

# SAFETY DATA SHEET

## CURATOR BLUING SALTS

### Product Description

A crystallized compound, used to facilitate the bluing of steel.

### Directions

Place crystals in a strong container that will stand frequent heating to high temperatures. Heat up the crystals, which will melt and form a liquid. Wire up the cleaned steel hand or other steel component with binding wire, so that it can be manoeuvred in and out of the liquid.

Immerse the wired hand into the liquid, lifting it out from time to time to allow oxidation to take place. Please note that the bluing salts themselves do not blue the steel, but merely keep it at an even temperature, so that all thicknesses of steel, blue at the same time.

When the hand has reached the desired shade of blue, quench immediately in cold water. Do **NOT** on any account replace the hand back into the bluing liquid after it has been cooled in the water, as this will make the bluing salts spit furiously.

The liquid will set solid when cold, and this is reusable. Make sure that the liquid cannot be knocked over, as any accident would cause serious burns.

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

### **1.1 Product Identifier**

|                            |                      |
|----------------------------|----------------------|
| Product Name:              | Curator Bluing Salts |
| Composition / Ingredients: | Potassium Nitrate    |
| CAS No :                   | 7757-79-1            |
| EC No.                     | 231-818-8            |

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

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

|                |  |
|----------------|--|
| Company Name : | Horological Solvents Ltd<br>Barnside, 194 Wellington Road, Bury, Lancs. BL9 9AH                      |
| Tel:           | 0161 764 2741  |
| Fax :          | 0161 764 8696  |
| Email :        | <a href="mailto:horological@restoration-materials.co.uk">horological@restoration-materials.co.uk</a> |

### **1.4 Emergency telephone number**

|                 |                                   |
|-----------------|-----------------------------------|
| Emergency Tel : | 0161 764 2741 (office hours only) |
|-----------------|-----------------------------------|

## **SECTION 2 : Hazards Identification**

### **2.1 Classifications of the substance or mixture**

Classification (EC No 1272/2008)

Physical Hazards : Oxidizing Solids      Category 3 (H272)

Health Hazards : Criteria not met

Environmental Hazards : Criteria not met

### **2.2 Label elements**



WARNING

#### **Hazard Statements :**

H272 – May intensify fire ; oxidizer

#### **Precautionary Statements :**

P280 - Wear protective gloves / protective clothing / eye protection / face protection.

P210 - Keep away from heat / sparks / open flames / hot surfaces. No smoking.

P221 - Take any precaution to avoid mixing with combustibles.

P371 + P380 + P375 - In case of major fire and large quantities ; Evacuate area. Fight fire remotely due to the risk of explosion.

### **2.3 Other hazards**

Results of PBT and vPvB assessment

In accordance with Annex XIII of the REACH Regulation, inorganic substances do not require assessment.

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

### **3.1 Substances**

| Component         | CAS number | EC-No     | Weight % | CLP Classification |
|-------------------|------------|-----------|----------|--------------------|
| Potassium Nitrate | 7757-79-1  | 231-818-8 | >95      | Ox. Sol. 3 (H272)  |

## **SECTION 4 : First Aid Measures**

### **4.1 Description of first aid measures**

Skin Contact : Wash off immediately with plenty of water for at least 15 minutes. Seek medical attention.

Eye Contact : Rinse the eye immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention.

Ingestion : Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

Inhalation : Move the exposed person to fresh air. If breathing stops, provide artificial respiration. Get medical attention if symptoms occur.

General : If symptoms persist, seek medical advice.

## **SECTION 5 : Fire-fighting measures**

### **5.1 Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Oxidizer : Contact with combustible / organic material may cause fire. May ignite combustibles (wood, paper, oil, clothing etc.) Thermal decomposition can lead to release of irritating gases and vapours. Keep product and empty container away from heat and sources of ignition.

### **5.3 Advice for fire-fighters**

As in any fire, wear self contained breathing apparatus, and full protective gear.

## **SECTION 6 : Accidental release measures**

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

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.

### **6.2 Environmental precautions**

Should not be released into the environment.

### **6.3 Methods of material for containment and cleaning up**

Sweep up or vacuum up spillage and collect in suitable container for disposal.

## **SECTION 7 : Handling and Storage**

### **7.1 Precautions for safe handling**

Wear personal protective equipment. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, or skin, or on clothing. Keep away from clothing and other combustible materials.

### **7.2 Conditions for safe storage, including any inculpabilities**

Storage Conditions : Store in a cool, well ventilated area. Keep container tightly closed. Do not store near combustible materials.

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

### **8.1 Control parameters**

Exposure limits : Contains no substances with occupational exposure limits.  
CAS No : 7757-79-1

### **8.2 Exposure controls**

Engineering Measures : Ensure adequate ventilation, especially in confined areas.

Respiratory protection : Small scale use – maintain adequate ventilation. No personal respiratory protective equipment normally required.

Skin /Hand Protection : Wear appropriate protective gloves and clothing to prevent skin exposure.

Eye / Face Protection : Wear appropriate safety glasses with side shields.

Environmental Exposure Controls : No information available.

## **SECTION 9 : Physical and chemical properties**

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

|                           |                          |
|---------------------------|--------------------------|
| State :                   | Solid / Crystalline      |
| Colour :                  | White                    |
| Odour :                   | Odourless                |
| pH                        | 8 – 10 %% aq. solution   |
| Melting Point / Range :   | 334 °C                   |
| Boiling Point ;           | 400 °C @ 760 mmHG        |
| Flash Point :             | No information available |
| Flammability (solid ,gas) | Not flammable            |
| Oxidizing Properties :    | Oxidizer                 |

### **9.2 Other Information**

|                     |        |
|---------------------|--------|
| Molecular Formula ; | K N O3 |
| Molecular Weight :  | 101.1  |

## **SECTION 10 : Stability and reactivity**

### **10.1 Reactivity**

Yes Oxidizer. Contact with combustible organic material may cause fire.

### **10.2 Chemical stability**

Oxidizer : Contact with combustible / organic material may cause fire.

### **10.3 Possibility of hazardous reactions**

None under normal processing.

### **10.4 Conditions to avoid**

Avoid dust formation. Excess heat. Combustible material. Incompatible materials

### **10.5 Incompatible materials**

Strong reducing agents. Strong acids. Combustible material.

### **10.6 Hazardous decomposition products**

Potassium oxides. Nitrogen oxides (NOx)

## **SECTION 11 : Toxicological information**

### **11.1 Information on toxicological effects**

No data available – Classification criteria not met.

## **SECTION 12 : Ecological Information**

### **12.1 Toxicity**

Ecotoxicity effects : This product contains the following substance(s) which are hazardous for the environment.

| Component         | Freshwater Fish         | Water Flea              | Freshwater Algae            | Microtox |
|-------------------|-------------------------|-------------------------|-----------------------------|----------|
| Potassium Nitrate | 1378 mg/l LC50<br>(96h) | 490 mg/l EC50<br>(48hr) | >1700 mg/l EC50<br>(10 day) |          |

### **SECTION 13 : Disposal considerations**

**General Info :** Dispose of in compliance with all local and national regulations.

### **SECTION 14 : Transport information**

|                           |                   |
|---------------------------|-------------------|
| UN Proper Shipping Name : | Potassium Nitrate |
| UN Number :               | UN1486            |
| Packing Group :           | III               |
| Transport Hazard Class :  | 5.1               |

### **SECTION 15 : Regulatory Information**

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

Potassium Nitrate : EINECS – 231-818-8

### **SECTION 16 : Other Information**

H272 – May intensify fire : oxidizer.

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication, however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials. This company will not be held liable for any damage or injury resulting from handling or contact with the above product.

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