SAFETY DATA SHEET

HORELEX RUST REMOVER

Product Description

Horelex Rust Remover is a free flowing liquid preparation for removing rust from ferrous metals. Based on phosphoric acid, speciality detergents together with inhibitors and synergists. It is both fast and effective.

Directions

Use pvc or latex gloves when handling and polythene or other plastic resistant containers. Pour sufficient Horelex into a shallow tray to cover the component. This should be left for about ten minutes or longer if the part is very rusted. Remove and rinse in clean water. Dry quickly and thoroughly to prevent further oxidation.

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

1.1 Product Identifier

Product Name:	Horelex Rust Remover
Composition / Ingredients:	Based on Phosphoric Acid 5 – 15%
Tariff No :	28092000
CAS No.	7664-38-2
EC No.	231-633-2

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

Acid based cleaner for dissolving rust from ferrous metals.

1.3 Details of the supplier of the safety data sheet

Company Name :	Horological Solvents Ltd Barnside, 194 Wellington Road, Bury, Lancs. BL9 9AH
Tel:	0161 764 2741
Fax :	0161 764 8696
Email :	horological@restoration-materials.co.uk

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

According to 1272/2008

GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage

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2.2 Label elements

According to 1272/2008

DANGER  GHS05

Hazard Statements

H314 Causes severe skin burns and eye damage
H290 May be corrosive to metals

Precautionary Statements

P260 Do not breathe dust / fume / gas / mist / vapours / spray.
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 of immediately all contaminated clothing. Rinse skin with water / shower.
P304 + P340 IF INHALED : Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338. IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.

SECTION 3 : Composition/information on ingredients

3.2 Hazardous Ingredients

Material	CAS number	Level	Hazards	See Section 2
Orthophosphoric Acid	7664-38-2	5-15%	Skin Corr. 1	H314

SECTION 4 : First Aid Measures

4.1 Description of first aid measures

Skin Contact : Remove contaminated clothing, wash skin with soap and water. Seek medical attention immediately.
Eye Contact : Immediately flush eyes with water, holding eyelids apart for at least 10 minutes. Seek medical assistance immediately.
Ingestion : Do not induce vomiting. If conscious, give water to drink. Seek medical assistance immediately.
Inhalation : If irritation occurs, remove to fresh air, keep warm and at rest, seek medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Skin Contact : Causes severe burns
Eye Contact : Will cause severe damage
Respiratory Hazard : Not a hazard in normal use. Breathing spray mist may cause irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Medical supervision for at least 48 hours.

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SECTION 5 : Fire-fighting measures

Flammability hazard : Not combustible.

5.1 Extinguishing Media

No special requirements. As appropriate for the fire.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released : Phosphorus Oxides (e.g. P205)

5.3 Advice for fire-fighters

Wear self contained respiratory protection. Wear fully protective suit.

SECTION 6 : Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Take precautions to avoid contact. Use PPE as detailed in Section 8
Spillage may make floors slippery. Keep the area clear. Observe regulations.

6.2 Environmental precautions

Prevent spills from entering water courses.

6.3 Methods of material for containment and cleaning up

Small quantities, flush to foul sewer with a large quantity of water.
Large quantities, contain and absorb or pump into suitable containers for disposal.

6.4 Reference to other sections

Reference to other sections : Refer to section 8 and 13 of SDS.

SECTION 7 : Handling and Storage

7.1 Precautions for safe handling

Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
When diluting always pour product into water and not vice versa
Information about fire – and explosion protection : No special measures required.

7.2 Conditions for safe storage, including any inculpabilities

Store in a cool, dry place protected from frost and away from alkalis and strong oxidising agents. Store upright in original containers.
Recommended storage temperature 93% : +35 - + ^{o}C 42 ^{o}C
85% : +28 - +42 ^{o}C
80% : +15 - +42 ^{o}C
75% : no need in heating.
(For other acid concentrations please use interpolation)

7.3 Specific end use(s)

Specific end use(s) : Pre-patination fluid – cleaner. Metal surface treatment

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SECTION 8 : Exposure controls / personal protection

8.1 Control parameters

Orthophosphoric Acid 1mg/m^3 WEL 8 hour TWA (UK EH40)

8.2 Exposure controls

These measures are suggested on the basis of general use methods and may not be appropriate to all potential uses of the product The user is responsible for carrying out a full risk assessment of their specific processes and systems of work.

Respiratory protection :	Not applicable.
Hand Protection :	Wear pvc or latex gloves. Exact choice of glove depends on specific risk assessments.
Eye Protection :	Wear a full face visor to BS EN 166 39B
Skin Protection :	As necessary to prevent contact.

Environmental Protection : Prevent mixture from entering water courses.

SECTION 9 : Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance :	Colourless Liquid
Odour :	Mild, characteristic
Solubility in water :	Miscible with water
Viscosity :	@ 20 °C 1.1 – 600 mPA.s (5% - 105%)
Boiling point / Boiling Range	108 - 171 °C (50-93%, 1013 hPa)
Melting point / Melting Range	-18 + 27 °C (75-93% EC A.1)
pH -value :	(23 g/l) @ 20 °C <1
Flash Point :	Not applicable
Oxidising Properties :	Not applicable
Relative density :	@ 20°C (typical) : 1.290
Vapour density :	@ 20°C : 3.4 (air=1)
Vapour pressure :	@ 20 °C : 4 Pa
Flammability (solid,gaseous)	Product is not flammable
Ignition temperature :	Not applicable

SECTION 10 : Stability and reactivity

10.1 Reactivity

Reactivity : Incompatible with strong oxidising agents and alkalis.
Corrosive action on metals.

10.2 Chemical stability

Chemical stability : Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No hazardous reactions are expected to occur.

10.4 Conditions to avoid

Conditions to avoid : Extremes of temperature.

10.5 Incompatible materials

Materials to avoid : Incompatible with strong oxidising agents and alkalis.

10.6 Hazardous decomposition products

Haz. decomp. Products : Oxides of phosphorus if heated. P205

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SECTION 11 : Toxicological information

11.1 Information on toxicological effects

Acute toxicity : Based on available date, the classification criteria are not met.
Skin Corrosion / irritation : Mixture is classified as Skin Corr. 1B (see section 2)
Serious eye damage / irritation : Mixture is classified as Eye Dam. 1. (see section 2)
Respiratory or skin sensitisation : Does not contain any ingredients classified as sensitising.
Carcinogenicity : does not contain any ingredients classified as carcinogenic.
Reproductive toxicity : does not contain any ingredients classified as toxic for reproduction.

Symptoms / routes of exposure

Skin Contact : Causes severe burns.
Eye Contact : Will cause severe damage.
Ingestion : Moderate toxicity, will cause irritation and damage to gastro-intestinal tract due to Acidity.
Inhalation : Not a hazard in normal use.

SECTION 12 : Ecological Information

12.1 Toxicity

May effect aquatic organisms due to low pH if released into water course untreated.

12.2 Persistence and degradability

No classified as dangerous for the environment / aquatic toxicant.

12.3 Bio accumulative potential

Not expected to bioaccumulate.

12.4 Mobility in soil

This product has high water solubility.

12.5 Results of PBT and vPvB assessment

Contains no ingredients classified as PBT or vPvB.

12.6 Other adverse effects

No other adverse effects are anticipated.

SECTION 13 : Disposal considerations

13.1 Waste treatment methods

Process effluent can normally be discharged to foul sewer (subject to consent limits).
Large quantities, dispose via a licensed chemical waste contractor.
Empty cleaned containers can be recycled where facilities exist or sent for landfill or incineration if permitted.

SECTION 14 : Transport information

DOT Regulations

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14.1 UN number : 1805
14.2 UN proper shipping name : Orthophosphoric Acid
14.3 Transport hazard class(es) : 8
14.4 Packing Group : III
14.5 Environmental hazards : Not classified as environmentally hazardous for transport

SECTION 15 : Regulatory Information

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

Contents according to (EC) regulation No. 648/2004 on detergents.

15.2 Chemical Safety Assessment

Chemical Safety Assessment : A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

SECTION 16 : Other Information

Other Information : This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830
H314 : Causes severe skin burns and eye damage
H290 : May be corrosive to metals.

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.

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