

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II and Regulation (EC) No. 1272/2008 (CLP)

SAFETY DATA SHEET

Protector F1 500ml

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

1.1 Product identifier

: Protector F1 500ml **Product name**

62094 **Product code**

Product description : Not available.

Product type : Liquid.

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

Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

: Alpha, Alent plc **Forsyth Road Sheerwater** Woking Surrey **England**

> **GU21 5RZ** Tel: +44(0)1483 758400 Fax: +44(0)1483 728837

Contact person: europeanregulatory@alent.

com

+44 1483 758400 **Emergency phone:** Material uses: Water-boiler treatment. Manufacturer : Alpha, Alent plc Koenendelseweg 29

5222 BG

's-Hertogenbosch The Netherlands Tel: +31 73 6280 111

Fax: +31 73 6219 283

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]

Not classified.

Ingredients of unknown

toxicity

: Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 71.3%

Ingredients of unknown

: Percentage of the mixture consisting of ingredient(s) of unknown hazards to the

ecotoxicity aquatic environment: 71.3%

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

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

SECTION 2: Hazards identification

Classification : Not classified.

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 : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.

Hazardous ingredients

Supplemental label: Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

elements

2.3 Other hazards

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

		<u>Classification</u>		
Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре
REACH #: 01-2119979079-20 EC: 202-394-1	≥1 - <2. 5	,	Acute Tox. 4, H302 Eve Irrit. 2, H319	[1]
CAS: 95-14-7		R52/53	Aquatic Chronic 2, H411	
		See Section 16 for the full text of the R- phrases declared above.	See Section 16 for the full text of the H statements declared above.	
REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥10 - <25	Not classified.	Not classified.	[2]
EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
REACH #: 01-2119979079-20		Xn; R22	Acute Tox. 4, H302	[1]
EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7 CAS: 10102-40-6 REACH #: 01-2119979079-20 EC: 202-394-1	REACH #: ≥1 - <2. 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 REACH #: ≥10 - <25 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7 CAS: 10102-40-6 REACH #: ≥1 - <2. 01-2119979079-20 EC: 202-394-1	REACH #: 01-2119979079-20 5	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7 CAS: 10102-40-6 REACH #: 01-2119979079-20 EC: 202-394-1 EXECUTE

2,2',2"-nitrilotriethanol REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7 sodium, hydrate (1:2: 2), (T-4)- REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7 CAS: 10102-40-6 Not classified. Not classified. Not classified. Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: EC: 231-551-7 ≥3 - <5 Not classified. Not classified.	1
	[2]
benzotriazole REACH #: ≥1 - <2. Xn; R22 Acute Tox. 4, H302	[1]
EC: 202-394-1	
Bulgaria	
Molybdate (MoO42-), sodium, hydrate (1:2: CAS: 10102-40-6 2), (T-4)- EC: 231-551-7 ≥3 - <5 Not classified. Not classified. Not classified.	[2]
benzotriazole REACH #: ≥1 - <2. Xn; R22 Acute Tox. 4, H302 5	[1]
EC: 202-394-1	
Croatia	
Molybdate (MoO42-), sodium, hydrate (1:2: CAS: 10102-40-6 2), (T-4)- EC: 231-551-7 ≥3 - <5 Not classified. Not classified.	[2]
benzotriazole REACH #: ≥1 - <2. Xn; R22 Acute Tox. 4, H302	[1]
EC: 202-394-1 Xi; R36 Eye Irrit. 2, H319	
CAS: 95-14-7 R52/53 Aquatic Chronic 2, H411 Propane-1,2-diol REACH #: ≥1 - <3 Not classified. Not classified.	_
01-2119456809-23 EC: 200-338-0 CAS: 57-55-6	
Czech Republic	
2,2',2"-nitrilotriethanol	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: CAS: 10102-40-6 2), (T-4)- EC: 231-551-7 ≥3 - <5 Not classified. Not classified.	[2]
benzotriazole REACH #: ≥1 - <2. Xn; R22 Acute Tox. 4, H302	[1]
EC: 202-394-1	
Denmark	
2,2',2"-nitrilotriethanol REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 Not classified. Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: CAS: 10102-40-6	[2]
benzotriazole REACH #: ≥1 - <2. Xn; R22 Acute Tox. 4, H302	[1]
01-2119979079-20	
Estonia	

Protector F1 500ml					
SECTION 3: Cor	nposition/inform	nation or	n ingredients		
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥10 - <25	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Finland					
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥10 - <25	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
France					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Germany					
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Greece					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Hungary					1
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Ireland					
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8	≥10 - <25	Not classified.	Not classified.	[2]

Not classified.

≥3 - <5

≥1 - <2. Xn; R22

Molybdate (MoO42-),

sodium, hydrate (1:2:

2), (T-4)benzotriazole EC: 203-049-8 CAS: 102-71-6

EC: 231-551-7

REACH #:

CAS: 10102-40-6

[2]

[1]

Not classified.

Acute Tox. 4, H302

SECTION 3: Composition/information on ingredients

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propane-1,2-diol	01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6	5 ≥1 - <3	Xi; R36 R52/53 Not classified.	Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Not classified.	[2]
Italy					
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7	≥1 - <2. 5	Xn; R22 Xi; R36 R52/53	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	[1]
Latvia					
sebacic acid	REACH #: 01-2119519212-52 EC: 203-845-5 CAS: 111-20-6	≥5 - <10	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1] [2]
propane-1,2-diol	EC: 202-394-1 CAS: 95-14-7 REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6	≥1 - <3	Xi; R36 R52/53 Not classified.	Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Not classified.	[2]
Lithuania					
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8	≥10 - <25	Not classified.	Not classified.	[2]
sebacic acid	CAS: 102-71-6 REACH #: 01-2119519212-52 EC: 203-845-5	≥5 - <10	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	CAS: 111-20-6 EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	,	Acute Tox. 4, H302	[1]
propane-1,2-diol	EC: 202-394-1 CAS: 95-14-7 REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6	≥1 - <3	Xi; R36 R52/53 Not classified.	Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Not classified.	[2]
Netherlands					
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7	≥1 - <2. 5	Xn; R22 Xi; R36 R52/53	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	[1]
Norway					
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥10 - <25	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5		Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	

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propane-1,2-diol	REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6	≥1 - <3	Not classified.	Not classified.	[2]
Poland					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Portugal					
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥10 - <25	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Romania					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Slovakia					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Slovenia					
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥10 - <25	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Spain					
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SECTION 3: Composition/information on ingredients					
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31	≥10 - <25	Not classified.	Not classified.	[2]

2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥10 - <25	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Sweden					
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥10 - <25	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Switzerland					
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥10 - <25	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	,	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
Turkey			.,		
benzotriazole	REACH #: 01-2119979079-20	≥1 - <2. 5	Xn; R22	Acute Tox. 4, H302	[1]
	EC: 202-394-1 CAS: 95-14-7		Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
United Kingdom (UK)					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-	EC: 231-551-7 CAS: 10102-40-6	≥3 - <5	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1	≥1 - <2. 5	Xn; R22 Xi; R36	Acute Tox. 4, H302 Eye Irrit. 2, H319	[1]
	CAS: 95-14-7		R52/53	Aquatic Chronic 2, H411	roi
propane-1,2-diol	REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6	≥1 - <3	Not classified.	Not classified.	[2]

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

SECTION 3: Composition/information on ingredients

- [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. Get medical attention if irritation

occurs.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Get medical attention if symptoms occur. 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. Get medical attention if symptoms occur.

Ingestion : Wash out mouth with water. 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. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms

occur.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.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

: In a fire or if heated, a pressure increase will occur and the container may burst.

SECTION 5: Firefighting measures

Hazardous combustion products

: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/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. 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).

6.3 Methods and material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. 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 Advice on general occupational hygiene

- : Put on appropriate personal protective equipment (see Section 8).
- : 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.

SECTION 7: Handling and storage

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 : Not available.

solutions

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

Product/ingredient name	Exposure limit values
Europe	
No exposure limit value known.	
Austria	
2,2',2"-nitrilotriethanol	GKV_MAK (Austria, 12/2011). Skin sensitiser. PEAK: 10 mg/m³, 4 times per shift, 15 minutes. Form: inhalable fraction
Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-	PEAK: 1.6 ppm, 4 times per shift, 15 minutes. Form: inhalable fraction TWA: 5 mg/m³ 8 hours. Form: inhalable fraction TWA: 0.8 ppm 8 hours. Form: inhalable fraction GKV_MAK (Austria, 12/2011). PEAK: 10 mg/m³, (measured as Mo), 4 times per shift, 15 minutes. Form: inhalable fraction TWA: 5 mg/m³, (measured as Mo) 8 hours. Form: inhalable fraction
Belgium	
2,2',2"-nitrilotriethanol	Lijst Grenswaarden / Valeurs Limites (Belgium, 4/2014). TWA: 5 mg/m³ 8 hours.
Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-	Lijst Grenswaarden / Valeurs Limites (Belgium, 4/2014). TWA: 0.5 mg/m³, (as Mo) 8 hours. Form: respirable fraction
Bulgaria	
Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-	България Министерство на труда и социалната политика и Министерството на здравеопазването (Bulgaria, 1/2012). Limit value 8 hours: 5 mg/m³, (as Molybdenum) 8 hours.
Croatia	
Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-	MinGoRP GVI/KGVI (Croatia, 6/2013). ELV: 5 mg/m³, (as Mo) 8 hours. STELV: 10 mg/m³, (as Mo) 15 minutes.
propane-1,2-diol	MinGoRP GVI/KGVI (Croatia, 6/2013). ELV: 10 mg/m³ 8 hours. Form: particulates ELV: 474 mg/m³ 8 hours. Form: total vapour and particulates ELV: 150 ppm 8 hours.
Czech Republic	

SECTION 8: Exposure controls/personal protection

2.2'.2"-nitrilotriethanol

MZCR PEL/NPK-P (Czech Republic, 1/2013). Absorbed through skin.

STEL: 10 mg/m³ 15 minutes. STEL: 1.64 ppm 15 minutes. TWA: 5 mg/m³ 8 hours. TWA: 0.82 ppm 8 hours.

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

MZCR PEL/NPK-P (Czech Republic, 1/2013).

TWA: 5 mg/m³, (as Mo) 8 hours. STEL: 25 mg/m³, (as Mo) 15 minutes.

Denmark

2,2',2"-nitrilotriethanol

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Arbejdstilsynet (Denmark, 10/2012).

TWA: 3.1 mg/m³ 8 hours. TWA: 0.5 ppm 8 hours.

Arbejdstilsynet (Denmark, 10/2012).

TWA: 5 mg/m³, (calculated as Mo) 8 hours.

Estonia

2,2',2"-nitrilotriethanol

Töökeskkonna keemiliste ohutegurite piirnormid määrus nr 293 (Estonia, 1/2008). Skin sensitiser.

STEL: 10 mg/m³ 15 minutes. TWA: 5 mg/m³ 8 hours.

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Töökeskkonna keemiliste ohutegurite piirnormid määrus nr 293 (Estonia, 1/2008).

TWA: 5 mg/m³ 8 hours. Form: respirable dust

TWA: 5 mg/m³ 8 hours.

TWA: 10 mg/m³ 8 hours. Form: total dust

Finland

2,2',2"-nitrilotriethanol

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 3/2014).

TWA: 5 mg/m³ 8 hours.

Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 3/2014).

TWA: 0.5 mg/m³, (calculated as Mo) 8 hours.

France

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Ministère du travail (France, 7/2012). Notes: Ministry of Labour (Brochure INRS Ed 984, July 2012). Indicative exposure limits

TWA: 5 mg/m³, (as Mo) 8 hours. STEL: 10 mg/m³, (as Mo) 15 minutes.

Germany

No exposure limit value known.

Greece

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Υπουργείο Εργασίας και Κοινωνικών Υποθέσεων (Greece, 2/2012).

TWA: 5 mg/m³, (as Mo) 8 hours.

Hungary

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

25/2000. (IX. 30.) EüM-SzCsM együttes rendelet (Hungary, 12/2011).

TWA: 5 mg/m³, (as Mo) 8 hours. PEAK: 20 mg/m³, (as Mo) 15 minutes.

Ireland

2.2'.2"-nitrilotriethanol

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

propane-1,2-diol

NAOSH (Ireland, 12/2011).

OELV-8hr: 5 mg/m³ 8 hours.

NAOSH (Ireland, 12/2011).

OELV-8hr: 10 mg/m³, (as Mo) 8 hours. Form: Inhalable fraction OELV-8hr: 0.5 mg/m³, (as Mo) 8 hours. Form: respirable fraction

NAOSH (Ireland, 12/2011).

OELV-8hr: 10 mg/m³ 8 hours. Form: particulate

OELV-8hr: 470 mg/m³ 8 hours. Form: vapour and particulates OELV-8hr: 150 ppm 8 hours. Form: vapour and particulates

SECTION 8: Exposure controls/personal protection

Italy

No exposure limit value known.

Latvia

sebacic acid

benzotriazole

propane-1,2-diol

Lithuania

2,2',2"-nitrilotriethanol

sebacic acid

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

propane-1,2-diol

Netherlands

No exposure limit value known.

Norway

2,2',2"-nitrilotriethanol

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

propane-1,2-diol

Poland

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Portugal

2,2',2"-nitrilotriethanol

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Romania

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Slovakia

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Slovenia

Ministru kabineta - AER (Latvia, 2/2011).

TWA: 4 mg/m³ 8 hours.

Ministru kabineta - AER (Latvia, 2/2011).

TWA: 5 mg/m³ 8 hours.

Ministru kabineta - AER (Latvia, 2/2011).

TWA: 7 mg/m³ 8 hours.

Lietuvos Higienos Normos HN 23 (Lithuania, 10/2007). Skin sensitiser.

STEL: 10 mg/m³ 15 minutes. TWA: 5 mg/m³ 8 hours.

Lietuvos Higienos Normos HN 23 (Lithuania, 10/2007).

TWA: 4 mg/m3 8 hours.

Lietuvos Higienos Normos HN 23 (Lithuania, 10/2007).

TWA: 5 mg/m³ 8 hours.

Lietuvos Higienos Normos HN 23 (Lithuania, 10/2007).

TWA: 7 mg/m³ 8 hours.

FOR-2011-12-06-1358 (Norway, 1/2013).

TWA: 5 mg/m³ 8 hours.

FOR-2011-12-06-1358 (Norway, 1/2013).

TWA: 5 mg/m³, (calculated as Mo) 8 hours. FOR-2011-12-06-1358 (Norway, 1/2013).

TWA: 79 mg/m³ 8 hours. TWA: 25 ppm 8 hours.

Rozporzadzenie Ministra Pracy i Polityki Spolecznej (Dz.U. 2014 poz. 817) (Poland, 6/2014).

TWA: 4 mg/m³, (calculated as Mo) 8 hours. STEL: 10 mg/m³, (calculated as Mo) 15 minutes.

Instituto Português da Qualidade (Portugal, 3/2007).

TWA: 5 mg/m³ 8 hours.

Instituto Português da Qualidade (Portugal, 3/2007).

TWA: 0.5 mg/m³, (expressed as Mo) 8 hours. Form: respirable fraction

HG 1218/2006 cu modificările și completările ulterioare (Romania, 1/2012).

VLA: 2 mg/m³ 8 hours.

Short term: 65 mg/m3 15 minutes.

Nariadenie vlády SR c. 355/2006 (Slovakia, 12/2011).

TWA: 5 mg/m³, (Molybdenum and its soluble compounds, as Mo) 8 hours.

SECTION 8: Exposure controls/personal protection

2,2',2"-nitrilotriethanol

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Slovenia, 12/2010).

TWA: 5 mg/m³ 8 hours. Form: inhalable fraction

Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Slovenia, 12/2010).

TWA: 5 mg/m³, (measured as Mo) 8 hours. Form: inhalable fraction

KTV: 20 mg/m 3 , (measured as Mo), 4 times per shift, 15 minutes.

Form: inhalable fraction

Spain

2,2',2"-nitrilotriethanol

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Sweden

2,2',2"-nitrilotriethanol

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Switzerland

2,2',2"-nitrilotriethanol

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

Turkey

No exposure limit value known.

United Kingdom (UK)

Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-

propane-1,2-diol

INSHT (Spain, 1/2014).

TWA: 5 mg/m³ 8 hours. INSHT (Spain, 1/2014).

TWA: 0.5 mg/m³, (as Mo) 8 hours. Form: respirable fraction

AFS 2011:18 (Sweden, 12/2011). Absorbed through skin.

STEL: 10 mg/m³ 15 minutes. TWA: 5 mg/m³ 8 hours. STEL: 1.6 ppm 15 minutes. TWA: 0.8 ppm 8 hours.

AFS 2011:18 (Sweden, 12/2011).

TWA: 5 mg/m³, (as Mo) 8 hours. Form: total dust

SUVA (Switzerland, 1/2014).

STEL: 20 mg/m³ 15 minutes. Form: Inhalable dust (total dust) TWA: 5 mg/m³ 8 hours. Form: Inhalable dust (total dust)

SUVA (Switzerland, 1/2014).

TWA: 5 mg/m³, (calculated as Mo) 8 hours. Form: Inhalable dust (total dust)

EH40/2005 WELs (United Kingdom (UK), 12/2011).

STEL: 10 mg/m³, (as Mo) 15 minutes. TWA: 5 mg/m³, (as Mo) 8 hours.

EH40/2005 WELs (United Kingdom (UK), 12/2011).

TWA: 10 mg/m³ 8 hours. Form: Particulate

TWA: 474 mg/m³ 8 hours. Form: Sum of vapour and particulates TWA: 150 ppm 8 hours. Form: Sum of vapour and particulates

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.

SECTION 8: Exposure controls/personal protection

8.2 Exposure controls

Appropriate engineering

: 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: safety glasses with side-shields. Recommended: 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 or dusts.

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. < 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: 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.

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, air-purifying or air-fed 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.

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 : Liquid.

Colour Yellow. [Light] **Odour** : Aromatic. [Slight]

pH : 8 [Conc. (% w/w): 100%]

Melting point/freezing point Initial boiling point and

boiling range Flash point

Not available. : Not available.

: Not available.

[Product does not sustain combustion.]

Upper/lower flammability or

explosive limits

: 1.1 **Relative density**

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

Partition coefficient: n-octanol/ : Not available.

water

Auto-ignition temperature

: Not available.

SECTION 9: Physical and chemical properties

1.7 % (w/w) **VOC** content

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
benzotriazole	LD50 Oral	Rat	560 mg/kg	-

Conclusion/Summary

: Not available.

Acute toxicity estimates

Route	ATE value
Oral	6706.1 mg/kg

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
benzotriazole	Eyes - Severe irritant	Rabbit	-	100 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

: Not available. **Conclusion/Summary** Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

SECTION 11: Toxicological information

Not available.

Aspiration hazard

Not available.

Information on the likely

: Not available.

routes of exposure

Potential acute health effects

Inhalation: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Eye contact: No known significant effects or critical hazards.Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No specific data.Ingestion: No specific data.Skin contact: No specific data.Eye contact: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects: Not available.

Long term exposure

Potential immediate : Not available.

effects

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

Conclusion/Summary: Not available.

12.2 Persistence and degradability

Conclusion/Summary: Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition : Not available.

coefficient (Koc)

SECTION 12: Ecological information

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

: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

European waste catalogue (EWC)

Waste code	Waste designation
16 03 06	organic wastes other than those mentioned in 16 03 05

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. 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
14.1 UN number	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-
14.3 Transport hazard class(es)	-	-
14.4 Packing group	-	-

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 : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

Europe inventory: Not determined.

National regulations

Austria
Belgium
Bulgaria
Croatia

Czech Republic

Denmark
Estonia
Finland
France

Professional Disease(s) - Table number: 84

: nwg Appendix No. 4

Germany

Hazard class for water

Greece Hungary

<u>Ireland</u>

Italy

Latvia

Lithuania

Netherlands

Norway

Poland

Portugal

Product/ingredient name	List name	Name on list	Classification	Notes
` '		molibdénio, compostos solúveis	Carc. A3	-

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

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Date of issue/ Date of : 04.06.2015.

revision

Date of previous issue : 04.06.2015.

Version : 2.02

Notice to reader

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

acronyms

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]

ClassificationJustification

Not classified.

Europe

Full text of abbreviated H: H302 Harmful if swallowed.

statements H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Full text of classifications

[CLP/GHS]

: Acute Tox. 4, H302 ACUTE TOXICITY (oral) - Category 4

Aquatic Chronic 2, H411 LONG-TERM AQUATIC HAZARD - Category 2

Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Full text of abbreviated R

phrases

: R22- Harmful if swallowed. R36- Irritating to eyes.

R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Full text of classifications

[DSD/DPD]

: Xn - Harmful Xi - Irritant

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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.

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