

SAFETY DATA SHEET

Revision date 2026-Jun-22

Revision number 2

1. IDENTIFICATION

Product identifier

Product name FOSTEX[®] S

Other means of identification

Product code 1306D
Synonyms Scale inhibitor and corrosion inhibitor component

Recommended use of the chemical and restrictions on use

Recommended use [RU] No information available
Uses advised against None known

Details of the supplier of the safety data sheet

Supplier GEO Specialty Chemicals UK Ltd
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Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC: (800) 424-9300
Outside USA - +1 (703) 527-3887 collect calls accepted

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2024 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

EMERGENCY OVERVIEW

Physical state liquid	Color dark brown	Odor pungent
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GHS Label elements, including precautionary statements**DANGER****Hazard statements**

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

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Keep only in original container.

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Absorb spillage to prevent material damage.

Precautionary Statements - Storage

Store locked up. Store in corrosive resistant container with a resistant inner liner.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other information

- Not applicable

Unknown acute toxicity

- 43 - 48% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%	TRADE SECRET
Water	7732-18-5	< 55%	*
Polyaminomethylene Phosphonic Acid	PROPRIETARY	43 - 48%	*
Hydrochloric Acid	7647-01-0	< 8%	--
Phosphonic Acid	13598-36-2	< 6%	*

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

*The exact percentage (concentration) of composition has been withheld as a trade secret While some substances are claimed as trade secret in accordance with the provision of OSHA 29 CFR 1910.1200(i), all known hazards are clearly communicated within this document

4. FIRST AID MEASURES

Description of first aid measures

Eye contact

Remove contact lenses, if worn. Immediately flush with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Seek medical advice immediately.

Skin contact

Wash with plenty of soap and water. Remove contaminated clothing and footwear. Wash clothing before reuse and discard footwear which cannot be decontaminated. Seek immediate medical attention.

Ingestion

Do not induce vomiting. Give large amounts of water followed by milk if available. If vomiting should occur spontaneously, keep airway clear. Get medical attention. Never give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Acute effects

Corrosive to all tissues contacted.

Chronic effects

None known.

Aggravated Medical Conditions

Dermatitis. Existing eye, skin and respiratory tract conditions.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Special Hazard

Corrosive liquid. Acid components are incompatible with metals. May release flammable hydrogen gas on contact.

Advice for firefighters

Firefighting measures

Cool exposed containers with water spray after extinguishing fire.

Special protective equipment for firefighters

Full protective clothing and approved self-contained breathing apparatus required for firefighting personnel.

Explosion data**Sensitivity to Mechanical Impact**

None.

Sensitivity to Static Discharge

None.

6. ACCIDENTAL RELEASE MEASURES

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

Wear suitable protective clothing and gloves.

Environmental precautions**Environmental precautions**

Avoid runoff to waterways and sewers.

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

Clear spills immediately. Contain by diking, then pump into acid resistant container, label and store in a safe place for disposal. Neutralize remaining traces with dry soda ash, ground limestone, or hydrated builders lime.

7. HANDLING AND STORAGE

Precautions for safe handling**Advice on safe handling**

Keep container closed when not in use

Avoid contact with eyes, skin and clothing

Wear chemical splash goggles, gloves, and protective clothing when handling.

Wash thoroughly after handling

Avoid breathing vapors or mists

Use with adequate ventilation and employ respiratory protection where mist or vapors may be generated.

Do not take internally

FOR INDUSTRIAL USE ONLY.

Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Product may congeal or stratify if cold.

Warm to room temperature and mix well before using.

Store in a cool, dry place away from direct sunlight.

Store away from oxidizers, powdered metals and finely divided combustible materials.

Store in corrosion-resistant containers.

Incompatible products

Strong oxidizing agents, organic materials, metals, especially cyanides and sulfides. Contact with reactive metals may produce flammable hydrogen gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical name	Weight-%	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrochloric Acid 7647-01-0	< 8%	2 ppm Ceiling	5 ppm Ceiling; 7 mg/m ³ Ceiling	50 ppm IDLH

Appropriate engineering controls

Engineering controls

Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.

Individual protection measures, such as personal protective equipment

Eye/face Protection

Wear chemical splash goggles and face shield (when eye and face contact is possible due to splashing or spraying of material).

Hand Protection

Appropriate chemical resistant gloves should be worn

Skin and body protection

Standard work clothing and work shoes.

Respiratory protection

If exposures exceed the PEL or TLV, use NIOSH/MSHA approved respirator in accordance with OSHA Respiratory Protection Requirements under 29 CFR 1910.134. If there are no applicable or established exposure limit requirements or guidelines, general ventilation should be sufficient.

Other personal protection data

Eyewash fountains and safety showers must be easily accessible.

Hygiene measures

Take off contaminated clothing and wash before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid
Color	dark brown
Appearance	clear
Odor	pungent
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks Method</u>
pH	< 2	No information available
Melting / freezing point	-40 °C / -40 °F	No information available
Boiling point / boiling range	107 °C / 225 °F	No information available
Flash point	> 93 °C / > 200 °F	Pensky-Martens Closed Cup (PMCC)
Evaporation rate	No information available	No information available
Flammability (solid, gas)	Not applicable	No information available
Flammability Limit in Air		
Upper flammability limit	No information available	No information available
Lower flammability limit	No information available	No information available
Vapor pressure	No information available	No information available
Relative vapor density	No information available	No information available
Specific gravity	1.15 - 1.35	No information available
Solubility (water)	miscible	No information available
Solubility in other solvents	No information available	No information available
Partition coefficient: n-octanol/water	No information available	No information available
Autoignition temperature	No information available	No information available
Decomposition temperature	No information available	No information available
Kinematic viscosity	No information available	No information available
Dynamic viscosity	< 100 cps @ 25 °C	No information available

Other information

Particle characteristics Not applicable

Density	10.2 lb/gal @ 20 °C
Bulk Density	No information available
Molecular weight	No information available
Volatile Organic Compound (VOC) content, wt.%	No information available
Percent Volatile, wt.%	55 % (Water)

10. STABILITY AND REACTIVITY

Reactivity**Reactivity**

No data available.

Chemical stability**Chemical stability**

Stable under normal conditions of handling, use and transportation.

Possibility of hazardous reactions

Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization

Not anticipated under normal or recommended handling and storage conditions.

Conditions to avoid

Conditions to avoid

None known.

Incompatible materials

Materials to avoid

Strong oxidizing agents, organic materials, metals, especially cyanides and sulfides. Contact with reactive metals may produce flammable hydrogen gas.

Hazardous decomposition products

Hazardous decomposition products

Carbon dioxide, carbon monoxide, HCl and oxides of nitrogen and phosphorous.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact

Destructive to eye tissue. Causes burns and corneal damage which may be permanent, even resulting in blindness.

Skin contact

Destructive to tissues contacted. Causes severe chemical burns.

Ingestion

Can cause burns of mucous membranes of gastrointestinal tract.

Inhalation

Overexposure to mist or spray can cause severe damage to mucous membranes of respiratory tract.

Acute toxicity - Product Information

Oral LD50	> 2,000 mg/kg
Dermal LD50	> 2,000 mg/kg
Inhalation LC50	No information available

Acute toxicity - Component Information

Chemical name	Weight-%	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric Acid 7647-01-0	< 8%		> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat) 1 h
Phosphonic Acid 13598-36-2	< 6%	= 1895 mg/kg (Rat)	--	--

Symptoms related to the physical, chemical and toxicological characteristics**Symptoms**

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation**

Causes severe burns

Serious eye damage/eye irritation

Risk of serious damage to eyes

Sensitization

No information available

Germ cell mutagenicity

No information available

Carcinogenicity

This product does not contain any components in concentrations greater than or equal to 0.1% that are listed as known or suspected carcinogens by NTP, IARC, ACGIH, or OSHA.

Reproductive toxicity

No information available

Specific target organ toxicity - Single exposure

No information available.

Specific target organ toxicity - Repeated exposure

No information available

Aspiration hazard

No information available.

Numerical measures of toxicity - Product Information

- 43 - 48% of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral)	7079 mg/kg
ATEmix (dermal)	60180 mg/kg
ATEmix (inhalation-dust/mist)	6 mg/l

Interactive effects

No information available

Other information

Conclusions are drawn from sources other than direct testing.

12. ECOLOGICAL INFORMATION**Ecotoxicity****Acute aquatic toxicity - Product Information**

Fish	No information available
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Crustacea EC50 (48 hrs) : 258 mg/L (Daphnia)

Algae/aquatic plants -

Acute aquatic toxicity - Component Information

Chemical name	Weight-%	Algae/aquatic plants	Fish	Crustacea
Hydrochloric Acid 7647-01-0	< 8%	--		--
Phosphonic Acid 13598-36-2	< 6%	--		--

Persistence and degradability

Persistence and degradability

Not readily biodegradable

Bioaccumulative potential

Bioaccumulative potential

The bioaccumulation potential is low

Mobility

Mobility

No information available

Results of PBT and vPvB assessment

PBT and vPvB assessment

No information available

Other adverse effects

Other information

No other ecological studies have been carried out on this product.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Dispose of product by neutralization, dewatering, and incineration (or by other approved methods) in accordance with applicable Federal, state and local regulations. Avoid landfilling liquids. Avoid landfilling liquids.

Contaminated packaging

Since empty containers retain product residue, follow label warnings even after container is emptied.

RCRA

Is the unused product a RCRA hazardous waste if discarded? (Yes/No)

Yes

If yes, the EPA Hazardous Waste Code is:

D002 (corrosivity)

14. TRANSPORT INFORMATION

DOT

Regulated

DOT UN/NA Number	UN 3265
Proper shipping name	Corrosive Liquid, Acidic, Organic, N.O.S., (Organo-Phosphonic Acid)
Hazard class	8
Packing group	III
ERG Number	153

ICAO/IATA Regulated

UN number	UN 3265
Proper shipping name	Corrosive Liquid, Acidic, Organic, N.O.S., (Organo-Phosphonic Acid)
Hazard class	8
Packing group	III
ERG Code	8L

IMDG Regulated

UN number	UN 3265
Proper shipping name	Corrosive Liquid, Acidic, Organic, N.O.S., (Organo-Phosphonic Acid)
Hazard class	8
Packing group	III
EmS	F-A, S-B

15. REGULATORY INFORMATION

International Inventories

United States (TSCA)

All ingredients are on the inventory or exempt from listing

Australia (AICS)

All ingredients are on the inventory or exempt from listing

Canada (DSL)

All ingredients are on the inventory or exempt from listing

Canada (NDSL)

None of the ingredients are on the inventory.

China (IECSC)

All ingredients are on the inventory or exempt from listing

European Union (EINECS)

All ingredients are on the inventory or exempt from listing

European Union (ELINCS)

None of the ingredients are on the inventory.

Japan (ENCS)

Some ingredients are not on the inventory.

KECL

None of the ingredients are on the inventory.

Philippines (PICCS)

Some ingredients are not on the inventory.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

AIIC - Australian Inventory of Industrial Chemicals
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
IECSC - China Inventory of Existing Chemical Substances
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

U.S. Federal Regulations

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	CERCLA/SARA Hazardous Substance RQ	CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs	Calculated Product RQ
Hydrochloric Acid 7647-01-0	5000 lb final RQ; 2270 kg final RQ	500 lb TPQ (gas only)	--

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 - Hazardous Substances	CWA - Reportable Quantities	CWA - Priority Pollutants	CWA - Toxic Pollutants
Hydrochloric Acid 7647-01-0	Present	5000 lb RQ	--	--

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	Weight-%	SARA 313 - Threshold Values %
Hydrochloric Acid 7647-01-0	< 8%	1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

• As indicated above, this product contains an ingredient(s) subject to the reporting requirements of SARA Title III, Section 313 (40 CFR Part 372). This document constitutes the notification required by the SARA regulations and this notification statement must not be detached from the SDS. If the SDS is copied for any reason, including distribution, this notice must also be copied and accompany all redistributed SDS's. Failure to do so may subject you to penalties under law.

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Hydrochloric Acid 7647-01-0	
Massachusetts Right to Know Law	Extraordinarily hazardous
Minnesota Hazardous Substance List	Present
New Jersey Right to Know List	sn 1012
Pennsylvania Right to Know List	Environmental hazard
Phosphonic Acid 13598-36-2	
New Jersey Right to Know List	sn 1519

16. OTHER INFORMATION

NFPA Rating	Health hazards - 3	Flammability - 0	Instability - 1	HMIS Rating
Health hazards - 3	Flammability - 0	Physical hazards - 1	Personal protection - B	

Product code 1306D

Revision date 2026-Jun-22

Revision number 2

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