



# Microshield Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EC) No. 453/2010

Date of issue: 27/07/2015

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Version: 1.1

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

### 1.1. Product identifier

Product form : Substance  
Product code : SDS12003

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

#### 1.2.1. Relevant identified uses

Intended for general public  
Main use category : Consumer use, Industrial use  
Use of the substance/mixture : Water repellent

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Permagard Products Ltd  
Chitting Industrial Estate  
Avonmouth  
Bristol BS11 OYB  
England

Tel: 0117 938 1596

Email: sales@permagard.co.uk

Web: www.permagard.co.uk

### 1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number
	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964
	National Poisons Information Service (NHS Direct)	<a href="http://www.npis.org">http://www.npis.org</a>	111 (England & Wales only) or 112 (EU) or 08454 24 24 24 (Scotland)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Not classified

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

#### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Precautionary statements (CLP) : P102 - Keep out of reach of children  
EUH-statements : EUH208 - Contains N-(2-aminoethyl)3-aminopropyltrimethoxysilane(1760-24-3). May produce an allergic reaction

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Name : Microshield

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Isotridecanol, ethoxylated	(CAS No) 9043-30-5 (EC no) 500-027-2	< 5	Xi; R41 Xn; R22
N-(2-aminoethyl)3-aminopropyltrimethoxysilane	(CAS No) 1760-24-3 (EC no) 217-164-6	0,1 - 1	Xi; R41 R43 N; R51/53
2-Methyl-4-isothiazolin-3-one	(CAS No) 2682-20-4 (EC no) 220-239-6	< 0,1	T; R23 Xn; R22 R43 C; R34 N; R50
2,2'-dithiobis[N-methylbenzamide]	(CAS No) 2527-58-4 (EC no) 219-768-5	< 0,1	R43 N; R50/53
1,2-Benzisothiazol-3(2H)-one, 2-methyl-	(CAS No) 2527-66-4	< 0,1	T; R25 Xn; R20/21 C; R34 R43 N; R50

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Isotridecanol, ethoxylated	(CAS No) 9043-30-5 (EC no) 500-027-2	< 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
N-(2-aminoethyl)3-aminopropyltrimethoxysilane	(CAS No) 1760-24-3 (EC no) 217-164-6	0,1 - 1	Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411
2-Methyl-4-isothiazolin-3-one	(CAS No) 2682-20-4 (EC no) 220-239-6	< 0,1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 1 (Inhalation), H330 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400
2,2'-dithiobis[N-methylbenzamide]	(CAS No) 2527-58-4 (EC no) 219-768-5	< 0,1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2-Benzisothiazol-3(2H)-one, 2-methyl-	(CAS No) 2527-66-4	< 0,1	Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1C, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400

Full text of R- and H-statements: see section 16

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.  
 First-aid measures after skin contact : Wash skin with plenty of water.  
 First-aid measures after eye contact : Rinse eyes with water as a precaution.  
 First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

No additional information available

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station. Provide adequate general and local exhaust ventilation.

Personal protective equipment : Protective clothing. Protective goggles. Gloves.



Hand protection : Protective gloves.

Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Environmental exposure controls : Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: milky. white.
Odour	: slight. Ammonia odour. Ester.
Odour threshold	: No data available
pH	: 8 - 9
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

### 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 : Not classified

#### N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)

LD50 oral rat	2400 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 2413 mg/kg bodyweight; Rat; Equivalent or similar to OECD 401; Experimental value; 7684 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	16480 mg/kg bodyweight (Rabbit; Experimental value; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Experimental value; EPA OPPTS 870.7600)

N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)	
LC50 inhalation rat (mg/l)	1.49-2.44,Rat; Experimental value
ATE CLP (oral)	2400,000 mg/kg bodyweight
ATE CLP (dermal)	16480,000 mg/kg bodyweight
Isotridecanol, ethoxylated (9043-30-5)	
ATE CLP (oral)	500,000 mg/kg bodyweight
2-Methyl-4-isothiazolin-3-one (2682-20-4)	
ATE CLP (oral)	100,000 mg/kg bodyweight
ATE CLP (dermal)	300,000 mg/kg bodyweight
ATE CLP (gases)	10,000 ppmv/4h
ATE CLP (vapours)	0,050 mg/l/4h
ATE CLP (dust,mist)	0,005 mg/l/4h
1,2-Benzisothiazol-3(2H)-one, 2-methyl- (2527-66-4)	
ATE CLP (oral)	100,000 mg/kg bodyweight
ATE CLP (dermal)	1100,000 mg/kg bodyweight
ATE CLP (dust,mist)	1,500 mg/l/4h
Skin corrosion/irritation	: Not classified pH: 8 - 9
Serious eye damage/irritation	: Not classified pH: 8 - 9
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)	
LC50 fish 1	213 mg/l (LC50; EPA 660/3 - 75/009; 96 h; Salmo gairdneri; Static system; Fresh water; Experimental value)
2-Methyl-4-isothiazolin-3-one (2682-20-4)	
LC50 fish 1	0,19 (0,07 - 0,3) mg/l 96h; Office of Pesticide Programs 2000. Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)). Environmental Fate and Effects Division, U.S.EPA, Washington, D.C.
LC50 other aquatic organisms 1	0,056 mg/l 48h; Crustaceans; Office of Pesticide Programs 2000. Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)). Environmental Fate and Effects Division, U.S.EPA, Washington, D.C.

### 12.2. Persistence and degradability

N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)	
Persistence and degradability	Not readily biodegradable in water. Hydrolysis in water. Biodegradability in soil: no data available. Adsorbs into the soil. Photolysis in the air.

### 12.3. Bioaccumulative potential

N-(2-aminoethyl)3-aminopropyltrimethoxysilane (1760-24-3)	
Log Pow	-1,67 (Estimated value; KOWWIN; 25 °C)
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

No additional information available

## 12.5. Results of PBT and vPvB assessment

No additional information available

## 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

Not dangerous goods in terms of transport regulations

### 14.2. UN proper shipping name

Not applicable

### 14.3. Transport hazard class(es)

Not applicable

### 14.4. Packing group

Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

No additional information available

#### 14.6.2. Transport by sea

No additional information available

#### 14.6.3. Air transport

No additional information available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	N-(2-aminoethyl)3-aminopropyltrimethoxysilane - Isotridecanol, ethoxylated - 2,2'-dithiobis[N-methylbenzamide]
3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	N-(2-aminoethyl)3-aminopropyltrimethoxysilane - Isotridecanol, ethoxylated - 2,2'-dithiobis[N-methylbenzamide]
3.c. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	N-(2-aminoethyl)3-aminopropyltrimethoxysilane - 2,2'-dithiobis[N-methylbenzamide]

Microshield is not on the REACH Candidate List

Contains no substance on the REACH candidate list

Microshield is not on the REACH Annex XIV List

Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Full text of R-, H- and EUH-statements:

Acute Tox. 1 (Inhalation)	Acute toxicity (inhal.), Category 1
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
EUH208	Contains . May produce an allergic reaction
R20/21	Harmful by inhalation and in contact with skin
R22	Harmful if swallowed
R23	Toxic by inhalation
R25	Toxic if swallowed
R34	Causes burns
R41	Risk of serious damage to eyes
R43	May cause sensitisation by skin contact
R50	Very toxic to aquatic organisms
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
C	Corrosive
N	Dangerous for the environment
T	Toxic
Xi	Irritant
Xn	Harmful

SDS EU\_NSC

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