

Product Shieldx Cladding Coat
 Revision date 08 September 2020
 Revision 2



Safety Data Sheet (SDS)

according to Regulation (EC) No. 1907/2006

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

1.1 Product identifier

Product name	Shieldx Cladding Coat
Synonyms, Trade names	No information available.

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

Identified uses	This is a water-borne coating for the refurbishment of metal cladding that has become weathered, dull or discoloured over time.
Uses advised against	For industrial and professional use only. Any other purpose.

1.3 Details of the supplier of the safety data sheet

Supplier	Castle Paints Ltd Cloncollig Industrial Estate Tullamore Offaly R35 X993 Ireland Tel: 353 (0)579351583 info@castlepaints.ie
Contact person	

1.4 Emergency telephone number

Emergency telephone	Emergency medical information: 8am - 10pm (Seven Days) contact National Poison Center, Beaumont Hospital. Telephone: +353 (0) 18092166
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Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)	
Physical and chemical hazards	Not classified
Human health	Skin. Sens 1 A- H317
Environment	Aquatic Chronic 3 - H412

2.2 Label elements

Contains	2-Methyl-2H-isothiazol-3-one
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Label in accordance with (EC) no. 1272/2008



Signal word	Warning
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Hazard statements	H317 May cause an allergic skin reaction. H412 Harmful to aquatic life with long lasting effects.
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Precautionary statements	Prevention P261 Avoid breathing dust/fume/ gas/mist/vapours/spray. P273 Avoid release to the environment.
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P280 Wear protective gloves/ protective clothing/eye protection/face protection.

Response

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P363 Wash contaminated clothing before reuse.

Disposal

P501 Dispose of contents/ container to a licensed hazardous waste disposal facility in accordance with all applicable regulations.

EUH statements

EUH208 Contains 1,2-benzisothiazol-3(2H)-one and 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.

2.3 Other hazards

None known.

Section 3: Composition/identification of ingredients

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Regulation (EC) No 1272/2008	%
Limestone	CAS-No.: 1317-65-3 EC No.: 215-279-6		30-50%
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	CAS-No.: 25265-77-4 EC No.: 246-771-9 REACH Reg No.: 01-2119441305-48-0002		1-5%
Distillates (petroleum), solvent dewaxed heavy paraffinic	CAS-No.: 64742-65-0 EC No.: 265-169-7		0.1-0.9%
docusate sodium	CAS-No.: 577-11-7 EC No.: 209-406-4 REACH Reg No.: 01-2119491296-29-0000	Skin Irrit.2 - H315, Eye Dam. 1 - H318	0.1-0.9%
Kaolin	CAS-No.: 1332-58-7 EC No.: 310-194-1		0.01-0.09%
sodium benzoate	CAS-No.: 532-32-1 EC No.: 208-534-8 REACH Reg No.: 01-2119460683-35-0000	Eye Irrit.2A - H319	0.01-0.09%
sodium nitrite	CAS-No.: 7632-00-0 EC No.: 231-555-9 REACH Reg No.: 01-2119471836-27-XXXX	Aquatic Acute 1 - H400, Acute Tox 3 - H301, Eye Irrit.2A - H319, Ox Sol 2- H272	0.01-0.09%
2-Methyl-2H-isothiazol-3-one	CAS-No.: 2682-20-4 EC No.: 220-239-6	Acute Tox 3 - H301, Acute Tox 3 - H311, Acute Tox 2 - H330, Skin Corr. 1B - H314, Eye Dam. 1 - H318, Skin. Sens 1 A- H317, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	0.01-0.09%

The full text for all hazard statements are displayed in section 16.

Composition comments

The data shown are in accordance with the latest EC Directives.

Distillates (petroleum), solvent-dewaxed heavy paraffinic: This product is not classified as carcinogenic as it complies with note L having polynuclear aromatic hydrocarbon content <3% determined in accordance with IP 346 (dimethylsulphoxide extraction) (Annex VI - Regulation EC 1272/2008).

Section 4: First aid measures

4.1 Description of first aid measures

General information

Provide general first aid, rest, warmth and fresh air. As a general rule, in case of doubt or if symptoms persist, always call a doctor. Seek medical attention for all burns and eye injuries, regardless how minor they may seem. First aid personnel must be aware of own risk during rescue.

Inhalation

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical

Ingestion	attention if any discomfort or breathing difficulties develop. Rinse mouth out and then drink plenty of water. Never give anything by mouth to an unconscious person. Seek medical attention.
Skin contact	Remove contaminated clothing and shoes and wash before reuse. Wash exposed area with soap and water. Continue to rinse for at least 15 minutes. Get medical attention if irritation develops or persists.
Eye contact	Avoid contaminating unaffected eye. Remove contact lenses if present and easy to do so. Hold eye lids open. Rinse with a gentle stream water for at least 15 minutes. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Inhalation of mist or vapor may cause respiratory tract irritation.
Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged contact may cause redness, irritation and dry skin. May cause an allergic skin reaction.
Eye contact	Prolonged contact may cause redness and/or tearing.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the physician	Treat symptomatically.
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Section 5: Fire-fighting measures

5.1 Extinguishing media

Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials. Water spray, foam, dry powder or carbon dioxide.
Unsuitable extinguishing media	None noted.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	When heated, vapours/gases hazardous to health may be formed.
Unusual fire & explosion hazards	No unusual fire or explosion hazards noted.
Specific hazards	Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special fire fighting procedures	Avoid breathing fire vapours. Keep up-wind to avoid fumes. Fight advanced or massive fires from safe distance or protected location. Ventilate closed spaces before entering them. Containers close to fire should be removed immediately or cooled with water if safe to do so.
Protective equipment for firefighters	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	Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Eliminate all sources of ignition. Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection.
For emergency responders	Follow safe handling advice and personal protective equipment recommendations for normal use of product.

6.2 Environmental precautions

Environmental precautions	Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.
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6.3 Methods and material for containment and cleaning up

Spill clean up methods	Wear appropriate personal protective equipment as specified in Section 8. Ventilate and
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evacuate the area. Stop leak if possible without risk. Cover drains. Absorb spillage with non-combustible, absorbent material. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container.

6.4 Reference to other sections

Reference to other sections

See section 1 for emergency contact. For personal protection, see section 8. For waste disposal, see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handling

Read and follow manufacturer's recommendations. Do not handle broken packages without protective equipment. Do not use contact lenses. Keep away from heat, sparks and open flame. Observe occupational exposure limits and minimise the risk of inhalation of vapours and mist. Do not eat, drink or smoke when using the product.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions

Store in tightly closed original container in a cool, dry and well-ventilated place. Keep upright, locked up and out of reach of children. Keep away from incompatible materials (see section 10). Protect from heat and direct sunlight.

Storage class

Unspecified storage.

7.3 Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.

Usage description

Use only according to directions. Replace and tighten cap after use.

Section 8: Exposure controls/Personal protection

8.1 Control parameters

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
Limestone	OEL		10 mg/m ³			Total inhalable dust.
Limestone	OEL		4 mg/m ³			Respirable dust.
Distillates (petroleum), solvent dewaxed heavy paraffinic	OEL		5 mg/m ³			Mineral oil - Pure, Highly & Severely Refined (Inhalable).
Kaolin	OEL		2 mg/m ³			Respirable dust.

Ingredient comments

Ireland, Occupational Exposure Limits 2020.

8.2 Exposure Controls

Protective equipment



Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

Where risk assessment shows air-purifying respirators are appropriate a full face respirator conforming to EN 143 should be used, and suitable respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. ABEK (EN 14387). Suggested filter type A/P2 (EN 141). Consult manufacturer for specific advice.

Use respirators and components tested and approved under appropriate government standards such as CEN (EU). Use respiratory protection as specified by an industrial

Hand protection	hygienist or other qualified professional if concentrations exceed the limits listed in Section 8. Selection of the glove material depends on consideration of the penetration times, rates of diffusion and degradation, and concentration specific to the workplace. Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374) is recommended. Gloves must be inspected prior to use. Suggested material: Nitrile rubber. Break through time: >480 minutes. Minimum layer thickness: 0.33 mm. Chloroprene. Breakthrough time: >480 minutes. Minimum layer thickness: 0.6 mm. Consult manufacturer for specific advice.
Eye protection	Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU).
Other protection	Wear appropriate clothing to prevent skin contact. Protective clothing should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. The selected clothing must satisfy the European norm standard EN 943.
Hygiene measures	Immediately take off any contaminated clothing and launder before re-use. Wash promptly if skin becomes contaminated. Wash hands after handling. Do not eat, drink, or smoke while using this product.
Process conditions	Ensure that eye flushing systems and safety showers are located close by in the work place.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Various.
Odour	Faintly sweet smelling.
Odour threshold - lower	No information available as testing has not been completed.
Odour threshold - upper	No information available as testing has not been completed.
pH-Value, Conc. Solution	8.50
pH-Value, Diluted solution	No information available as testing has not been completed.
Melting point	May start to solidify at the following temperature: 0°C (32 °F), based on the quantity of water in the product.
Initial boiling point and boiling range	> 38 °C
Flash point	Not applicable, product does not support combustion.
Evaporation rate	No information available as testing has not been completed.
Flammability state	The product is not classified as flammable.
Flammability limit - lower(%)	The product is not classified as flammable.
Flammability limit - upper(%)	The product is not classified as flammable.
Vapour pressure	No information available as testing has not been completed.
Vapour density (air=1)	No information available as testing has not been completed.
Relative density	1.25 kg/m ³ @ 20 °C.
Bulk density	No information available as testing has not been completed.
Solubility	Partially soluble in cold water.
Decomposition temperature	No information available as testing has not been completed.
Partition coefficient; n-Octanol/Water	No information available as testing has not been completed.
Auto ignition temperature (°C)	No information available as testing has not been completed.

Viscosity	Dynamic @ 20 °C: 460 cP. Kinematic @ 40 °C: > 0.21 cm ² /s.
Explosive properties	Not classified as explosive.
Oxidising properties	The product does not meet the criteria to be classified as oxidising.

9.2 Other information

Molecular weight	The product is a mixture, the molecular weight can not be determined.
Volatile organic compound	EU limit for this product (Cat. A/d): 130 g/l (2010). This product contains max. 30 g/l VOC.
Other information	None noted.

Section 10: Stability and reactivity**10.1 Reactivity**

Reactivity	Reaction with: strong oxidising substances and acids.
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10.2 Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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10.3 Possibility of hazardous reactions

Hazardous reactions	None under normal processing.
Hazardous polymerisation	No information available as testing has not been completed.
Polymerisation description	No information available as testing has not been completed.

10.4 Conditions to Avoid

Conditions to avoid	Heat, sparks, open flames, temperature extremes and direct sunlight.
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10.5 Incompatible materials

Materials to avoid	Strong oxidising agents. Strong acids. Do not mix with other chemicals unless listed on directions.
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10.6 Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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Section 11: Toxicological information**11.1 Information on toxicological effects**

Toxicological information	No toxicological information for the overall finished product.
Acute toxicity (Oral LD50)	No information available as testing has not been completed.
Acute toxicity (Dermal LD50)	No information available as testing has not been completed.
Acute toxicity (Inhalation LD50)	No information available as testing has not been completed.
Serious eye damage/irritation	Product is not classified as an eye irritant.
Skin corrosion/irritation	The product is not classified as a skin corrosion/irritation hazard.
Respiratory sensitisation	The product is not classified as a respiratory hazard.
Skin sensitisation	The product is classified as a skin sensitisation hazard.
Germ cell mutagenicity	The product is not classified as a mutagen.
Carcinogenicity	The product is not classified as a carcinogen hazard.
Specific target organ toxicity - Single exposure:	
STOT - Single exposure	The product is not classified as a single exposure specific target organ toxin.

Specific target organ toxicity - Repeated exposure:**STOT - Repeated exposure**

The product is not classified as a repeat exposure specific target organ toxin.

Inhalation

Inhalation of mist or vapor may cause respiratory tract irritation.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged contact may cause redness, irritation and dry skin. May cause an allergic skin reaction.

Eye contact

Prolonged contact may cause redness and/or tearing.

Waste management

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Do not pour into drains or waterways.

Routes of entry

Eye and skin contact, ingestion or inhalation.

Target organs

Skin.

Aspiration hazards:

The product is not classified as an aspiration hazard.

Reproductive toxicity:

The product is not classified as a reproductive hazard.

Name	LD50 oral	LD50 dermal	LD50 inhalation
docusate sodium	4200.00mg/kg Rat	10000.00mg/kg Rat	20.00mg/l (vapours) Rat 4 Hours
Limestone	>5000.00mg/kg Rat		
sodium benzoate	>2000.00mg/kg Rat	>2000.00mg/kg Rabbit	
sodium nitrite	180.00mg/kg Rat		
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	6500.00mg/kg Rat	15200.00mg/kg Rabbit	

Section 12: Ecological information**12.1 Toxicity****Acute toxicity - Fish**

No information available as testing has not been completed.

Acute toxicity - Aquatic invertebrates

No information available as testing has not been completed.

Acute toxicity - Aquatic plants

No information available as testing has not been completed.

Acute toxicity - Microorganisms

No information available as testing has not been completed.

Chronic toxicity - Fish

No information available as testing has not been completed.

Chronic toxicity - Aquatic invertebrates

No information available as testing has not been completed.

Chronic toxicity - Aquatic plants

No information available as testing has not been completed.

Chronic toxicity - Microorganisms

No information available as testing has not been completed.

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Eco toxicological information

No ecological toxicity data available for the overall finished product.

12.2 Persistence and degradability**Degradability**

No information available as testing has not been completed.

Biological oxygen demand

No information available as testing has not been completed.

Chemical oxygen demand

No information available as testing has not been completed.

12.3 Bioaccumulative potential**Bioaccumulative potential**

No information available as testing has not been completed.

Bioaccumulation factor

No information available as testing has not been completed.

Partition coefficient; n-Octanol/Water

No information available as testing has not been completed.

12.4 Mobility in soil**Mobility**

No information available as testing has not been completed.

12.5 Results of PBT and vPvB assessment**Results of PBT and vPvB assessment** The product does not contain any PBT or vPvB substances.**12.6 Other adverse effects****Other adverse effects**

None known.

Name	Acute toxicity (Fish)	Acute toxicity (Aquatic invertebrates)	Acute toxicity (Aquatic plants)
Limestone	LC50 96 Hours >10000.00mg/l Onchorhynchus mykiss (Rainbow Trout)	EC50 48 Hours >1000.00mg/l Daphnia magna	EC50 72 Hours >200.00mg/l Scenedesmus Subspicatus
sodium benzoate	LC50 96 Hours >100.00mg/l Freshwater Fish	EC50 48 Hours >100.00mg/l Daphnia magna	
sodium nitrite		EC50 96 Hours 15.40mg/l Daphnia magna	
2-Methyl-2H-isothiazol-3-one	NOEC 96 Hours 2.01ppm Onchorhynchus mykiss (Rainbow Trout)		
isobutyric acid, monoester with 2,2,4-trimethylpentane-1,3-diol	LC0 96 Hours >19.00mg/l Onchorhynchus mykiss (Rainbow Trout)	EC50 48 Hours 147.80mg/l Daphnia magna	

Section 13: Disposal considerations

Waste management

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Do not pour into drains or waterways.

13.1 Waste treatment methods

Disposal methods

Dispose of waste and residues in accordance with local authority requirements. Empty containers or liners may retain some product residues. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Section 14: Transport information

14.1 UN number

UN no. (ADR) Not applicable.
UN no. (IMDG) Not applicable.
UN no. (IATA) Not applicable.

14.2 UN proper shipping name

ADR proper shipping name Not applicable.
IMDG proper shipping name Not applicable.
IATA proper shipping name Not applicable.

14.3 Transport hazard class(es)

ADR class Not applicable.
IMDG class Not applicable.
IATA class Not applicable.

Transport labels Not applicable

14.4 Packing group

ADR/RID/ADN packing group Not applicable.
IMDG packing group Not applicable.
IATA packing group Not applicable.

14.5 Environmental hazards

ADR No
IMDG No
IATA No

14.6 Special precautions for user

EMS Not applicable.
Emergency action code Not applicable.
Hazard no. (ADR) Not applicable.
Tunnel restriction code Not applicable.

14.7 Transport in bulk according to annex II of MARPOL73/78 and the IBC code

Not applicable.

Section 15: Regulatory information**15.1 Safety, health and environmental regulations/Legislation specific for the substance or mixture**

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 830/2015 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
Approved code of practice	2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)
Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16: Other information

General information	2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)
Revision comments	This Safety Data Sheet is in accordance with REACH Annex II, (EC) No 830/2015. This is a second issue. [2]Information updated. Classification updated. [3]Information updated. [4]Information updated. [8]Information updated. Code of practice updated. [9]Information updated. [10]Information updated. [11]Information updated. [12]Information updated. [15]Information updated. [16]Information updated.
Revision date	08 September 2020
Supersedes date	26 April 2019
Revision	2
Safety data sheet status	Approved.

Hazard statements in full

H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.
H302	Harmful if swallowed.
H351	Suspected of causing cancer .
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure .
H272	May intensify fire; oxidiser.
H301	Toxic if swallowed.
EUH071	Corrosive to the respiratory tract.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one and 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use. Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all times the responsibility of the user to take all necessary measures to comply with

legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.