Product	Weather Guard Rooftile Paint
Revision date	05 October 2021
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	**Weather Guard Rooftile Paint**
Other means of identification	No information available.

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

Identified uses	Paint or paint related material.
Uses advised against	No uses advised against are identified.

1.3 Details of the supplier of the safety data sheet

Supplier	FSW Coatings Ltd Virginia Co Cavan Ireland Tel: 353 49854 7209
Contact person	info@fsw.ie

1.4 Emergency telephone number

Emergency telephone	+ 353 49854 7209 (Between 0900 and 1700 hrs Monday-Friday)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and chemical hazards	Not classified
Human health	Not classified
Environment	Aquatic Chronic 3 - H412

2.2 Label elements

Contains	Not applicable
Label in accordance with (EC) no. 1272/2008	No pictogram required
Signal word	No Signal Word
Hazard statements	H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	**Prevention** P273 Avoid release to the environment. **Disposal** P501 Dispose of contents/ container to a licensed hazardous waste disposal facility in accordance with all applicable regulations.
EUH statements	EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3 Other hazards

None known.

Section 3: Composition/information on 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		10-15%
propane-1,2-diol	CAS-No.: 57-55-6 EC No.: 200-338-0 REACH Reg No.: 01-2119456809-23-0000		1-5%
2-(2-butoxyethoxy)ethanol	CAS-No.: 112-34-5 EC No.: 203-961-6 REACH Reg No.: 01-2119475104-44-XXXX	Eye Irrit.2A - H319	0.1-0.9%
2-Aminoethanol	CAS-No.: 141-43-5 EC No.: 205-483-3	Acute Tox 4 - H302, Acute Tox 4 - H312, Acute Tox 4 - H332, Skin Corr. 1B - H314, STOT SE 3 - H335, Aquatic Chronic 3 - H412	0.1-0.9%
Ammonia, anhydrous	CAS-No.: 1336-21-6 EC No.: 215-647-6 REACH Reg No.: 01-2119488876-14-XXXX	Skin Corr. 1B - H314, STOT SE 3 - H335, Aquatic Acute 1 - H400	0.1-0.9%
diuron (ISO) 3-(3,4-dichlorophenyl)--,1-dimethylurea	CAS-No.: 330-54-1 EC No.: 206-354-4	Acute Tox 4 - H302, Carc. 2 - H351, STOT RE 2 - H373, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	0.1-0.9%
2,2',2''-nitrilotriethanol	CAS-No.: 102-71-6 EC No.: 203-049-8 REACH Reg No.: 01-2119486482-31-XXXX		<0.1%
zinc oxide	CAS-No.: 1314-13-2 EC No.: 215-222-5 REACH Reg No.: 01-2119463881-32-0000	Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	<0.1%
formaldehyde 100%	CAS-No.: 50-00-0 EC No.: 200-001-8	Acute Tox 3 - H301, Acute Tox 2 - H310, Skin Corr. 1B - H314, Skin. Sens 1 - H317, Acute Tox 3 - H331, Muta. 2- H341, Carc. 1B - H350	<0.001%
2,2'-iminodiethylamine	CAS-No.: 111-40-0 EC No.: 203-865-4	Acute Tox 4 - H302, Acute Tox 4 - H312, Acute Tox 2 - H330, Skin Corr. 1B - H314, Skin. Sens 1 - H317, STOT SE 3 - H335	<0.001%

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.
2-aminoethanol: Specific Concentration Limit - STOT SE3 / H335; >= 5.
Ammonia, anhydrous: Specific Concentration Limits = STOT Single Exp. 3 >= 25; STOT Single Exp. 3 >= 5 - < 25; Skin Corr. 1B >= 5; Skin Irrit. 2 >= 1 - < 5.
Ammonia, anhydrous: M Factor acute = 1.
Diuron (ISO) 3-(3,4-dichlorophenyl)- 1,1-dimethylurea: M (chronic)=10.
Zinc oxide: M (acute and chronic) = 1.
Formaldehyde: Specific Concentration Limits = Eye Irrit. 2; H319: 5 % <= C < 25 %, STOT SE 3; H335: C >= 5 %, Skin Corr. 1B; H314: C >= 25 %, Skin Irrit. 2; H315: 5 % <= C < 25 %, Skin Sens. 1; H317: C >= 0,2 %.

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

If this product is inhaled and symptoms occur, move the exposed person to fresh air promptly. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion

If this product is ingested, immediately rinse mouth and drink small amounts of water. Seek medical advice (show the label where possible). DO NOT induce vomiting! Never give anything by mouth if victim is unconscious, is rapidly losing consciousness or is convulsing.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms

	occur after washing. Seek medical attention if irritation persists.
Eye contact	Do not rub eye. Avoid contaminating unaffected eye. Remove contact lenses if present and easy to do so. Immediately flush with plenty of water for up to 15 minutes. Hold eye lids open while continuing to rinse. If irritation persists, seek medical attention immediately.

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	No specific symptoms noted.
Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	May cause temporary eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the physician	Treat symptomatically.

Section 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media	Use fire-extinguishing media appropriate for surrounding materials. Alcohol resistant foam. Water spray. Carbon dioxide.
Unsuitable extinguishing media	High volume water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
Unusual fire & explosion hazards	No unusual fire or explosion hazards noted.
Specific hazards	In the event of damage to packaging, floors may become slippery, avoid falls.

5.3 Advice for firefighters

Special fire fighting procedures	If possible, fight fire from protected position. Ventilate closed spaces before entering them. Keep up-wind to avoid fumes. Avoid breathing fire vapours. 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. Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection. Eliminate all sources of ignition. Read and follow manufacturer's recommendations. Do not touch or walk through spilled material. If necessary evacuate surrounding areas. Avoid sparks, flames, heat and smoking.
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.

6.3 Methods and material for containment and cleaning up

Spill clean up methods	Stop leak if possible without risk. Ventilate and evacuate the area. Eliminate all sources of ignition. When dealing with a spillage, wear necessary protective equipment. DO NOT touch spilled material! Absorb spillage with non-combustible, absorbent material. Flush area with plenty of water. Place waste material into suitable labelled sealed containers for disposal. Wash thoroughly after dealing with a spillage. 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 Use proper personal protection when handling (refer to Section 8). Use under well-ventilated conditions. Avoid contact with eyes, skin and clothing. Avoid breathing vapors and mists. Do not mix with other chemicals. Keep out of reach of children and pets. Avoid formation or spread of mists in the air. No smoking, eating or drinking in areas where the mixture is used. Wash thoroughly after handling.

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. Store at room temperature. Keep away from heat, sparks and flames and other sources of ignition. Do not freeze.

Storage class Chemical storage

7.3 Specific end use(s)

Specific end use(s) The identified uses are in section 1 of this Safety Data Sheet.

Usage description Use only according to directions.

Section 8: Exposure controls/Personal protection

8.1 Control parameters

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
Limestone	OEL		4 mg/m^3			
Limestone	OEL		10 mg/m^3			
propane-1,2-diol	OEL	150 ppm	470 mg/m^3			
propane-1,2-diol	OEL		10 mg/m^3			
2-(2-butoxyethoxy)ethanol	OEL	10 ppm	67.5 mg/m^3	12 ppm	101.2 mg/m^3	IOELV
2-Aminoethanol	OEL	1 ppm	2.5 mg/m^3	3 ppm	7.6 mg/m^3	Sk, IOELV
diuron (ISO) 3-(3,4-dichlorophenyl)--,1-dimethylurea	OEL		10 mg/m^3			
2,2',2''-nitrilotriethanol	OEL		5 mg/m^3			
zinc oxide	OEL		2 (R) mg/m^3		10 mg/m^3	
formaldehyde 100%	OEL	0.3 ppm	0.37 mg/m^3	0.6 ppm	0.738 mg/m^3	BOELV, Carc 1B, Sens, Limit value 0.5ppm/0.62mg/m3 for the healthcare, funeral and embalming sectors until 11 July 202421.
2,2'-iminodiethylamine	OEL	1 ppm	4 mg/m^3			Sk

Ingredient comments Ireland, Occupational Exposure Limits 2021.

8.2 Exposure Controls

Protective equipment

Engineering measures Provide adequate general and local exhaust ventilation.

Respiratory equipment Where risk assessment shows air-purifying particulate respirators are appropriate a full face respirator and filters conforming to EN143 should be used as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate

	government standards such as CEN (EU). Use type ABEK (EN 14387) respirator cartridges. Type A/organic vapour protective components recommended.
Hand protection	Use suitable chemical protective gloves if there is a risk of skin contact. Consult glove manufacturer for specific advice on material. 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. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Change gloves regularly. Type of gloves recommended: Butyl rubber. Minimum layer thickness: 0.7 mm. Minimum breakthrough time / gloves: 480 min.
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	Select appropriate protective clothing based on chemical resistance data and an assessment of local exposure potential. 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. The selected clothing must satisfy the European norm standard EN 943.
Hygiene measures	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.
Process conditions	Keep container tightly sealed when not in use. 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	Viscous liquid.
Colour	Various.
Odour	Faint odour.
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	>8.1
pH-Value, Diluted solution	No information available as testing has not been completed.
Melting point	May start to solidify at the temperatures below 2°C.This is based on data for the following ingredient: water.
Initial boiling point and boiling range	>42°C
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability state	Non Flammable.
Flammability limit - lower(%)	No information available as testing has not been completed.
Flammability limit - upper(%)	0.00
Vapour pressure	Highest known value: 3.2 kPa (23.8 mm Hg) (at 20°C) (water). Weighted average: 3.12 kPa (23.4 mm Hg) (at 20°C)
Vapour density (air=1)	Highest known value: 7.5 (Air = 1) (isobutyric acid, monoester with 2,2, 4-trimethylpentan--1,3-diol).
Relative density	1.1
Bulk density	Not applicable as the product is a liquid.
Solubility	Partially soluble in cold water.

Decomposition temperature	Stable under normal handling and storage conditions
Partition coefficient; n-Octanol/Water	No information available as testing has not been completed.
Auto ignition temperature (°C)	Not applicable.
Viscosity	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	Not applicable as the product is a mixture.
Volatile organic compound	50.00 g/litre
Other information	Volume solids: 37.0% +/- 1.0%. Weight Solids: 43.0% +/- 1.0%

Section 10: Stability and reactivity

10.1 Reactivity

Reactivity	Reactions may occur with strong oxidising agents.

10.2 Chemical stability

Stability	Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

Hazardous reactions	For information on hazardous reactions see section 10.1.
Hazardous polymerisation	No information available.
Polymerisation description	No information available.

10.4 Conditions to Avoid

Conditions to avoid	Avoid contact with heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Materials to avoid	Keep away from oxidizing agents. Keep away from other chemicals.

10.6 Hazardous decomposition products

Hazardous decomposition products	Oxides of carbon.

Section 11: Toxicological information

11.1 Information on hazard classses as defined in Regulation (EC) No. 1272/2008

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	May cause temporary eye irritation.
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 not 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 No specific symptoms noted.
Ingestion May cause discomfort if swallowed.
Skin contact Prolonged contact may cause redness, irritation and dry skin.
Eye contact May cause temporary eye irritation.
Waste management When handling waste, consideration should be made to the safety precautions applying to handling of the product.

Routes of entry Eyes, skin, ingestion or inhalation.
Target organs Eyes, skin, digestive system, respiratory system.

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
2-(2-butoxyethoxy)ethanol	3305.00mg/kg Rat >2000.00mg/kg Rat	2764.00mg/kg Rabbit >2000.00mg/kg Rabbit	
Ammonia, anhydrous	350.00mg/kg Rat		
formaldehyde 100%	>200.00mg/kg Rat		
propane-1,2-diol	22000.00mg/kg Rat	>2000.00mg/kg Rabbit	

11.2 Information on other hazards

Information on other hazards None known.

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 The product contains a substance which is harmful to aquatic life with long lasting effects.
Eco toxilogical information The product contains a substance which is harmful to aquatic organisms.

12.2 Persistence and degradability

Degradability The degradability of the product has not been stated.
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 data available on bioaccumulation.
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 Partially soluble in cold water.

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 Endocrine disrupting properties

Endocrine disrupting properties The product does not contain any substances with endocrine disrupting properties at a concentration above or equal to 0.1%.

12.7 Other adverse effects

Other adverse effects None known.

Name	Acute toxicity (Fish)	Acute toxicity (Aquatic invertebrates)	Acute toxicity (Aquatic plants)
2-(2-butoxyethoxy)ethanol	LC50 96 Hours 1300.00mg/l Lepomis macrochirus (Bluegill)	EC50 48 Hours >100.00mg/l Daphnia magnaEC50 48 Hours >100.00mg/l Daphnia magna	
Ammonia, anhydrous	LC50 96 Hours 0.80ppm Freshwater Fish		
diuron (ISO) 3-(3,4-dichlorophenyl)--,1-dimethylurea	LC50 96 Hours 14.70mg/l Onchorhynchus mykiss (Rainbow Trout)	EC50 48 Hours 1.40mg/l Daphnia magna	EC50 72 Hours 0.02mg/l Scenedesmus Subspicatus
zinc oxide	LC50 96 Hours 0.14mg/l Onchorhynchus mykiss (Rainbow Trout)	EC50 48 Hours 0.17mg/l Daphnia magna	
propane-1,2-diol	LC50 96 Hours 40613.00mg/l Onchorhynchus mykiss (Rainbow Trout)		

Section 13: Disposal considerations

Waste management When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1 Waste treatment methods

Disposal methods Dispose of waste and residues in accordance with local authority requirements.

Section 14: Transport information

14.1 UN number or ID 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 Maritime transport in bulk according to IMO instruments

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 2020/878 of 18 June 2020 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	2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2021) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)

15.2 Chemical safety assessment

Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16: Other information

General information	This Safety Data Sheet is in accordance with REACH Annex II, (EC) No 2020/878.
Revision comments	This is a second issue. [1]Information updated. [2]Information updated. [3]Information updated. [8]Information updated. [11]Information updated. [12]Information updated. [15]Information updated.
Revision date	05 October 2021
Revision	2
Safety data sheet status	Approved.

Hazard statements in full

H319	Causes serious eye irritation.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.
H351	Suspected of causing cancer .
H373	May cause damage to organs through prolonged or repeated exposure .
H410	Very toxic to aquatic life with long lasting effects.
H317	May cause an allergic skin reaction.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H318	Causes serious eye damage.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H341	Suspected of causing genetic defects .

H350	May cause cancer .
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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.