Product Shieldx Metal Coat

Revision date 09 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 Metal 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 with a high level of elasticity for the protection of weathered

galvanised, general and structural steelwork.

For industrial and professional use only.

Uses advised against 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

1.4 Emergency telephone number

Contact person

Emergency telephone Emergency medical information: 8am - 10pm (Seven Days) contact National Poison

Center, Beaumont Hospital. Telephone: +353 (0) 18092166

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and chemical hazards
Human health
Environment
Not classified
Skin. Sens 1 A- H317
Aquatic Chronic 3 - H412

2.2 Label elements

Contains 2-Methyl-2H-isothiazol-3-one

Label in accordance with (EC) no. 1272/2008



Signal word Warning

Hazard statements H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements Prevention

P261 Avoid breathing dust/fume/ gas/mist/vapours/spray.

 $\ensuremath{\mathsf{P273}}$ Avoid release to the environment.

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

Inhalation

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

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

attention if any discomfort or breathing difficulties develop.

Ingestion 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.

Eve 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.

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

Unusual fire & explosion hazards

Specific hazards

When heated, vapours/gases hazardous to health may be formed.

No unusual fire or explosion hazards noted.

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 firefighters (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.

Follow safe handling advice and personal protective equipment recommendations for normal For emergency responders

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.

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 evacuate the area. Stop leak if possible without risk. Cover drains. Absorb spillage with noncombustible, absorbent material. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled

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

Store in tightly closed original container in a cool, dry and well-ventilated place. Keep Storage precautions

upright, locked up and out of reach of children. Keep away from incompatible materials (see

section 10). Protect from heat and direct sunlight.

Unspecified storage.

7.3 Specific end use(s)

Storage class

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

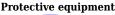
8.1 Control parameters

Component	STD	TWA (8 H	Hrs)	STEL (1	5mins)	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/m³			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







Engineering measures

Respiratory equipment

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

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

hygienist or other qualified professional if concentrations exceed the limits listed in Section

Hand protection 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

Liquid. **Appearance** 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

No information available as testing has not been completed. pH-Value, Diluted solution

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/m³ @ 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 cm²/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.

10.2 Chemical stability

Stability Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

Hazardous reactions None under normal processing.

Hazardous polymerisationNo 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.

10.5 Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids. Do not mix with other chemicals unless listed on

directions.

10.6 Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapours.

Section 11: Toxicological information

11.1 Information on toxicological effects

Toxicological information No toxicological information for the overall finished product.

Acute toxicity (Oral LD50)

Acute toxicity (Dermal LD50)

Acute toxicity (Inhalation LD50)

No information available as testing has not been completed.

No information available as testing has not been completed.

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 sensitisationThe 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 exposureThe 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

Acute toxicity - Aquatic invertebrates

No information available as testing has not been completed.

Acute toxicity - Aquatic plants

Acute toxicity - Microorganisms

Chronic toxicity - Fish

Chronic toxicity - Aquatic

No information available as testing has not been completed.

No information available as testing has not been completed.

No information available as testing has not been completed.

No information available as testing has not been completed.

No information available as testing has not been completed.

Chronic toxicity - Aquatic plants

No information available as testing has not been completed.

No information available as testing has not been completed.

Ecotoxicity Harmful to aquatic life with long lasting effects.

Eco toxilogical information No ecological toxicity data available for the overall finished product.

12.2 Persistence and degradability

DegradabilityNo information available as testing has not been completed.Biological oxygen demandNo information available as testing has not been completed.Chemical oxygen demandNo information available as testing has not been completed.

12.3 Bioaccumulative potential

Bioaccumulative potential
Bioaccumulation factor
Partition coefficient; nOctanol/Water

No information available as testing has not been completed.
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

 $\textbf{Results of PBT and } vPvB \ \textbf{assessment} \ \ \textbf{The product does not contain any PBT or } vPvB \ \textbf{substances}.$

12.6 Other adverse effects

Other adverse effects None known.

Name		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	um benzoate LC50 96 Hours >100.00mg/l EC Freshwater Fish Da		
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)

UN no. (IMDG)

UN no. (IATA)

Not applicable.

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
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)

This Safety Data Sheet is in accordance with REACH Annex II, (EC) No 830/2015.

Revision comments This is a second issue. [2]Information updated. Classification updated. [3]Information

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[9]Information updated. [10]Information updated. [11]Information updated. [12]Information

updated. [15]Information updated. [16]Information updated.

Revision date 09 September 2020 **Supersedes date** 26 April 2019

Revision

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.

H302Harmful if swallowed.H351Suspected of causing cancer .H400Very 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.