

Material Safety Data Sheet

MSDS: Rust Converter

Date of Issue: June 2004

Supersedes Issue Date: May 1992

Rust Converter

Company Details

Nutech Paint Pty Ltd (A.B.N. 94 242 116 396)
4 Keppler Circuit, Seaford, Victoria 3198, Australia
Tel: (03) 9775 1491 Fax: (03) 9775 1680
Emergency Telephone 000

Product Identification

This product is classified as hazardous according to criteria of Worksafe Australia

Product Name: Rust Converter
Other Names: Nutech Rust Converter, Othophosphoric Acid
Shipping Name: Othophosphoric Acid
U.N. Number: 1805
D.G. Class: 8
Subsidiary Risk: N/A
Hazchem Code: 2R
Packaging Group: III
Poisons Schedule: S5
Chemical Description: Othophosphoric Acid 10% - 30%
Use: Converts rust on metal surfaces

Physical Description / Properties

Appearance: Clear colourless liquid
Odour: Odourless, no odour warning
Boiling Point (°C): 158
pH < 1.5
Specific Gravity: 1.35
Shelf Life: N/A
Flammability Limits: No data
Solubility in Water: Soluble
Solubility in Organic Solvents: N/A
Flash Point (°C): Not combustible
Volatile Component: Hydrogen Chloride Gas

Ingredients

Chemical Entity	C.A.S. Number	Proportions %
Orthophosphoric	7664-38-2	10 - 30
Surfactants		2
Water		to make 100%

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Health Hazard Information

Health Effects

Effects of Overexposure – Acute

Vapor or mist may cause irritation to eyes and throat. Concentrated solutions may cause severe burns. Burns to the mouth, stomach pain, breathing difficulty, nausea, vomiting, diarrhea and convulsions and in severe cases collapse and death. Concentrated solutions may cause severe skin burns if not washed off immediately.

Effects of Exposure – Chronic

Dermatitis may occur from prolonged or repeated skin contact.

Emergency and First Aid Procedures

Swallowed

Rinse mouth with water. Do not induce vomiting. Have victim drink 300 ml water to dilute material in stomach. Transfer victim to emergency facility immediately.

Eye

Immediately hold open eyes and flush with water continuously for at least thirty minutes, holding eye lids open. Seek immediate medical attention.

Skin

Flush affected area with luke warm water for at least 20 minutes. Remove contaminated clothing whilst under running water. Seek medical attention immediately.

Inhaled

Remove to fresh air and apply artificial respiration if not breathing. Keep person calm and seek medical attention.

Advice to Doctor

Treat symptomatically as for strong acids.

Precautions for Use

Exposure Standards

1 mg/m³, 5 ppm Worksafe Australia, Short term exposure limit (TLV-STEL) 3 mg/m³

Engineering Controls

Maintain concentration below recommended exposure limit.

Ventilation

Use in well ventilated area or use local exhaust - face velocity > 25 mg/m³ minimum

Personal Protection

Gloves: Long impervious PVC, neoprene or nitrile

Overalls: Cotton

Eyes: Chemical goggles resistant to hydrocarbon solvents

Respiratory: Brush or Roller Application - SAR or SCBA facepiece respiratory protection including fit test.

Other: Rubber boots and splash apron advisable

Other Precautions

Will react with water/steam to produce toxic and corrosive fumes. Reacts with metals including iron, zinc, brass, galvanised iron, aluminium copper and copper alloys.

Application

Do not use in mechanical spray equipment as internal damage will result. Do not use in a pressurized spray hose.

Flammability

Non-Flammable.

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Safe Handling Information

Storage and Transport

Store in a cool place and out of direct sunlight. Store in a well ventilated area and away from oxidants and foodstuffs. Keep containers sealed and protected from physical damage. Not to be loaded with Class 1, 4.3, 5.1, 5.2, 6*, 7, foodstuff and food empties. (*where Class 6 Substance is a cyanide and Class 8 substance is an acid).

Spill

Isolate area. Recover free liquid. Ensure clean up by trained personnel only. Absorb in dry inert material and place in sealable labelled drums. Neutralise remaining product with lime or soda ash, sodium bicarbonate adjusting pH6-9. Flush to sewer as a greatly diluted solution. Wear full protective clothing. Avoid breathing vapours. Ventilate confined spaces or use breathing apparatus. Keep out of sewers and drains by diking or impounding. Advise authorities.

Waste Disposal

Observe all Federal, State and Local regulations. Dispatch sealed labelled material to approved waste authority.

Fire / Explosion Hazard

Explosion Limit Upper:

N/A

Explosion Limit Lower:

N/A

Flammability:

Non flammable

Corrosivity:

Attacks most metals

Hazardous Decomposition Products:

On heating emits toxic fumes

Hazardous Products:

Hydrogen Chloride. Reacts with cyanides, phosphides, sulphides, flourides, silicides

Extinguishing Media:

Water spray. Cool drums with water spray

Other Precautions:

Fire fighter should wear self-contained breathing apparatus in fire situations.

Contact Points

Nutech Paint Pty Ltd:	(03) 9775 1491
Poisons Information Centre:	131 126
Fire Brigade:	000
Ambulance:	000
Police:	000

Key to Abbreviations

N/A	Not applicable
NAS	Not assigned
°C	Degrees Celsius
k/Pa	Kilopascals
m/min	

We cannot anticipate all conditions under which this information and our products may be used. Users are advised to make their own tests to determine the safety and suitability of each product. All information in this Data Sheet is as up to date as possible. No warranty expressed or implied is made to the accuracy, reliability or completeness of this data. Nutech assumes no responsibility for personal injury or property damage to vendors, users or third parties caused by the material. Such vendors or users assume all risks associated with the use of the material.