



# SAFETY DATA SHEET

Revision Date 14-Oct-2016

Version 2

## 1. IDENTIFICATION

### Product identifier

**Product Name** 18E HEAVY DUTY RADIATOR CLEANER 32 FO BO

### Other means of identification

**Product Code** 80030

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Liquid cleaner

**Uses advised against** No information available

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

#### Manufactured and Distributed by:

ITW Permatex  
6875 Parkland Blvd.  
Solon, OH 44139 USA

#### May Also Be Distributed by:

ITW Permatex Canada  
35 Brownridge Road, Unit 1  
Halton Hills, ON Canada L7G 0C6  
Telephone: (800) 924-6994

**Company Phone Number** 1-87-Permatex  
(877) 376-2839

**24 Hour Emergency Phone Number** Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

**E-mail address** mail@permatex.com

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Gases)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

### Label elements

#### **Emergency Overview**

#### **Danger**

Harmful if swallowed or if inhaled  
Causes severe skin burns and eye damage



**Appearance** Yellow

**Physical state** Liquid

**Odor** Pungent

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Wear protective gloves/protective clothing/eye protection/face protection  
Do not eat, drink or smoke when using this product  
Wash face, hands and any exposed skin thoroughly after handling

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician  
Specific treatment (see supplemental first aid instructions on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Immediately call a POISON CENTER or doctor/physician  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell  
Immediately call a POISON CENTER or doctor/physician  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth  
Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

- Not applicable

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**substance(s)**

Chemical Name	CAS No	Weight-%	Trade Secret
HYDROCHLORIC ACID	7647-01-0	10-20	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of first aid measures**

**General advice**

Get medical advice/attention if you feel unwell.

Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
Ingestion	IF SWALLOWED: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See section 2 for more information.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>), Dry chemical, Foam

**Unsuitable extinguishing media**

None.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

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

**Personal precautions** Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological Information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Store locked up.

**Incompatible materials** Strong oxidizing agents, Water, Bases, Reducing agents, Amines, Alkalis

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
HYDROCHLORIC ACID 7647-01-0	Ceiling: 2 ppm	(vacated) Ceiling: 5 ppm (vacated) Ceiling: 7 mg/m <sup>3</sup> Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup>	IDLH: 50 ppm Ceiling: 5 ppm Ceiling: 7 mg/m <sup>3</sup>

*NIOSH IDLH Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves.

**Respiratory protection** Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Physical state** Liquid  
**Appearance** Yellow  
**Odor** Pungent  
**Odor threshold** No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	1	

Melting point / freezing point	No information available
Boiling point / boiling range	100-110 °C / 212-230 °F
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	1.09
Water solubility	Soluble in water
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

#### Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	0
Density	No information available
Bulk density	No information available

## 10. STABILITY AND REACTIVITY

#### Reactivity

Strong reducing agents  
Alkaline salts

#### Chemical stability

Stable under recommended storage conditions

#### Possibility of Hazardous Reactions

None under normal processing.

#### Conditions to avoid

Incompatible materials.

#### Incompatible materials

Strong oxidizing agents, Water, Bases, Reducing agents, Amines, Alkalis

#### Hazardous Decomposition Products

Hydrogen chloride

## 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Inhalation	Harmful by inhalation.
Eye contact	Corrosive to the eyes and may cause severe damage including blindness.
Skin contact	Contact causes severe skin irritation and possible burns.
Ingestion	Harmful if swallowed. Can burn mouth, throat, and stomach.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
HYDROCHLORIC ACID 7647-01-0	238 - 277 mg/kg ( Rat )	> 5010 mg/kg ( Rabbit )	= 1.68 mg/L ( Rat ) 1 h

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
HYDROCHLORIC ACID 7647-01-0	-	Group 3	-	X

*IARC (International Agency for Research on Cancer)*

*Not classifiable as a human carcinogen*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

**Target Organ Effects** Eyes, Respiratory system, Skin.

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 1587 mg/kg

**ATEmix (dermal)** 33433 mg/kg

**ATEmix (inhalation-gas)** 3755 mg/l

**ATEmix (inhalation-dust/mist)** 3.3 mg/l

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

0 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

**Other adverse effects**

No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D002

**14. TRANSPORT INFORMATION****DOT**

UN/ID no NA1760  
Proper shipping name: Compounds, Cleaning, liquid, (Hydrochloric, acid), Limited Quantity (LQ)  
Hazard Class 8  
Packing Group II  
Emergency Response Guide Number 154

**IATA**

Proper shipping name: Do not ship by air

**IMDG**

Proper shipping name: Do Not Ship

**15. REGULATORY INFORMATION****International Inventories**

TSCA Complies  
DSL/NDL Complies  
EINECS/ELINCS Complies  
ENCS Complies  
IECSC Complies  
KECL Complies  
PICCS Complies  
AICS Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
ENCS - Japan Existing and New Chemical Substances  
IECSC - China Inventory of Existing Chemical Substances  
KECL - Korean Existing and Evaluated Chemical Substances  
PICCS - Philippines Inventory of Chemicals and Chemical Substances  
AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
HYDROCHLORIC ACID - 7647-01-0	1.0

**SARA 311/312 Hazard Categories**

Acute health hazard Yes  
Chronic Health Hazard Yes  
Fire hazard No  
Sudden release of pressure hazard No  
Reactive Hazard No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
HYDROCHLORIC ACID 7647-01-0	5000 lb	-	-	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
HYDROCHLORIC ACID 7647-01-0	5000 lb	5000 lb	RQ 5000 lb final RQ RQ 2270 kg final RQ

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
WATER 7732-18-5	-	-	X
HYDROCHLORIC ACID 7647-01-0	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**WHMIS Hazard Class**

E - Corrosive material

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b>NFPA</b>	Health hazards 3	Flammability 0	Instability 0	-
<b>HMIS</b>	Health hazards 3	Flammability 0	Physical hazards 0	Personal protection B

NFPA (National Fire Protection Association)  
HMIS (Hazardous Material Information System)

Revision Date 14-Oct-2016

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet