

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA
GHS

Printing date: 29.03.2016


Revision: 29.03.2016

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

- **1.1 Product identifier**
- **Trade name: Rust X v.1**
- **Article number:** 100960
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture:** Rust remover/ rust-removing agent
- **1.3 Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Theochem Laboratories
7373 Rowlett Park Drive
Tampa, FL 33610
Phone: 813-237-6463
- **1.4 Emergency telephone number:**
ChemTel Inc.
+1 (800)255-3924, +1 (813)248-0585



SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Classifications listed are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**
- 
GHS05
- **Signal word** Danger
- **Hazard-determining components of labelling:**
Proprietary Organophosphonic Acid Salt
glycollic acid
oxalic acid
phosphoric acid
- **Hazard statements**
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
P260 Do not breathe mist/vapours/spray.
P264 Wash thoroughly after handling.

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P280 Wear protective gloves/protective clothing/eye protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P363 Wash contaminated clothing before reuse.
 P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **2.3 Other hazards** There are no other hazards not otherwise classified that have been identified.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Components:**

CAS: 7664-38-2 EINECS: 231-633-2 Index number: 015-011-00-6	phosphoric acid ⚠ Skin Corr. 1B, H314	10-20%
	Proprietary Organophosphonic Acid Salt ⚠ Skin Corr. 1B, H314 ⚠ Acute Tox. 4, H302; STOT SE 3, H335	<5%
CAS: 144-62-7 EINECS: 205-634-3 Index number: 607-006-00-8	oxalic acid ⚠ Eye Dam. 1, H318 ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312	<5%
CAS: 79-14-1 EINECS: 201-180-5	glycollic acid ⚠ Skin Corr. 1B, H314 ⚠ Acute Tox. 4, H332	<5%

- **Additional information:** For the wording of the listed Hazard Statements refer to section 16.

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SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately remove any clothing soiled by the product.
Immediately rinse with water.
If skin irritation continues, consult a doctor.
Seek immediate medical help for blistering or open wounds.
- **After eye contact:**
Protect unharmed eye.
Remove contact lenses if worn, if possible.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
Strong caustic effect on skin and mucous membranes.
Gastric or intestinal disorders.
Coughing
Nausea
Breathing difficulty
- **Hazards:**
Danger of gastric perforation.
Causes serious eye damage.
- **4.3 Indication of any immediate medical attention and special treatment needed**
If necessary oxygen respiration treatment.
Medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
The product is not flammable.
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** None.
- **5.2 Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

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SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

· 6.2 Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· 6.3 Methods and material for containment and cleaning up

Use limestone to neutralize and absorb spill.

Send for recovery or disposal in suitable receptacles.

Clean the affected area carefully; suitable cleaners are:

Warm water

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Prevent formation of aerosols.

Store in cool, dry place in tightly closed receptacles.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

· Information about fire - and explosion protection: No special measures required.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.

· **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from metals.

Do not store together with alkalis (caustic solutions).

Store away from oxidising agents.

· **Further information about storage conditions:** Keep container tightly sealed.

· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

7664-38-2 phosphoric acid

PEL (USA)	Long-term value: 1 mg/m ³
REL (USA)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
TLV (USA)	Short-term value: 3 mg/m ³ Long-term value: 1 mg/m ³
IOELV (EU)	Short-term value: 2 mg/m ³ Long-term value: 1 mg/m ³

144-62-7 oxalic acid

PEL (USA)	Long-term value: 1 mg/m ³
REL (USA)	Short-term value: 2 mg/m ³ Long-term value: 1 mg/m ³
TLV (USA)	Short-term value: 2 mg/m ³ Long-term value: 1 mg/m ³ anhydrous and dihydrate
IOELV (EU)	Long-term value: 1 mg/m ³

- **DNELs:** No further relevant information available.
- **PNECs:** No further relevant information available.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Clean skin thoroughly immediately after handling the product.

· Respiratory protection:

Not required under normal conditions of use.

Use suitable respiratory protective device in case of insufficient ventilation.

For spills, respiratory protection may be advisable.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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· **Eye protection:**

Safety glasses

· **Body protection:**

Full head, face and neck protection
Protective work clothing

· **Limitation and supervision of exposure into the environment:**

No further relevant information available.

· **Risk management measures:** See Section 7 for additional information.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **Appearance**

· Form:	Liquid
· Colour:	Clear
· Odour:	Acidic
· Odour threshold:	Not determined.

· pH-value:	< 2,0
· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	Not determined.

· **Flash point:** Not applicable.· **Flammability (solid, gaseous):** Not determined.· **Auto/Self-ignition temperature:** Not determined.· **Decomposition temperature:** Not determined.· **Self-igniting:** Product is not self-igniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Explosion limits**

· Lower:	Not determined.
· Upper:	Not determined.

· **Vapour pressure:** Not applicable.· **Density at 20 °C (68 °F):** 1,01 g/cm³ (8,428 lbs/gal)· **Relative density:** Not determined.· **Vapour density:** Not applicable.· **Evaporation rate:** Not applicable.· **Solubility in / Miscibility with water:**

Soluble.

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- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity**
 - Dynamic:** Not applicable.
 - Kinematic:** Not applicable.
- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Corrosive action on metals.
Reacts with alkali (lyes).
Toxic fumes may be released if heated above the decomposition point.
- **10.4 Conditions to avoid** Excessive heat.
- **10.5 Incompatible materials** Alkalis
- **10.6 Hazardous decomposition products**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)
Phosphorus compounds
Irritant gases/vapours

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

Proprietary Organophosphonic Acid Salt

Oral	LD50	798,1 mg/kg (rat)
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144-62-7 oxalic acid

Oral	LD50	375 mg/kg (rat)
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79-14-1 glycollic acid

Oral	LD50	2040 mg/kg (rat)
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- **Primary irritant effect**
- **Skin corrosion/irritation:**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation:**
Causes severe skin burns and eye damage.
- **Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.

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- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

- **NTP (National Toxicology Program):**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

- **Probable routes of exposure:**

Eye contact.

Skin contact.

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

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

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

- **STOT-single exposure:** Based on available data, the classification criteria are not met.

- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.

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

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:** The product contains materials that are harmful to the environment.

- **12.2 Persistence and degradability** Biodegradable

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** No further relevant information available.

- **Ecotoxicological effects:**

- **Remark:** After neutralisation a reduction of the harming action may be recognised.

- **Additional ecological information:**

- **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

- **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Dilute concentrate with water and neutralize afterwards with suitable material (lime or chalk). The formed salts are inert and pose little hazard.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN-Number

DOT, ADR, IMDG, IATA

UN1760

14.2 UN proper shipping name



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 5 L (1,3 gal).

DOT, IATA

Corrosive liquids, n.o.s. (Organic acid salt, Phosphoric acid)

ADR

1760 CORROSIVE LIQUID, N.O.S. (Organic acid salt, Phosphoric acid)

IMDG

CORROSIVE LIQUID, N.O.S. (Organic acid salt, Phosphoric acid)

14.3 Transport hazard class(es)

DOT



Class

8 Corrosive substances.

Label

8

ADR



Class

8 (C1) Corrosive substances.

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· Label	8
· IMDG, IATA	
	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	
· DOT, ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	
· Danger code (Kemler):	Warning: Corrosive substances. 80
· EMS Number:	F-A,S-B
· Segregation groups	Acids
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	
	Not applicable.

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

7664-38-2 | phosphoric acid

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California):

· Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

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- **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients are listed.

- **IARC (International Agency for Research on Cancer)**

None of the ingredients are listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

- **Canada**

- **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

- **Other regulations, limitations and prohibitive regulations**

- **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients are listed.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.

- **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 SVHC: Substances of Very High Concern

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vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Sources

Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: ISBN: 978-0-470-07488-6
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Safety Data Sheets, Individual Manufacturers

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