathing is difficult, give oxygen. If breathing stops, perform cardio pulmonary resuscitation (CPR). Take to hospital.

**First-aid measures after skin contact**: Wash immediately with plenty of soap and water. Remove contaminated clothing and shoes. If on skin, take off contaminated clothing. Seek medical attention if ill effect or irritation develops.

**First-aid measures after eye contact**: In case of eye contact, immediately rinse with clean water for 10-15 minutes. Call a doctor.

**First-aid measures after ingestion**: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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

**Symptoms/injuries**: Significant pain in the burn region. A calcic depletion may happen.

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

A supervision of the acid-basic balance and the calcium rate in the serum of the blood is necessary.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

*Suitable extinguishing media*: Powders, CO2, Sand.

*Unsuitable extinguishing media*: Water.

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

**Explosion hazard**: In the presence of water, contact with metals may produce hydrogen which may form explosive mixtures with air.

**Reactivity**: Stable under normal conditions (Handling and storage).

#### 5.3. Advice for firefighters

**Protection during firefighting**: Only approved supplied air or self-contained breathing apparatus operated in positive pressure mode are satisfactory, if exposure can exceed the exposure limit value. Total impervious protective suits, gloves, and boots must be worn.

### SECTION 6: Accidental release measures

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

**General measures**: Keep public away from danger area. Personal protective equipment (see section(s): 8.2).

**For non-emergency personnel**: No additional information available

**For emergency responders**: No additional information available

#### 6.2. Environmental precautions

Prevent entry to sewers, soils and natural waters. Notify authorities if product enters sewers or public waters.

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

**Methods for cleaning up**: Sweep or shovel spills into appropriate container for disposal. Avoid dust production.

#### 6.4. Reference to other sections

See section 8 and 13 for more information.
**SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

**Precautions for safe handling:**
Do not breathe dust. Always wash your hands immediately after handling this product, and once again before leaving the workplace. Remove contaminated clothing and shoes. Wash clothing before re-using. Packagings, even those that have been emptied, will retain product residue. Always obey safety warnings and handle empty packagings as if they were full. Avoid any direct contact with the product.

**Hygiene measures:**
When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Remove contaminated clothing and shoes.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:**
Store in dry, cool, well-ventilated area. Keep away from food, drink and animal feeding stuffs.

### 7.3. Specific end use(s)

No additional information available

---

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

### 8.1. Control parameters

<table>
<thead>
<tr>
<th>FLUOPRAY™ SSF (16893-85-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
</tr>
<tr>
<td>OSHA</td>
</tr>
</tbody>
</table>

### 8.2. Exposure controls

**Appropriate engineering controls:**
Local exhaust ventilation with captor/receptor hood. Monitor the atmosphere at regular intervals. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

**Materials for protective clothing:**
Nitrile rubber.

**Hand protection:**
Wear chemical protective gloves.

**Eye protection:**
Wear safety glasses with side shields.

**Skin and body protection:**
Protective clothing (with elasticated cuffs and closed neck).

**Respiratory protection:**

**Environmental exposure controls:**
Prevent entry to sewers and soil.

---

**SECTION 9: Physical and chemical properties**

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

| Physical state | Solid |
| Appearance | Powder. |
| Colour | white |
| Odour | odourless |
| Odour threshold | Not applicable |
| pH | No data available |
| Relative evaporation rate (butylacetate=1) | No data available |
| Melting point | 620 °C (1013 hPa) |
| Freezing point | 620 °C (1013 hPa) |
| Boiling point | No data available |
| Flash point | Not flammable |
| Auto-ignition temperature | Non flammable |
| Decomposition temperature | 620 °C |
| Flammability (solid, gas) | No data available |
| Vapour pressure | Negligible. |
| Relative vapour density at 20 °C | No data available |
| Relative density | 2.7 (20°C) |
| Solubility | Water: 6.96 (22°C) |
| Log Pow | Not applicable |
**SECTION 10: Stability and reactivity**

10.1. Reactivity
Stable under normal conditions (Handling and storage).

10.2. Chemical stability
Stable under normal conditions (Handling and storage).

10.3. Possibility of hazardous reactions
In the presence of water, contact with metals can produce hydrogen which may form flammable mixtures with air.

10.4. Conditions to avoid
Moisture. Heating.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Hydrofluoric Acid.

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoropray™ SSF (16893-85-9)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>25 - 2000 mg/kg OECD 401</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>1814 mg/l OECD 403</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

| Fluoropray™ SSF (16893-85-9) | |
| NOAEL (oral, rat, 90 days) | 25 mg/kg bodyweight/day Similar to: EPA OPP 83-5 |
| Aspiration hazard | Not classified |

**SECTION 12: Ecological information**

12.1. Toxicity

| Fluoropray™ SSF (16893-85-9) | |
| LC50 fishes 1 | 37.5 mg/l (96h) Dario rerio, OECD 203 |
| EC50 Daphnia 1 | 35.4 mg/l (48h) - daphnia magna, OECD 202 |
| ErC50 (algae) | 18 mg/l (72h) - Pseudokirchneriella subcapitata, OECD 201 |
| NOEC chronic fish | 4 mg/l (21 d), Oncorhynchus mykiss |
### FLUOPRAY™ SSF

#### NOEC (additional information)

| ACTIVATED SLUDGE | NOEC (3h): 510 mg/L; (16h-72h): 7.1-226 mg/L |

#### 12.2. Persistence and degradability

| FLUOPRAY™ SSF (16893-85-9) | Performed. (inorganic substance). |

#### 12.3. Bioaccumulative potential

| FLUOPRAY™ SSF (16893-85-9) | Log Pow: Not applicable |
| Log Kow: Not applicable |
| Bioaccumulative potential: small. |

#### 12.4. Mobility in soil


#### 12.5. Other adverse effects

- Other adverse effects: No.
- Effect on ozone layer: No.
- Effect on the global warming: No known ecological damage caused by this product.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- Hazardous waste due to toxicity. Dispose of this material and its container at hazardous or special waste collection point. Dispose in a safe manner in accordance with local/national regulations.
- Empty packaging can have residues or dusts and are subject to proper waste disposal, as above.

### SECTION 14: Transport information

- UN2674 Sodium fluorosilicate, 6.1, III
- UN-No. (DOT): UN2674
- Proper Shipping Name (DOT): Sodium fluorosilicate
- Hazard labels (DOT): 6.1 - Poison inhalation hazard
- Packing group (DOT): III - Minor Danger
DOT Special Provisions (49 CFR 172.102)

IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).

IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.

TP3 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx)

153

DOT Packaging Non Bulk (49 CFR 173.xxx)

213

DOT Packaging Bulk (49 CFR 173.xxx)

240

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)

100 kg

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)

200 kg

DOT Vessel Stowage Location

A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.

DOT Vessel Stowage Other

52 - Stow “separated from” acids

Additional information

Other information

No supplementary information available.

ADR

Transport document description

UN 2674 SODIUM FLUOROSILICATE, 6.1, III, (E)

Packing group (ADR)

III

Class (ADR)

6.1 - Toxic substances

Hazard identification number (Kemler No.)

60

Classification code (ADR)

T5

Danger labels (ADR)

6.1 - Toxic substances

Orange plates

60

2674

Tunnel restriction code (ADR)

E

LQ

5kg

Excepted quantities (ADR)

E1

Transport by sea

UN-No. (IMDG)

2674

Proper Shipping Name (IMDG)

SODIUM FLUOROSILICATE

Class (IMDG)

6.1 - Toxic substances

Packing group (IMDG)

III - substances presenting low danger

Air transport

UN-No.(IATA)

2674

Proper Shipping Name (IATA)

Sodium fluorosilicate
**FLUOPRAY™ SSF**

**Safety Data Sheet**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| Class (IATA) | 6.1 - Toxic Substances |
| Packing group (IATA) | III - Minor Danger |

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

**FLUOPRAY™ SSF (16893-85-9)**

- Listed on the United States TSCA (Toxic Substances Control Act) inventory
- Not listed on the United States SARA Section 313
- RQ (Reportable quantity, section 304 of EPA's List of Lists) Not applicable
- SARA Section 302 Threshold Planning Quantity (TPQ) Not applicable
- SARA Section 311/312 Hazard Classes Immediate (acute) health hazard
- SARA Section 313 - Emission Reporting Not applicable

#### 15.2. International regulations

**CANADA**

**FLUOPRAY™ SSF (16893-85-9)**

- Listed on the Canadian DSL (Domestic Sustances List) inventory.
- WHMIS Classification Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects

**EU-Regulations**

No additional information available

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

- Acute Tox. 3 (Dermal) H311
- Acute Tox. 3 (Inhalation) H331
- Acute Tox. 3 (Oral) H301

Full text of H-phrases: see section 16

**Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**

T; R23/24/25

Full text of R-phrases: see section 16

#### 15.2.2. National regulations

**FLUOPRAY™ SSF (16893-85-9)**

- CERCLA reportable quantities : not applicable
- California Proposition 65: not applicable
- SUBSTANCE LISTED IN THE ANNEX I OF DIRECTIVE 2003/105/CE AMENDING DIRECTIVE 96/82/CE (CONTROL OF MAJOR - ACCIDENT HAZARDS INVOLVING DANGEROUS SUBSTANCES)
- Not Listed on SARA Section 302 (Specific toxic chemical listings)

#### 15.3. US State regulations

### SECTION 16: Other information

Data sources Reach dossier.
Abbreviations and acronyms:
- ADN: European Agreement concerning international carriage of Dangerous goods by Inland waterways
- ADR: European Agreement concerning international carriage of Dangerous goods by Road
- AF: Assessment factor
- BCF: Bioconcentration factor
- Bw: Body weight
- CAS: Chemical Abstracts Service
- CLP: Classification, labelling, packaging
- CSR: Chemical Safety Report
- DMEL: Derived maximum effect level
- DNEL: Derivative No effect Level
- EC: European Community
- ELV: Emission limit values
- EN: European Norm
- EUH: European Hazard Statement
- EWC: European Waste catalogue
- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organization
- IMDG: International Maritime Dangerous Goods
- LC50: Median lethal concentration
- LD50: Median lethal dose
- NOAEL: No-observed-adverse-effect-level
- NOEC: No observed effect concentration
- NOEL: No observed effect level
- OEL: Operator exposure level
- PBT: Persistent, bioaccumulative, Toxic
- PEC: Predicted effect level
- PNEC: Predicted No effect Concentration
- RID: Regulations concerning the international carriage of dangerous goods by rail
- STEL: Short Term Exposure Limit
- TWA: Time weighted average
- vPvB: Very persistent, very bioaccumulative.

Training advice: None.

Full text of H-phrases:

- **Acute Tox. 3 (Dermal)**: Acute toxicity (dermal), Category 3
- **Acute Tox. 3 (Inhalation)**: Acute toxicity (inhal.), Category 3
- **Acute Tox. 3 (Inhalation:gas)**: Acute toxicity (inhalation:gas) Category 3
- **Acute Tox. 3 (Oral)**: Acute toxicity (oral), Category 3
- **H301**: Toxic if swallowed
- **H311**: Toxic in contact with skin
- **H331**: Toxic if inhaled

NFPA health hazard: 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard: 0 - Materials that will not burn.

NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating
- Health: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given.
- Flammability: 0 Minimal Hazard
- Physical: 0 Minimal Hazard

SDS US (GHS HazCom 2012)

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