Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830

SAFETY DATA SHEET

DS-3 2kg

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

1.1 Product identifier

Product name : **DS-3 2kg**

Product code : 61027

Product description : Not available.

Product type : Solid.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Restricted to professional users.

Material uses : Water-conditioning agent.

1.3 Details of the supplier of the safety data sheet

Supplier : **Fernox**
2 Genesis Business Park
Albert Drive
Sheerwater
Woking GU21 5RW

Information contact : **+44 (0) 330 100 7750**
+44 (0) 330 100 7751
europeanregulatory@macdermid.com

1.4 Emergency telephone number

Supplier

Telephone number : **+44 (0) 330 100 7750**

Hours of operation : **24/7**

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Irrit. 2, H315
Eye Irrit. 2, H319
Aquatic Chronic 3, H412

Ingredients of unknown toxicity :

Ingredients of unknown ecotoxicity :

SECTION 2: Hazards identification

Classification according to Directive 1999/45/EC [DPD]

Europe

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xi; R36/38
R52/53

Human health hazards : Irritating to eyes and skin.

Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Causes serious eye irritation.
Causes skin irritation.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves: < 1 hour (breakthrough time): disposable vinyl. Wear eye or face protection: Recommended: safety glasses with side-shields . Avoid release to the environment.

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

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : sulphamidic acid

Supplemental label elements : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

Product/ingredient name	Identifiers	%	Classification 67/548/EEC	Classification Regulation (EC) No. 1272/2008 [CLP]	Type
Europe					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38 **See Section 16 for the full text of the R-phrases declared above.**	Skin Irrit. 2, H315 Eye Irrit. 2, H319 **See Section 16 for the full text of the H statements declared above.**	[1]
Austria					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Belgium					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Bulgaria					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Croatia					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Czech Republic					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]

SECTION 3: Composition/information on ingredients

Denmark					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Estonia					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Finland					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
France					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Germany					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Greece					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Hungary					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Ireland					

SECTION 3: Composition/information on ingredients

sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Italy					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Latvia					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Lithuania					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Netherlands					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Norway					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Poland					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Portugal					

SECTION 3: Composition/information on ingredients

sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Romania					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Slovakia					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Slovenia					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Spain					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Sweden					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Switzerland					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
Turkey					

SECTION 3: Composition/information on ingredients

sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
United Kingdom (UK)					
sulphamidic acid	REACH #: 01-2119488633-28 EC: 226-218-8 CAS: 5329-14-6 Index: 016-026-00-0	≥90	Xi; R36/38 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	[1]
Phenol, ethoxylated	EC: 500-013-6 CAS: 9004-78-8	≥3 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
[5] Substance of equivalent concern

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

SECTION 4: First aid measures

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides

5.3 Advice for firefighters

Special precautions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

: Store between the following temperatures: 5 to 30°C (41 to 86°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Europe

No exposure limit value known.

Austria

No exposure limit value known.

Belgium

No exposure limit value known.

Bulgaria

No exposure limit value known.

Croatia

No exposure limit value known.

Czech Republic

No exposure limit value known.

Denmark

No exposure limit value known.

Estonia

No exposure limit value known.

Finland

No exposure limit value known.

France

No exposure limit value known.

Germany

No exposure limit value known.

Greece

No exposure limit value known.

Hungary

No exposure limit value known.

Ireland

No exposure limit value known.

Italy

No exposure limit value known.

Latvia

No exposure limit value known.

Lithuania

No exposure limit value known.

Netherlands

No exposure limit value known.

Norway

No exposure limit value known.

Poland

No exposure limit value known.

SECTION 8: Exposure controls/personal protection

Portugal

No exposure limit value known.

Romania

No exposure limit value known.

Slovakia

No exposure limit value known.

Slovenia

No exposure limit value known.

Spain

No exposure limit value known.

Sweden

No exposure limit value known.

Switzerland

No exposure limit value known.

Turkey

No exposure limit value known.

United Kingdom (UK)

No exposure limit value known.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived effect levels

No DELs available.

Predicted effect concentrations

No PECs available.

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Recommended: safety glasses with side-shields

SECTION 8: Exposure controls/personal protection

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. < 1 hour (breakthrough time): disposable vinyl

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: None assigned.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: None assigned.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Solid.

Colour : Yellow.

Odour : acidic smell

pH : 2 [Conc. (% w/w): 1%]

Melting point/freezing point : 205°C

Initial boiling point and boiling range : Not available.

Flash point : Not available.

Upper/lower flammability or explosive limits : Not available.

Relative density : Not available.

Solubility(ies) : Soluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Not available.

VOC content : 4.9 % (w/w)

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
sulphamidic acid	LD50 Oral	Rat	3160 mg/kg	-
Phenol, ethoxylated	LD50 Oral	Rat	>2000 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
sulphamidic acid	Eyes - Moderate irritant	Rabbit	-	20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	-
	Skin - Mild irritant	Human	-	120 hours 4 Percent Intermittent	-
	Skin - Severe irritant	Rabbit	-	24 hours 500 milligrams	-

Conclusion/Summary : Not available.

Sensitiser

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

SECTION 11: Toxicological information

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Eye contact : Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : No specific data.

Ingestion : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
sulphamidic acid	Acute LC50 14200 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Phenol, ethoxylated	Acute LC50 >100 mg/l	Fish	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

SECTION 12: Ecological information

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
sulphamidic acid	<1	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
16 03 03*	inorganic wastes containing dangerous substances

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	2967	2967	2967
14.2 UN proper shipping name	Sulphamic acid (sulphamidic acid)	Sulphamic acid (sulphamidic acid)	Sulphamic acid (sulphamidic acid)

SECTION 14: Transport information

14.3 Transport hazard class(es)	8 	8 	8 
14.4 Packing group	III	-	III
14.5 Environmental hazards	No.	No.	No.
Additional information	**Hazard identification number** 80 **Tunnel code** E	**Emergency schedules (EmS)** F-A, S-B	**Passenger and Cargo Aircraft**Quantity limitation: 5 kg **Cargo Aircraft Only**Quantity limitation: 60 kg

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Europe inventory : Not determined.

National regulations

Austria

Belgium

Bulgaria

Croatia

Czech Republic

Denmark

Estonia

Finland

France

Germany

Hazard class for water : nwg Appendix No. 4

Greece

SECTION 15: Regulatory information

Hungary
Ireland
Italy
Latvia
Lithuania
Netherlands
Norway
Poland
Portugal
Romania
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom (UK)

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Date of printing 10.12.2016

Date of issue/ Date of revision : 06.12.2016

Date of previous issue : 30.11.2016

Version : 2.22

Notice to reader

◤ Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Aquatic Chronic 3, H412	Calculation method

Europe

Full text of abbreviated H statements : H315 Causes skin irritation.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS] :

Aquatic Chronic 3, H412	LONG-TERM AQUATIC HAZARD - Category 3
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2

Full text of abbreviated R phrases : R36/38- Irritating to eyes and skin.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications [DSD/DPD] : Xi - Irritant

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Fernox SDS CLP Europe