



SAFETY DATA SHEET

FLOGARD MS6228

1 IDENTIFICATION OF PREPARATION AND OF COMPANY

1.1 Identification of the substance or preparation

Product : FLOGARD MS6228

1.2 Use of substance/preparation

Corrosion inhibitor

1.3 Company/undertaking identification

GE Water & Process Technologies France SNC

Allée du 1er Mai

Parc d'Activités de Paris-Est

F-77183 Croissy Beaubourg

Tel.: 01 60 37 59 60

1.4 Emergency telephone

- GE Betz (24h/24h) : 01 60 37 00 00

- Official advisory body

ORFILA : 01 45 42 59 59

2 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical description

Aqueous acidic solution of phosphonates and polymer

Hazardous component(s)	EINECS/ELINCS #	CAS #	Conc.
Phosphoric Acid C, R34	231-633-2	7664-38-2	10 - 25 %
Phosphonic acid, (1-hydroxyethylidene)bis- Xi, R41	220-552-8	2809-21-4	5 - 10 %

Remarks

The classification of the above substance(s) is given, including the symbol letters and R phrases which are assigned in accordance with their physicochemical, health and environmental hazards. Please refer to section 16 (Relevant R phrases, used in sections 2 and 3 of this SDS), where the full text of each relevant R phrase is listed.

3 HAZARDS IDENTIFICATION

Important hazards

- Health/physical hazard Irritating to eyes and skin.
- Symptoms of exposure Inhalation may cause irritation of respiratory tract.
May cause redness or itching of skin.
- Environmental hazards The product is not classified as dangerous for the environment.



SAFETY DATA SHEET

FLOGARD MS6228

4 FIRST AID MEASURES

Skin contact	Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, seek medical advice.
Eye contact	Flush immediately with plenty of running water. If irritation persists, seek medical advice.
Inhalation	Remove to fresh air.
Ingestion	Rinse mouth with water. Immediately give 1-2 glasses of water, if victim is fully conscious.

5 FIRE-FIGHTING MEASURES

Extinguishing Media

- Suitable Carbon dioxide, dry chemicals, foam, water spray (fog).

Special protective equipment for fire fighters Self contained breathing apparatus. (CEN : EN 137)
Protective clothing (CEN : EN 469)
Protective gloves (CEN : EN 659)
Helmet (CEN : EN 443)

Special exposure hazards Oxides of carbon, sulphur, and phosphorus evolved in fire.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions Wear protective clothing, gloves and safety goggles.
Please refer also to section no. 8 'Exposure controls' for further information.

Environmental precautions Prevent from entering sewers or the immediate environment.
Accidental release of large quantities into the aquatic environment may harm aquatic organisms.

Methods for Cleaning Up

- on soil Absorb onto inert material and dispose of according to Special Waste Regulations.
Remove small spills with plenty of water.

7 HANDLING AND STORAGE

7.1 Handling Acidic.
Do not mix with alkaline material.

7.2 Storage Keep away from heat.

Maximum storage stability (days) 20

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

- VME/VLE (INRS) Phosphoric Acid : 0.2 ppm, 1mg/m³ (VME) - 0.5 ppm, 2 mg/m³ (VLE)

Exposure controls

- Recommended engineering controls Adequate ventilation to maintain air contaminants below exposure limits.



SAFETY DATA SHEET

FLOGARD MS6228

Exposure controls

- Respiratory protection In case of insufficient ventilation, use a breathing mask with filter type: P2
CEN : EN 140; EN 143; EN 149
- Hand protection Neoprene gloves (Protection against unintentional short-term contact)
CEN : EN 374-1/2/3; EN 420
- Eye protection Safety goggles.
CEN : EN 166
- Skin protection Protective clothing.
CEN : EN 340; EN 369; EN 465
- Environmental exposure controls Prevent from entering in public sewers or the immediate environment.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Appearance	Liquid
Colour	Colourless to yellow
Odour	Slight

9.2 Important health, safety and environmental info

pH in aqueous solution	(5%) 1,8
Flash point (Pensky/Martens)	(°C) >100
Density at 20°C (kg/m ³)	1183
Solubility in water (% weight)	Completely soluble
Viscosity at 20°C (mPas)	5
Relative vapour density (air=1)	<1
Evaporation rate (ether=1)	<1

9.3 Other information

Melting point, (°C)	-10
Pour point, (°C)	-7

10 STABILITY AND REACTIVITY

- 10.1 Conditions to avoid** Keep away from heat.
- 10.2 Materials to avoid** Avoid contact with strong oxidisers.
Avoid contact with strong bases.
- 10.3 Hazardous decomposition products** Oxides of carbon, sulphur, and phosphorus evolved in fire.

11 TOXICOLOGICAL INFORMATION

Mammalian Test Data

- Oral LD50, rat (mg/kg) >2000 (estimated value)
- Dermal LD50, rabbit (mg/kg) >2000 (estimated value)



SAFETY DATA SHEET

FLOGARD MS6228

Exposure hazard

- Inhalation May cause irritation to respiratory organs.
- Skin contact Causes irritation.
- Eye contact Causes irritation.
- Ingestion May cause slight gastrointestinal irritation.

12 ECOLOGICAL INFORMATION

Ecotoxicity

- Fathead minnow (mg/l) LC50 : >5000
NOEL : 1510
96 hour Acute Toxicity
- Daphnia Magna (mg/l) LC50 : 2790
NOEL : 1640
48 hour Acute Toxicity

Persistence and degradability

- COD (mgO₂/g) 99 (calculated data)
- BOD 5 (mgO₂/g) 1 (calculated data)
- BOD 28 (mgO₂/g) 4 (calculated data)
- Closed Bottle Test (% Degradation in 28 days) 6 (calculated data)
- Zahn-Wellens Test (% Degradation in 28 days) 21 (calculated data)
- TOC (mg C/g) 31 (calculated data)

Summary

The product is not classified as dangerous for the environment.
The evaluation of environmental hazards is based on the concentration limits as set out in directive 1999/45/EC.

13 DISPOSAL CONSIDERATIONS

Disposal of product

According to Special Waste Regulations.

EWC (European Waste Code) recommendation : 16 03 05
16 Wastes not otherwise specified in the list.
16 03 Off-specification batches and unused products.
16 03 05 Organic wastes containing dangerous substances.
Depending on the origin and state of the waste, other EWC numbers may be applicable too.

Disposal of packaging

According to Special Waste Regulations.

EWC (European Waste Code) recommendation : 15 01 10
15 Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified.
15 01 Packaging (including separately collected municipal packaging waste).
15 01 10 Packaging containing residues of or contaminated by dangerous substances.
Depending on the origin and state of the waste, other EWC numbers may be applicable too.

14 TRANSPORT INFORMATION

Substance id.no. (SIN) (UN No.) 1760

Correct shipping name Corrosive liquid, n.o.s.



SAFETY DATA SHEET

FLOGARD MS6228

- Contains Phosphoric Acid mixture
Phosphonic acid, (1-hydroxyethylidene)bis-, mixture

Land transport

- Transport hazard label 8
Corrosive
- RID/ADR classification 8
- Packaging group III

Maritime transport

- Transport hazard label 8
Corrosive
- IMO-IMDG class 8
- Packaging group III
- EmS no. F-A, S-B
- MFAG no. See Emergency action guide.
The treatment recommended in this Guide is specified in the appropriate tables and more comprehensive in the appropriate sections of the Appendices.

Air transport

- Transport hazard label 8
Corrosive
- ICAO/IATA classification 8

Other information TREMCARD 80GC9-III

15 REGULATORY INFORMATION

EEC labelling information

- Symbol(s) Irritant:Xi
- R Phrase(s) R 36/38 :Irritating to eyes and skin.
- S Phrase(s) S 26 :In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 28 :After contact with skin, wash immediately with plenty of soap and water.
S 36/37/39 :Wear suitable protective clothing, gloves and eye/face protection.
- EINECS number All ingredients of this product are listed in EINECS or ELINCS, unless specifically exempted under the EEC Directive 67/548/EEC.

16 OTHER INFORMATION

Nature of revision Correction in Section: 1,9

Based on EC Directive 1999/45/EC
2001/58/EC
2001/118/EC

This information is based on our current knowledge and is intended to describe the product for the purpose of safety requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



SAFETY DATA SHEET

FLOGARD MS6228

Relevant R phrases, used in sections 2 and 3 of this SDS

R 34 : Causes burns.

R 41 : Risk of serious damage to eyes.

R 36/38 : Irritating to eyes and skin.