



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

SAFETY DATA SHEET

Protector F1 Express (10x265ml)

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

1.1 Product identifier

Product name : Protector F1 Express (10x265ml)
Product code : 58229
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

Manufacturer

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

Emergency phone: +44 1483 758400

Material uses : Water treatment agent.

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]

Aerosol 1, H222, H229

Ingredients of unknown toxicity : Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 51.4%

Ingredients of unknown ecotoxicity : Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 51.4%

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

Europe

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

Protector F1 Express (10x265ml)

SECTION 2: Hazards identification

Classification : F+; R12
Physical/chemical hazards : Extremely flammable.

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** : Danger

Hazard statements : Extremely flammable aerosol.
 Pressurized container: may burst if heated.

Precautionary statements

Prevention : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use.

Response : Not applicable.

Storage : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Disposal : Not applicable.

Hazardous ingredients :

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

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	%	<u>Classification</u>		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Europe 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]
1,2-benzisothiazol-3(2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R41, R38 R43 N; R50 See Section 16 for the full text of the R-phrases declared above.	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 See Section 16 for the full text of the H-statements declared above.	[1]
Austria					

Protector F1 Express (10x265ml)**SECTION 3: Composition/information on ingredients**

2,2',2''-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	EC: 231-551-7 CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10 ≥3 - <5	Not classified. F+; R12	Not classified. Flam. Gas 1, H220 Press. Gas, H280	[2] [2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
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] [1]
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Belgium					
2,2',2''-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	EC: 231-551-7 CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10 ≥3 - <5	Not classified. F+; R12	Not classified. Flam. Gas 1, H220 Press. Gas, H280	[2] [2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
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] [1]
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Bulgaria					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	EC: 231-551-7 CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10 ≥3 - <5	Not classified. F+; R12	Not classified. Flam. Gas 1, H220 Press. Gas, H280	[2] [2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]

Protector F1 Express (10x265ml)**SECTION 3: Composition/information on ingredients**

benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7	≥1 - <2.5	Xn; R22	Acute Tox. 4, H302	[1]
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xi; R36 R52/53 Xn; R22 Xi; R41, R38 R43 N; R50	Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Croatia					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- butane	EC: 231-551-7 CAS: 10102-40-6 REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥5 - <10 ≥3 - <5	Not classified. F+; R12	Not classified. Flam. Gas 1, H220 Press. Gas, H280	[2] [2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7	≥1 - <2.5	Xn; R22	Acute Tox. 4, H302	[1]
propane-1,2-diol	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.	-
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Czech Republic					
2,2',2''-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- benzotriazole	EC: 231-551-7 CAS: 10102-40-6 REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7	≥5 - <10 ≥1 - <2.5	Not classified. Xn; R22	Not classified. Acute Tox. 4, H302	[2] [1]
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xi; R36 R52/53 Xn; R22 Xi; R41, R38 R43 N; R50	Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Denmark					
2,2',2''-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	EC: 231-551-7 CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10 ≥3 - <5	Not classified. F+; R12	Not classified. Flam. Gas 1, H220 Press. Gas, H280	[2] [2]
butane	REACH #:	≥3 - <5	F+; R12	Flam. Gas 1, H220	[2]

Protector F1 Express (10x265ml)**SECTION 3: Composition/information on ingredients**

benzotriazole	01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0 REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥1 - <2.5	Xn; R22	Press. Gas, H280 Acute Tox. 4, H302	[1]
1,2-benzisothiazol-3(2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xi; R36 R52/53 Xn; R22	Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
Estonia					
2,2',2''-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-propane	CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10	Not classified.	Not classified.	[2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥1 - <2.5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
1,2-benzisothiazol-3(2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R36 R52/53 Xn; R22	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
Finland					
2,2',2''-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-propane	CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10	Not classified.	Not classified.	[2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥1 - <2.5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
1,2-benzisothiazol-3(2H)-one	CAS: 2634-33-5	≥0.01 - <0.05	Xn; R22 Xi; R36 R52/53 Xn; R22 Xi; R41, R38	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302 Skin Irrit. 2, H315	[1]

Protector F1 Express (10x265ml)**SECTION 3: Composition/information on ingredients**

	Index: 613-088-00-6		R43 N; R50	Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	
France					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- butane	EC: 231-551-7 CAS: 10102-40-6 REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥5 - <10	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
1,2-benzisothiazol-3 (2H)-one	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥1 - <2. 5	Xn; R22 Xi; R36 R52/53 Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Germany					
propane	EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥1 - <2. 5	Xn; R22 Xi; R36 R52/53 Xn; R22	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
1,2-benzisothiazol-3 (2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xi; R41, R38 R43 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Greece					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	EC: 231-551-7 CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10	Not classified.	Not classified.	[2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥1 - <2. 5	Xn; R22 Xi; R36 R52/53 Xn; R22	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
1,2-benzisothiazol-3 (2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xi; R41, R38 R43 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]

Protector F1 Express (10x265ml)**SECTION 3: Composition/information on ingredients**

Hungary					
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-butane	EC: 231-551-7 CAS: 10102-40-6 REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥5 - <10	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
1,2-benzisothiazol-3 (2H)-one	Index: 601-004-00-0 REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥1 - <2.5	Xn; R22 Xi; R36 R52/53 Xn; R22	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
		≥0.01 - <0.05	Xi; R41, R38 R43 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Ireland					
2,2',2"-nitritotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-propane	CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10	Not classified.	Not classified.	[2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6 EC: 220-120-9	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
propane-1,2-diol	Index: 601-004-00-0 REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6 EC: 220-120-9	≥1 - <2.5	Xn; R22 Xi; R36 R52/53 Not classified.	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Not classified.	[1]
1,2-benzisothiazol-3 (2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥1 - <3	Xn; R22	Acute Tox. 4, H302	[2]
		≥0.01 - <0.05	Xi; R41, R38 R43 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Italy					
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥1 - <2.5	Xn; R22	Acute Tox. 4, H302	[1]
1,2-benzisothiazol-3 (2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xi; R36 R52/53 Xn; R22	Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
			Xi; R41, R38 R43 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	
Latvia					

Protector F1 Express (10x265ml)**SECTION 3: Composition/information on ingredients**

sebacic acid	REACH #: 01-2119519212-52 EC: 203-845-5 CAS: 111-20-6	≥10 - <25	Not classified.	Not classified.	[2]
propane	EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
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] [2]
propane-1,2-diol	REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6	≥1 - <3	Not classified.	Not classified.	[2]
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Lithuania					
2,2',2''-nitritotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥25 - <50	Not classified.	Not classified.	[2]
sebacic acid	REACH #: 01-2119519212-52 EC: 203-845-5 CAS: 111-20-6	≥10 - <25	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- benzotriazole	EC: 231-551-7 CAS: 10102-40-6 REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7	≥5 - <10	Not classified.	Not classified.	[2]
propane-1,2-diol	REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6	≥1 - <2. 5	Xn; R22 Xi; R36 R52/53	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411	[1]
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥1 - <3	Not classified.	Not classified.	[2]
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
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]
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]

Protector F1 Express (10x265ml)

SECTION 3: Composition/information on ingredients

Norway					
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	EC: 231-551-7 CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10	Not classified.	Not classified.	[2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
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]
propane-1,2-diol	REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6	≥1 - <3	Not classified.	Not classified.	[2]
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Poland					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	EC: 231-551-7 CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10	Not classified.	Not classified.	[2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
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]
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Portugal					
2,2',2"-nitrilotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	EC: 231-551-7 CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10	Not classified.	Not classified.	[2]
		≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]

Protector F1 Express (10x265ml)**SECTION 3: Composition/information on ingredients**

butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥1 - <2.5	Xn; R22 Xi; R36 R52/53 Xn; R22	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
1,2-benzisothiazol-3 (2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xi; R41, R38 R43 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Romania					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	EC: 231-551-7 CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10	Not classified.	Not classified.	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥1 - <2.5	Xn; R22 Xi; R36 R52/53 Xn; R22	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
1,2-benzisothiazol-3 (2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xi; R41, R38 R43 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Slovakia					
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- benzotriazole	EC: 231-551-7 CAS: 10102-40-6 REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥5 - <10	Not classified.	Not classified.	[2]
1,2-benzisothiazol-3 (2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R36 R52/53 Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Slovenia					
2,2',2''-nitritotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10	Not classified.	Not classified.	[2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
benzotriazole	REACH #:	≥1 - <2.5	Xn; R22	Acute Tox. 4, H302	[1]

Protector F1 Express (10x265ml)**SECTION 3: Composition/information on ingredients**

	01-2119979079-20 EC: 202-394-1 CAS: 95-14-7	5	Xi; R36 R52/53	Eye Irrit. 2, H319 Aquatic Chronic 2, H411	
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Spain					
2,2',2''-nitritotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	CAS: 10102-40-6 EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥5 - <10	Not classified.	Not classified.	[2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
1,2-benzisothiazol-3 (2H)-one	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7	≥1 - <2. 5	Xn; R22 Xi; R36 R52/53 Xn; R22	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xi; R41, R38 R43 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Sweden					
2,2',2''-nitritotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- benzotriazole	CAS: 10102-40-6 REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7	≥5 - <10	Not classified.	Not classified.	[2]
1,2-benzisothiazol-3 (2H)-one	EC: 220-120-9 CAS: 2634-33-5 Index: 613-088-00-6	≥1 - <2. 5	Xn; R22 Xi; R36 R52/53 Xn; R22	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
		≥0.01 - <0.05	Xi; R41, R38 R43 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Switzerland					
2,2',2''-nitritotriethanol	REACH #: 01-2119486482-31 EC: 203-049-8 CAS: 102-71-6 EC: 231-551-7	≥25 - <50	Not classified.	Not classified.	[2]
Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)- propane	CAS: 10102-40-6 EC: 200-827-9	≥5 - <10	Not classified.	Not classified.	[2]
		≥3 - <5	F+; R12	Flam. Gas 1, H220	[2]

Protector F1 Express (10x265ml)**SECTION 3: Composition/information on ingredients**

butane	CAS: 74-98-6 Index: 601-003-00-5 REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Press. Gas, H280 Flam. Gas 1, H220 Press. Gas, H280	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥1 - <2.5	Xn; R22 Xi; R36 R52/53 Xn; R22	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
1,2-benzisothiazol-3 (2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xi; R41, R38 R43 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
Turkey propane	EC: 200-827-9 CAS: 74-98-6 Index: 601-003-00-5	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
butane	REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥3 - <5	F+; R12	Flam. Gas 1, H220 Press. Gas, H280	[2]
benzotriazole	REACH #: 01-2119979079-20 EC: 202-394-1 CAS: 95-14-7 EC: 220-120-9	≥1 - <2.5	Xn; R22 Xi; R36 R52/53 Xn; R22	Acute Tox. 4, H302 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Acute Tox. 4, H302	[1]
1,2-benzisothiazol-3 (2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xi; R41, R38 R43 N; R50	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]
United Kingdom (UK) Molybdate (MoO42-), sodium, hydrate (1:2: 2), (T-4)-butane	EC: 231-551-7 CAS: 10102-40-6 REACH #: 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0	≥5 - <10 ≥3 - <5	Not classified. F+; R12	Not classified. Flam. Gas 1, H220 Press. Gas, H280	[2] [2]
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]
propane-1,2-diol	REACH #: 01-2119456809-23 EC: 200-338-0 CAS: 57-55-6 EC: 220-120-9	≥1 - <3	Not classified.	Not classified.	[2]
1,2-benzisothiazol-3 (2H)-one	CAS: 2634-33-5 Index: 613-088-00-6	≥0.01 - <0.05	Xn; R22 Xi; R41, R38 R43 N; R50	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400	[1]

SECTION 3: Composition/information on ingredients

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 if irritation occurs. |
| 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. Get medical attention if symptoms occur. 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

Potential acute health effects

- | | |
|---------------------|---|
| Eye contact | : No known significant effects or critical hazards. |
| 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. |

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 : Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurised contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. 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).

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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.

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SECTION 6: Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. 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 non-combustible, 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. Contaminated absorbent material may pose the same hazard as the spilt product.
- 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). Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. 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 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. Eliminate all ignition sources. 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

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SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
<p>Europe</p> <p>No exposure limit value known.</p> <p>Austria</p> <p>2,2',2''-nitritotriethanol</p> <p>Molybdate (MoO₄²⁻), sodium, hydrate (1:2:2), (T-4)-</p> <p>propane</p> <p>butane</p>	<p>GKV_MAK (Austria, 12/2011). Skin sensitiser.</p> <p>PEAK: 10 mg/m³, 4 times per shift, 15 minutes. Form: inhalable fraction</p> <p>PEAK: 1.6 ppm, 4 times per shift, 15 minutes. Form: inhalable fraction</p> <p>TWA: 5 mg/m³ 8 hours. Form: inhalable fraction</p> <p>TWA: 0.8 ppm 8 hours. Form: inhalable fraction</p> <p>GKV_MAK (Austria, 12/2011).</p> <p>PEAK: 10 mg/m³, (measured as Mo), 4 times per shift, 15 minutes. Form: inhalable fraction</p> <p>TWA: 5 mg/m³, (measured as Mo) 8 hours. Form: inhalable fraction</p> <p>GKV_MAK (Austria, 12/2011).</p> <p>TWA: 1000 ppm 8 hours.</p> <p>TWA: 1800 mg/m³ 8 hours.</p> <p>CEIL: 2000 ppm, 3 times per shift, 60 minutes.</p> <p>CEIL: 3600 mg/m³, 3 times per shift, 60 minutes.</p> <p>GKV_MAK (Austria, 12/2011).</p> <p>TWA: 800 ppm 8 hours.</p> <p>CEIL: 3800 mg/m³, 3 times per shift, 60 minutes.</p> <p>CEIL: 1600 ppm, 3 times per shift, 60 minutes.</p> <p>TWA: 1900 mg/m³ 8 hours.</p>
<p>Belgium</p> <p>2,2',2''-nitritotriethanol</p> <p>Molybdate (MoO₄²⁻), sodium, hydrate (1:2:2), (T-4)-</p> <p>propane</p> <p>butane</p>	<p>Lijst Grenswaarden / Valeurs Limites (Belgium, 4/2014).</p> <p>TWA: 5 mg/m³ 8 hours.</p> <p>Lijst Grenswaarden / Valeurs Limites (Belgium, 4/2014).</p> <p>TWA: 0.5 mg/m³, (as Mo) 8 hours. Form: respirable fraction</p> <p>Lijst Grenswaarden / Valeurs Limites (Belgium, 4/2014).</p> <p>TWA: 1000 ppm 8 hours. Form: gas</p> <p>Lijst Grenswaarden / Valeurs Limites (Belgium, 4/2014).</p> <p>TWA: 1000 ppm 8 hours. Form: gas</p>
<p>Bulgaria</p> <p>Molybdate (MoO₄²⁻), sodium, hydrate (1:2:2), (T-4)-</p> <p>propane</p> <p>butane</p>	<p>България Министерство на труда и социалната политика и Министерство на здравеопазването (Bulgaria, 1/2012).</p> <p>Limit value 8 hours: 5 mg/m³, (as Molybdenum) 8 hours.</p> <p>България Министерство на труда и социалната политика и Министерство на здравеопазването (Bulgaria, 1/2012).</p> <p>Limit value 8 hours: 1800 mg/m³ 8 hours.</p> <p>България Министерство на труда и социалната политика и Министерство на здравеопазването (Bulgaria, 1/2012).</p> <p>Limit value 8 hours: 1900 mg/m³ 8 hours.</p>
<p>Croatia</p> <p>Molybdate (MoO₄²⁻), sodium, hydrate (1:2:2), (T-4)-</p> <p>butane</p> <p>propane-1,2-diol</p>	<p>MinGoRP GVI/KGVI (Croatia, 6/2013).</p> <p>ELV: 5 mg/m³, (as Mo) 8 hours.</p> <p>STELV: 10 mg/m³, (as Mo) 15 minutes.</p> <p>MinGoRP GVI/KGVI (Croatia, 6/2013).</p> <p>STELV: 1810 mg/m³ 15 minutes.</p> <p>STELV: 750 ppm 15 minutes.</p> <p>ELV: 1450 mg/m³ 8 hours.</p> <p>ELV: 600 ppm 8 hours.</p> <p>MinGoRP GVI/KGVI (Croatia, 6/2013).</p> <p>ELV: 10 mg/m³ 8 hours. Form: particulates</p> <p>ELV: 474 mg/m³ 8 hours. Form: total vapour and particulates</p> <p>ELV: 150 ppm 8 hours.</p>
<p>Czech Republic</p>	

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SECTION 8: Exposure controls/personal protection

2,2',2''-nitrilotriethanol	MZCR PEL/NPK-P (Czech Republic, 1/2013). Absorbed through skin. STEL: 10 mg/m ³ 15 minutes. STEL: 1.64 ppm 15 minutes. TWA: 5 mg/m ³ 8 hours. TWA: 0.82 ppm 8 hours.
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	MZCR PEL/NPK-P (Czech Republic, 1/2013). TWA: 5 mg/m ³ , (as Mo) 8 hours. STEL: 25 mg/m ³ , (as Mo) 15 minutes.
Denmark	
2,2',2''-nitrilotriethanol	Arbejdstilsynet (Denmark, 10/2012). TWA: 3.1 mg/m ³ 8 hours. TWA: 0.5 ppm 8 hours.
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	Arbejdstilsynet (Denmark, 10/2012). TWA: 5 mg/m ³ , (calculated as Mo) 8 hours.
propane	Arbejdstilsynet (Denmark, 10/2012). TWA: 1000 ppm 8 hours. TWA: 1800 mg/m ³ 8 hours.
butane	Arbejdstilsynet (Denmark, 10/2012). TWA: 500 ppm 8 hours. TWA: 1200 mg/m ³ 8 hours.
Estonia	
2,2',2''-nitrilotriethanol	Töökeskkonna keemiliste ohutegurite piirnormid määrus nr 293 (Estonia, 1/2008). Skin sensitiser. STEL: 10 mg/m ³ 15 minutes. TWA: 5 mg/m ³ 8 hours.
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	Töökeskkonna keemiliste ohutegurite piirnormid määrus nr 293 (Estonia, 1/2008). TWA: 5 mg/m ³ 8 hours. Form: respirable dust TWA: 5 mg/m ³ 8 hours. TWA: 10 mg/m ³ 8 hours. Form: total dust
propane	Töökeskkonna keemiliste ohutegurite piirnormid määrus nr 293 (Estonia, 1/2008). TWA: 1800 mg/m ³ 8 hours. TWA: 1000 ppm 8 hours.
butane	Töökeskkonna keemiliste ohutegurite piirnormid määrus nr 293 (Estonia, 1/2008). TWA: 1500 mg/m ³ 8 hours. TWA: 800 ppm 8 hours.
Finland	
2,2',2''-nitrilotriethanol	Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 3/2014). TWA: 5 mg/m ³ 8 hours.
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 3/2014). TWA: 0.5 mg/m ³ , (calculated as Mo) 8 hours.
propane	Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 3/2014). TWA: 800 ppm 8 hours. TWA: 1500 mg/m ³ 8 hours. STEL: 1100 ppm 15 minutes. STEL: 2000 mg/m ³ 15 minutes.
butane	Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 3/2014). STEL: 1000 ppm 15 minutes. TWA: 800 ppm 8 hours.
France	

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SECTION 8: Exposure controls/personal protection

Molybdate (MoO ₄ ²⁻), 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/m ³ , (as Mo) 8 hours. STEL: 10 mg/m ³ , (as Mo) 15 minutes.
butane	Ministère du travail (France, 7/2012). Notes: Ministry of Labour (Brochure INRS Ed 984, July 2012). Indicative exposure limits TWA: 800 ppm 8 hours. TWA: 1900 mg/m ³ 8 hours.
Germany	
propane	TRGS900 AGW (Germany, 4/2014). TWA: 1800 mg/m ³ 8 hours. PEAK: 7200 mg/m ³ 15 minutes. TWA: 1000 ppm 8 hours. PEAK: 4000 ppm 15 minutes.
butane	TRGS900 AGW (Germany, 4/2014). TWA: 2400 mg/m ³ 8 hours. PEAK: 9600 mg/m ³ 15 minutes. TWA: 1000 ppm 8 hours. PEAK: 4000 ppm 15 minutes.
Greece	
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	Υπουργείο Εργασίας και Κοινωνικών Υποθέσεων (Greece, 2/2012). TWA: 5 mg/m ³ , (as Mo) 8 hours.
propane	Υπουργείο Εργασίας και Κοινωνικών Υποθέσεων (Greece, 2/2012). TWA: 1000 ppm 8 hours. TWA: 1800 mg/m ³ 8 hours.
butane	Υπουργείο Εργασίας και Κοινωνικών Υποθέσεων (Greece, 2/2012). TWA: 1000 ppm 8 hours. TWA: 2350 mg/m ³ 8 hours.
Hungary	
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	25/2000. (IX. 30.) EüM-SzCsM együttes rendelet (Hungary, 12/2011). TWA: 5 mg/m ³ , (as Mo) 8 hours. PEAK: 20 mg/m ³ , (as Mo) 15 minutes.
butane	25/2000. (IX. 30.) EüM-SzCsM együttes rendelet (Hungary, 12/2011). TWA: 2350 mg/m ³ 8 hours. PEAK: 9400 mg/m ³ 15 minutes.
Ireland	
2,2',2''-nitrilotriethanol	NAOSH (Ireland, 12/2011). OELV-8hr: 5 mg/m ³ 8 hours.
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	NAOSH (Ireland, 12/2011). OELV-8hr: 10 mg/m ³ , (as Mo) 8 hours. Form: Inhalable fraction OELV-8hr: 0.5 mg/m ³ , (as Mo) 8 hours. Form: respirable fraction
propane	NAOSH (Ireland, 12/2011). Oxygen Depletion [Asphyxiant]. OELV-8hr: 1000 ppm 8 hours.
butane	NAOSH (Ireland, 12/2011). OELV-8hr: 1000 ppm 8 hours.
propane-1,2-diol	NAOSH (Ireland, 12/2011). OELV-8hr: 10 mg/m ³ 8 hours. Form: particulate OELV-8hr: 470 mg/m ³ 8 hours. Form: vapour and particulates OELV-8hr: 150 ppm 8 hours. Form: vapour and particulates
Italy	
No exposure limit value known.	
Latvia	

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sebacic acid	Ministru kabineta - AER (Latvia, 2/2011). TWA: 4 mg/m ³ 8 hours.
propane	Ministru kabineta - AER (Latvia, 2/2011). TWA: 100 mg/m ³ , (as C) 8 hours. STEL: 300 mg/m ³ , (as C) 15 minutes.
butane	Ministru kabineta - AER (Latvia, 2/2011). TWA: 300 mg/m ³ 8 hours.
benzotriazole	Ministru kabineta - AER (Latvia, 2/2011). TWA: 5 mg/m ³ 8 hours.
propane-1,2-diol	Ministru kabineta - AER (Latvia, 2/2011). TWA: 7 mg/m ³ 8 hours.
Lithuania	
2,2',2''-nitrilotriethanol	Lietuvos Higienos Normos HN 23 (Lithuania, 10/2007). Skin sensitiser. STEL: 10 mg/m ³ 15 minutes. TWA: 5 mg/m ³ 8 hours.
sebacic acid	Lietuvos Higienos Normos HN 23 (Lithuania, 10/2007). TWA: 4 mg/m ³ 8 hours.
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	Lietuvos Higienos Normos HN 23 (Lithuania, 10/2007). TWA: 5 mg/m ³ 8 hours.
propane-1,2-diol	Lietuvos Higienos Normos HN 23 (Lithuania, 10/2007). TWA: 7 mg/m ³ 8 hours.
Netherlands	
No exposure limit value known.	
Norway	
2,2',2''-nitrilotriethanol	FOR-2011-12-06-1358 (Norway, 1/2013). TWA: 5 mg/m ³ 8 hours.
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	FOR-2011-12-06-1358 (Norway, 1/2013). TWA: 5 mg/m ³ , (calculated as Mo) 8 hours.
propane	FOR-2011-12-06-1358 (Norway, 1/2013). TWA: 500 ppm 8 hours. TWA: 900 mg/m ³ 8 hours.
butane	FOR-2011-12-06-1358 (Norway, 1/2013). TWA: 250 ppm 8 hours. TWA: 600 mg/m ³ 8 hours.
propane-1,2-diol	FOR-2011-12-06-1358 (Norway, 1/2013). TWA: 79 mg/m ³ 8 hours. TWA: 25 ppm 8 hours.
Poland	
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz.U. 2014 poz. 817) (Poland, 6/2014). TWA: 4 mg/m ³ , (calculated as Mo) 8 hours. STEL: 10 mg/m ³ , (calculated as Mo) 15 minutes.
propane	Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz.U. 2014 poz. 817) (Poland, 6/2014). TWA: 1800 mg/m ³ 8 hours.
butane	Rozporządzenie Ministra Pracy i Polityki Społecznej (Dz.U. 2014 poz. 817) (Poland, 6/2014). TWA: 1900 mg/m ³ 8 hours. STEL: 3000 mg/m ³ 15 minutes.
Portugal	
2,2',2''-nitrilotriethanol	Instituto Português da Qualidade (Portugal, 3/2007). TWA: 5 mg/m ³ 8 hours.
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	Instituto Português da Qualidade (Portugal, 3/2007). TWA: 0.5 mg/m ³ , (expressed as Mo) 8 hours. Form: respirable fraction
propane	Instituto Português da Qualidade (Portugal, 3/2007). TWA: 1000 ppm 8 hours.
butane	Instituto Português da Qualidade (Portugal, 3/2007). TWA: 1000 ppm 8 hours. Form: gas

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SECTION 8: Exposure controls/personal protection

Romania

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

propane

Slovakia

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

Slovenia

2,2',2''-nitritotriethanol

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

propane

butane

Spain

2,2',2''-nitritotriethanol

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

propane

butane

Sweden

2,2',2''-nitritotriethanol

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

Switzerland

TWA: 1000 ppm 8 hours.

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

VLA: 2 mg/m³ 8 hours.

Short term: 65 mg/m³ 15 minutes.

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

VLA: 1400 mg/m³ 8 hours.

VLA: 778 ppm 8 hours.

Short term: 1800 mg/m³ 15 minutes.

Short term: 1000 ppm 15 minutes.

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

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

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/m³, (measured as Mo), 4 times per shift, 15 minutes. Form: inhalable fraction

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

TWA: 1800 mg/m³ 8 hours.

TWA: 1000 ppm 8 hours.

KTV: 7200 mg/m³, 4 times per shift, 15 minutes.

KTV: 4000 ppm, 4 times per shift, 15 minutes.

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

TWA: 2400 mg/m³ 8 hours.

TWA: 1000 ppm 8 hours.

KTV: 9600 mg/m³, 4 times per shift, 15 minutes.

KTV: 4000 ppm, 4 times per shift, 15 minutes.

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

INSHT (Spain, 1/2014).

TWA: 1000 ppm 8 hours. Form: gas

INSHT (Spain, 1/2014).

TWA: 1000 ppm 8 hours. Form: gas

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

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SECTION 8: Exposure controls/personal protection

2,2',2''-nitritotriethanol	SUVA (Switzerland, 1/2014). STEL: 20 mg/m ³ 15 minutes. Form: Inhalable dust (total dust) TWA: 5 mg/m ³ 8 hours. Form: Inhalable dust (total dust)
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	SUVA (Switzerland, 1/2014). TWA: 5 mg/m ³ , (calculated as Mo) 8 hours. Form: Inhalable dust (total dust)
propane	SUVA (Switzerland, 1/2014). TWA: 1000 ppm 8 hours. TWA: 1800 mg/m ³ 8 hours. STEL: 4000 ppm 15 minutes. STEL: 7200 mg/m ³ 15 minutes.
butane	SUVA (Switzerland, 1/2014). TWA: 800 ppm 8 hours. TWA: 1900 mg/m ³ 8 hours. STEL: 7200 mg/m ³ 15 minutes. STEL: 3200 ppm 15 minutes.
Turkey	
propane	NIOSH REL (United States, 10/2013). TWA: 1000 ppm 10 hours. TWA: 1800 mg/m ³ 10 hours.
butane	NIOSH REL (United States, 10/2013). TWA: 800 ppm 10 hours. TWA: 1900 mg/m ³ 10 hours.
United Kingdom (UK)	
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 10 mg/m ³ , (as Mo) 15 minutes. TWA: 5 mg/m ³ , (as Mo) 8 hours.
butane	EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 1810 mg/m ³ 15 minutes. STEL: 750 ppm 15 minutes. TWA: 1450 mg/m ³ 8 hours. TWA: 600 ppm 8 hours.
propane-1,2-diol	EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 10 mg/m ³ 8 hours. Form: Particulate TWA: 474 mg/m ³ 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.

8.2 Exposure controls

Appropriate engineering controls : The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

SECTION 8: Exposure controls/personal protection

- 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 glasses with side-shields
- 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. 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, 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. 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** : Liquid.
- Colour** : Brown. [Light]
- Odour** : Aromatic. [Slight]
- pH** : 8.1 [Conc. (% w/w): 100%]
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : Not available.
- Flash point** : Not available.
- Upper/lower flammability or explosive limits** : Not available.
- Relative density** : 1.18
- Solubility(ies)** : Easily soluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/ water** : Not available.
- Auto-ignition temperature** : Not available.

Protector F1 Express (10x265ml)**SECTION 9: Physical and chemical properties**

VOC content : 6 % (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 : Avoid all possible sources of ignition (spark or flame).

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	-
1,2-benzisothiazol-3(2H)-one	LD50 Oral	Rat	1020 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Route	ATE value
Oral	12210 mg/kg

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
benzotriazole	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
1,2-benzisothiazol-3(2H)-one	Skin - Mild irritant	Human	-	48 hours 5 Percent	-

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

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SECTION 11: Toxicological information

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the 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 : 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 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
1,2-benzisothiazol-3(2H)-one	Acute EC50 97 ppb Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 10 to 20 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
	Acute LC50 167 ppb Fresh water	Fish - Oncorhynchus mykiss	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Date of issue/Date of revision : 28.05.2015.

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SECTION 12: Ecological information

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Not available.

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 : 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. 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
14.1 UN number	1950	1950
14.2 UN proper shipping name	Aerosols, flammable (butane, propane)	Aerosols, flammable (butane, propane)

Protector F1 Express (10x265ml)

SECTION 14: Transport information

14.3 Transport hazard class(es)	2 	2.1 
14.4 Packing group	III	III

SECTION 15: Regulatory information

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

[Regulation \(EC\) No. 1272/2008 \[CLP\]](#)

[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

[Germany](#)

Hazard class for water : nwg Appendix No. 4

[Greece](#)

[Hungary](#)

[Ireland](#)

[Italy](#)

[Latvia](#)

[Lithuania](#)

[Netherlands](#)

[Norway](#)

[Poland](#)

[Portugal](#)

Product/ingredient name	List name	Name on list	Classification	Notes
Molybdate (MoO42-), sodium, hydrate (1:2:2), (T-4)-	Portugal Occupational Exposure Limits	molibdénio, compostos solúveis	Carc. A3	-

[Romania](#)

[Slovakia](#)

Protector F1 Express (10x265ml)**SECTION 15: Regulatory information****Slovenia**

Product/ingredient name	List name	Name on list	Classification	Notes
butane	Slovenia Carcinogen, Mutagen, Reprotoxic chemicals	butan z vsebnostjo >= 0,1% butadiena [203-450-8]	Carc.1, Muta. MUTA2	-

Spain**Sweden****Switzerland****Turkey****United Kingdom (UK)**

Product/ingredient name	List name	Name on list	Classification	Notes
butane	UK Occupational Exposure Limits EH40 - WEL	butane	Carc.	-

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

SECTION 16: Other information

Date of printing : 30.05.2015.

Date of issue/ Date of revision : 28.05.2015.

Date of previous issue : 28.05.2015.

Version : 2

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**

Aerosol 1, H222, H229

Expert judgment

Europe

Full text of abbreviated H statements : H222, H229 Extremely flammable aerosol. Pressurized container: may burst if heated.
 H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H400 Very toxic to aquatic life.
 H411 Toxic to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS] : Acute Tox. 4, H302 ACUTE TOXICITY (oral) - Category 4
 Aerosol 1, H222, H229 AEROSOLS - Category 1
 Aquatic Acute 1, H400 ACUTE AQUATIC HAZARD - Category 1
 Aquatic Chronic 2, H411 LONG-TERM AQUATIC HAZARD - Category 2
 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
 Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2
 Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1

Protector F1 Express (10x265ml)

Full text of abbreviated R phrases : R12- Extremely flammable.
R22- Harmful if swallowed.
R41- Risk of serious damage to eyes.
R36- Irritating to eyes.
R38- Irritating to skin.
R43- May cause sensitisation by skin contact.
R50- Very toxic to aquatic organisms.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications [DSD/DPD] : F+ - Extremely flammable
Xn - Harmful
Xi - Irritant
N - Dangerous for the environment

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.

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