

**SAFETY DATA SHEET**  
**SODIUM FLUORIDE LRG**

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product name	SODIUM FLUORIDE LRG
Product number	1545
CAS number	7681-49-4
EC number	231-667-8

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

Identified uses	Laboratory reagent.
Uses advised against	No specific uses advised against are identified.

**1.3. Details of the supplier of the safety data sheet****Supplier**

Reagent Chemical Services  
18 Aston Fields Road  
Whitehouse Industrial Estate  
Runcorn  
Cheshire WA7 3DL

T: 01928 716903 (08.30 - 17.00)  
F: 01928 716425  
E: [info@reagent.co.uk](mailto:info@reagent.co.uk)

**1.4. Emergency telephone number**

Emergency telephone	OHES Environmental Ltd 24-7 Tel. 0333 333 9939 (24 hour)
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**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification (EC 1272/2008)**

Physical hazards	Not Classified
Health hazards	Acute Tox. 3 - H301 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
Environmental hazards	Not Classified

**2.2. Label elements**

EC number	231-667-8
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**Pictogram**

## SODIUM FLUORIDE LRG

<b>Signal word</b>	Danger
<b>Hazard statements</b>	H301 Toxic if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.
<b>Precautionary statements</b>	P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 If skin irritation occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention.
<b>Supplemental label information</b>	EUH032 Contact with acids liberates very toxic gas.
<b>Supplementary precautionary statements</b>	P264 Wash contaminated skin thoroughly after handling. P321 Specific treatment (see medical advice on this label). P330 Rinse mouth. P362+P364 Take off contaminated clothing and wash it before reuse. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.

### 2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

<b>Product name</b>	SODIUM FLUORIDE LRG
<b>CAS number</b>	7681-49-4
<b>EC number</b>	231-667-8

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>General information</b>	Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.
<b>Skin contact</b>	Remove contaminated clothing and rinse skin thoroughly with water. Continue to rinse for at least 15 minutes and get medical attention. Take off contaminated clothing and wash it before reuse.
<b>Eye contact</b>	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes. Get medical attention if irritation persists after washing.

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**Protection of first aiders** First aid personnel should wear appropriate protective equipment during any rescue. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves.

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

**General information** The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation** Prolonged inhalation of high concentrations may damage respiratory system.

**Ingestion** May cause stomach pain or vomiting. May cause severe internal injury.

**Skin contact** Redness. Irritating to skin.

**Eye contact** Irritating to eyes.

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

**Notes for the doctor** Treat symptomatically. Keep affected person under observation.

**Specific treatments** No specific chemical antidote is known to be required after exposure to this product.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

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

**Specific hazards** The product is not flammable. When handled correctly, undamaged units represent no danger.

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances: Fluorine. Oxides of the following substances: Sodium.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses.

**Special protective equipment for firefighters** Wear chemical protective suit. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

## SECTION 6: Accidental release measures

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

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid contact with skin, eyes and clothing. Wash thoroughly after dealing with a spillage.

**For emergency responders** Wear protective clothing, gloves, eye and face protection.

### 6.2. Environmental precautions

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**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

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

**Methods for cleaning up** Wear protective clothing as described in Section 8 of this safety data sheet. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Wash thoroughly after dealing with a spillage.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Avoid breathing dust. Read and follow manufacturer's recommendations.

**Advice on general occupational hygiene** Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Provide eyewash station. Wash hands thoroughly after handling.

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

**Storage precautions** Keep container tightly closed, in a cool, well ventilated place. Protect containers from damage. Keep away from food, drink and animal feeding stuffs. Store away from the following materials: Acids. Alkalis. Oxidising materials. Protect from freezing and direct sunlight.

**Storage class** Chemical storage.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls

#### Protective equipment



**Appropriate engineering controls** Provide adequate general and local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

**Eye/face protection** Wear eye protection. Personal protective equipment for eye and face protection should comply with European Standard EN166. If inhalation hazards exist, a full-face respirator may be required instead.

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<b>Hand protection</b>	Wear protective gloves. To protect hands from chemicals, gloves should comply with European Standard EN374. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. For exposure up to 8 hours, wear gloves made of the following material: Nitrile rubber. Neoprene. Thickness: ~ 0.4 mm Frequent changes are recommended.
<b>Other skin and body protection</b>	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
<b>Hygiene measures</b>	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.
<b>Respiratory protection</b>	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Wear a respirator fitted with the following cartridge: Particulate filter, type P3. Check that the respirator fits tightly and the filter is changed regularly. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.
<b>Environmental exposure controls</b>	Keep container tightly sealed when not in use.

### SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Powder.
<b>Colour</b>	White.
<b>Odour</b>	Odourless.
<b>pH</b>	pH (diluted solution): 8.5 - 10.0 @ 1%
<b>Melting point</b>	996°C
<b>Initial boiling point and range</b>	1695°C
<b>Flash point</b>	Technical impossibility to obtain the data.
<b>Evaporation rate</b>	Not determined.
<b>Flammability (solid, gas)</b>	No specific test data are available.
<b>Vapour pressure</b>	Not known.
<b>Relative density</b>	Not determined.
<b>Bulk density</b>	~ 2.8 kg/m <sup>3</sup>
<b>Partition coefficient</b>	Scientifically unjustified.
<b>Auto-ignition temperature</b>	Scientifically unjustified.
<b>Decomposition Temperature</b>	No specific test data are available.
<b>Viscosity</b>	No specific test data are available.
<b>Explosive properties</b>	Not considered to be explosive.

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**Oxidising properties** Does not meet the criteria for classification as oxidising.

### 9.2. Other information

**Other information** None.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** See Section 10.3 (Possibility of hazardous reactions) for further information.

### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Generates toxic gas in contact with acid.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid excessive heat for prolonged periods of time. Avoid contact with acids.

### 10.5. Incompatible materials

**Materials to avoid** Avoid contact with the following materials: Strong acids. Strong alkalis. Strong oxidising agents.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Fluorine. Oxides of the following substances: Sodium.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** LD<sub>50</sub> 223 mg/kg/day, Oral, Rat REACH dossier information.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** LD<sub>50</sub> >2000 mg/kg/day, Dermal, Rabbit REACH dossier information.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Scientifically unjustified. REACH dossier information.

#### Skin corrosion/irritation

**Animal data** Irritating.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Causes serious eye irritation.

#### Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

#### Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

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### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

**IARC carcinogenicity** None of the ingredients are listed or exempt.

### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Based on available data the classification criteria are not met.

### Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

### Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

### **General information**

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation** Prolonged inhalation of high concentrations may damage respiratory system.

**Ingestion** May cause stomach pain or vomiting. May cause severe internal injury.

**Skin contact** Redness. Irritating to skin.

**Eye contact** Irritating to eyes.

**Route of entry** Ingestion Inhalation Skin and/or eye contact

**Target organs** No specific target organs known.

## SECTION 12: Ecological Information

**Ecotoxicity** Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

### 12.1. Toxicity

**Toxicity** Based on available data the classification criteria are not met.

**Acute toxicity - fish** LC<sub>50</sub>, 192 hours: 118.5 ppm, Freshwater fish  
REACH dossier information.

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 96 hours: 26 - 48 mg/l, Freshwater invertebrates  
REACH dossier information.

**Acute toxicity - aquatic plants** Not determined.

### 12.2. Persistence and degradability

**Persistence and degradability** The degradability of the product is not known.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** Scientifically unjustified.

### 12.4. Mobility in soil

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**Mobility** The product is water-soluble and may spread in water systems.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** When handling waste, the safety precautions applying to handling of the product should be considered. The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out.

**Disposal methods** Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

**General** For limited quantity packaging/limited load information, consult the relevant modal documentation using the data shown in this section.

### 14.1. UN number

**UN No. (ADR/RID)** 1690

**UN No. (IMDG)** 1690

**UN No. (ICAO)** 1690

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** SODIUM FLUORIDE, SOLID

**Proper shipping name (IMDG)** SODIUM FLUORIDE, SOLID

**Proper shipping name (ICAO)** SODIUM FLUORIDE, SOLID

**Proper shipping name (ADN)** SODIUM FLUORIDE, SOLID

### 14.3. Transport hazard class(es)

**ADR/RID class** 6.1

**ADR/RID label** 6.1

**IMDG class** 6.1

**ICAO class/division** 6.1

### Transport labels



### 14.4. Packing group



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ADR/RID packing group III

IMDG packing group III

ICAO packing group III

### 14.5. Environmental hazards

#### Environmentally hazardous substance/marine pollutant

No.

### 14.6. Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-A, S-A

Hazard Identification Number (ADR/RID) 60

Tunnel restriction code (E)

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not relevant.

Not relevant.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**National regulations** Health and Safety at Work etc. Act 1974 (as amended).  
Control of Substances Hazardous to Health Regulations 2002 (as amended).  
EH40/2005 Workplace exposure limits.

**EU legislation** Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).  
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).  
Commission Regulation (EU) No 2015/830 of 28 May 2015.

**Authorisations (Title VII Regulation 1907/2006)** No specific authorisations are known for this product.

**Restrictions (Title VIII Regulation 1907/2006)** No specific restrictions on use are known for this product.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### Inventories

##### EU - EINECS/ELINCS

All the ingredients are listed or exempt.

## SECTION 16: Other information

## SODIUM FLUORIDE LRG

<b>Abbreviations and acronyms used in the safety data sheet</b>	<p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>IATA: International Air Transport Association.</p> <p>ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>CAS: Chemical Abstracts Service.</p> <p>ATE: Acute Toxicity Estimate.</p> <p>LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.</p> <p>LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>EC<sub>50</sub>: 50% of maximal Effective Concentration.</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p> <p>DMEL: Derived Minimal Effect Level.</p> <p>DNEL: Derived No Effect Level.</p> <p>PNEC: Predicted No Effect Concentration.</p>
<b>Classification abbreviations and acronyms</b>	<p>Acute Tox. = Acute toxicity</p> <p>Eye Irrit. = Eye irritation</p> <p>Skin Irrit. = Skin irritation</p>
<b>General information</b>	<p>Only trained personnel should use this material.</p>
<b>Classification procedures according to Regulation (EC) 1272/2008</b>	<p>Acute Tox. 3 - H301: Skin Irrit. 2 - H315: Eye Irrit. 2 - H319: : Expert judgement.</p>
<b>Training advice</b>	<p>Read and follow manufacturer's recommendations.</p>
<b>Revision date</b>	<p>20/02/2018</p>
<b>Revision</b>	<p>2</p>
<b>Supersedes date</b>	<p>22/09/2017</p>
<b>SDS status</b>	<p>Approved.</p>
<b>Hazard statements in full</b>	<p>H301 Toxic if swallowed.</p> <p>H315 Causes skin irritation.</p> <p>H319 Causes serious eye irritation.</p>

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.