

RUSTING SOLUTION

Product Description

A cold patination treatment to speed up the rusting process on steel and iron.

Directions

Thoroughly remove and clean any grease or oil from item to be rusted. Apply Rusting Solution by brush, cloth or immersion. Solution may be applied neat or diluted with up to 10 parts water. Leave item overnight, when a film of rust should have coated the item. For a greater depth of rust, repeat process again if necessary. On completion, seal in the 'rust' with a coating of wax or lacquer if required. Without this procedure the rust will come off with handling.

SECTION 1: Identification of the Substance / Mixture and of the company/undertaking

1.1 Product Identifier

Product Name:	Rusting Solution
Composition/Ingredients:	Ferric Chloride Solution 38-42%
CAS No.	7705-08-0
EC No.	231-729-4

1.2 Relevant identified uses of the substance mixture and uses advised against

Rusting solution for Iron and Mild Steel

1.3 Details of the supplier of the safety data sheet

Company Name:	Wardle Antiquing Unit 6 Albany Court, Blenheim Road, Airfield Industrial Estate, Ashbourne, Derbyshire DE6 1HA
Tel:	01335 347154
Email:	sales@johnwardle.co.uk

1.4 Emergency telephone number

Emergency tel: 01335 347154 (office hours only)

SECTION 2: Hazards Identification

2.1 Classifications of the substance or mixture According to 1272/2008

H314 Skin corrosion / irritation Category 1B
H355 Specification target organ toxicity – single exposure Category 3
For the full text of the H-Statements mentioned in this section, see Section 16

EEC Directive 67/548/EEC & Directive 1999/45/EC

R34 Corrosive (C)
R37 Irritant (Xi)
For the full text of the R-Statements mentioned in this section, see Section 16

2.2 Label elements According to 1272/2008



DANGER

Hazard Statements

H314 Causes severe skin burns and eye damage
H335 May cause respiratory irritation.

Precautionary Statements

P261 Avoid breathing dust / fume / gas / mist / vapours / spray.
P271 Use only outdoors or in a well-ventilated area.
P304 + P340 IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P402 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

SECTION 3: Composition/information on ingredients

3.2 Hazardous Ingredients

Material	CAS number	EINECS No	Content	See Section 2
Iron Trichloride	7705-80-0	231-729-4	10%	H314, H335

SECTION 4: First Aid Measures

4.1 Description of first aid measures

Skin Contact:	Remove contaminated clothing, wash of skin immediately with soap and plenty of water.
Eye Contact:	Immediately flush eyes with water, holding eyelids apart for at least 5 minutes. Seek medical assistance immediately.
Ingestion:	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Inhalation:	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position. Seek medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms / Effects: No further information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing Media

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

Unsuitable extinguishing media: High volume water jet.

5.2 Special hazards arising from the substance or mixture

Incomplete combustion may form toxic pyrolysis products.

5.3 Advice for fire-fighters

In the event of a fire, wear self-contained breathing apparatus. Wear personal protective equipment.

Further information: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapours or spray mist. For personal protection see Section 8.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods of material for containment and cleaning up

Use mechanical handling equipment. Keep in suitable, closed containers for disposal. Absorb with liquid-binding material (sand, diatomite, acid binders, and universal binders) Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see Section 8

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Keep container tightly closed. Avoid formation of aerosol. Do not breathe vapours of spray mist. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

Hygiene Measures: Keep away from food, drink and animal feed. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of the workday. Take off all contaminated clothing immediately. Provide adequate ventilation. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist.

7.2 Conditions for safe storage, including any inculpabilities

Keep only in the original container.

Normal measures for preventive fire protection.

Keep container tightly closed and in a dry and cool place. Keep away from heat.

Keep away from food, drink and animal feed.

7.3 Specific end use(s)

No information available

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Component:	Iron Trichloride
Regulatory Basis:	UK. EH40 Workplace Exposure Limits (WELs)
Regulatory List:	EH40 WEL
Value Type:	Time Weighted Average (TWA)
Value:	1 mg/m ³
Regulatory Basis:	UK. EH40 Workplace Exposure Limits (WELs)
Regulatory List:	EH40 WEL
Value Type:	Short Term Exposure Limit (STEL)
Value:	2 mg/m ³

8.2 Exposure controls

Appropriate Engineering Controls:	Refer to protective measures listed in sections 7 & 8
Respiratory Protection:	Respiratory protection is required if exposure is exceeded (e.g OEL) When aerosol or mist is formed, use suitable respiratory protection.
Hand Protection:	Wear suitable gloves.
Gloves Material:	The glove material must be impermeable and resistant to the product / substance / preparation. Protective gloves should be replaced at the first signs of wear.
Eye Protection:	Goggles or face shield giving complete protection to the eyes.
Skin Protection:	Wear personal protective equipment
Environmental Exposure Controls:	Do not flush into surface water or sanitary sewer systems.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Dark Brown Liquid
Odour:	Characteristic
pH in water solution:	Acidic
Freezing Point:	ca. -10oC
Boiling Point:	280oC
Water Solubility:	Completely Soluble
Viscosity, kinematic:	7.5mm 2/s 25oC

No further information available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

No information available

10.4 Conditions to avoid

0oC

10.5 Incompatible materials

Materials to avoid: Acids, alkalis, copper, zinc, Silver, Hydrogen peroxide, Hypochlorites, Iron, Mild Steel

10.6 Hazardous decomposition products

Haz. decomp. Products: No information available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:	Value type: LD50. Value: 900 mg/kg Species: Rat
Acute Inhalation Toxicity:	Irritating to the respiratory system. Prolonged or repeated contact with vapour may cause bronchitis and corrosive damages on teeth.
Acute Dermal Toxicity:	Corrosive
Skin Corrosion / Irritation:	No sensitising effects known
Serious Eye Damage / Eye Irritation:	Eye Irritation

SECTION 12: Ecological Information

12.1 Toxicity

Acute aquatic toxicity. Toxic to algae.

12.2 Persistence and degradability

12.3 Bio accumulative potential

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal to normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.

Contaminated Packaging: Empty contaminated packaging thoroughly. They can be recycled after thorough and proper cleaning. Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

SECTION 14: Transport information



14.1	UN number:	2582
14.2	UN proper shipping name:	Ferric Chloride Solution
14.3	Transport hazard class(es):	8
14.4	Packing Group:	III

- 14.5 Environmental hazards:** Labelling according to 5.2.1.8 ADR no
 Labelling according to 5.2.1.8. RID no
 Labelling according to 5.2.1.6.3 IMDG no
 Classification as environmentally hazardous to
 2.9.3, IMDG no
 Classified as "P" according to 2.10 IMDG no

SECTION 15: Regulatory Information

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

15.2 Chemical Safety Assessment

Currently we do not have any information from our supplier about this.

SECTION 16: Other Information

Full text of R-Phrases referred to under sections 2 and 3:

R34: Causes burns

R37: Irritating to respiratory system

Full text of H-Statements referred to under sections 2 and 3

H314: Causes severe skin burns and eye damage

H335: May cause respiratory irritation.

Source of key data used to compile data sheet

Supplier information

Legal Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.