Product Metalshield Black Satin & Matt

Revision date 02 November 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 Metalshield Black Satin & Matt
Other means of identification UFI: S2CX-CE3C-K206-A4DY

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

Identified uses Paint or paint related material.

Uses advised against Any other purpose.

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

National emergency telephone

number

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

Outside those hours, contact National Poisons Information Centre, Beaumont Hospital. Members of Public: +353 (1) 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week) Healthcare

Professionals: +353 (1) 809 2566 (24 hour service)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and chemical hazards Flam. Liq 3- H226

Human health STOT SE 3 - H336, Skin. Sens 1 A- H317

Environment Aquatic Chronic 2 - H411

2.2 Label elements

Contains Cobalt bis(2-ethylhexanoate)

dodecane-1-thiol

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

 $Hydrocarbons, C9-C12, n-Alkanes, Isoalkanes, Cyclics, Aromatics (5-25\%) \, / \, Naphtha$

(petroleum), hydrodesulfurized heavy (benzene< 0,1 %)

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



Signal word Warning

Hazard statements H226 Flammable liquid and vapour.

H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements Prevention

P210 Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.

P233 Keep container tightly closed.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/eye protection/face protection.

Response

P370 + P378 In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO2) for extinction.

Storage

P403 + P235 Store in a well-ventilated place. Keep cool.

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	%
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	CAS-No.: EC No.: 919-857-5 REACH Reg No.: 01-2119463258-33-XXXX	Asp. Tox - H304, Flam. Liq 3- H226, STOT SE 3 - H336	20-30%
Hydrocarbons, C9-C12, n-Alkanes, Isoalkanes, Cyclics, Aromatics (5-25%) / Naphtha (petroleum), hydrodesulfurized heavy (benzene< 0,1 %)	CAS-No.: 64742-82-1 EC No.: 919-446-0 REACH Reg No.: 01-2119458049-33	STOT SE 3 - H336, Asp. Tox - H304, Flam. Liq 3- H226, Aquatic Chronic 2 - H411	5-10%
trizinc bis(orthophosphate)	CAS-No.: 7779-90-0 EC No.: 231-944-3	Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	1-5%
1-methoxy-2-propanol	CAS-No.: 107-98-2 EC No.: 203-539-1	Flam. Liq 3- H226, STOT SE 3 - H336	1-5%
2-ethylhexanoic acid, zirconium salt	CAS-No.: 22464-99-9 EC No.: 245-018-1	Repr. 2 - H361d	0.1-0.9%
naphthalene	CAS-No.: 91-20-3 EC No.: 202-049-5	Acute Tox 4 - H302, Carc. 2 - H351, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	0.1-0.9%
Cobalt bis(2-ethylhexanoate)	CAS-No.: 136-52-7 EC No.: 205-250-6 REACH Reg No.: 01-2119524678-29-XXXX	Eye Irrit.2A - H319, Skin. Sens 1 A- H317, Repr. 1B- H360, Aquatic Acute 1 - H400, Aquatic Chronic 3 - H412	0.1-0.9%
dodecane-1-thiol	CAS-No.: 112-55-0 EC No.: 203-984-1	Skin Corr. 1C - H314, Skin. Sens 1 A- H317, Aquatic Chronic 1 - H410	0-1%
nonane	CAS-No.: 111-84-2 EC No.: 203-913-4	Aquatic Chronic 1 - H410, Skin Irrit.2 - H315, Asp. Tox - H304, Flam. Liq 3- H226, STOT SE 3 - H336	<0.1%
propionic acid	CAS-No.: 79-09-4 EC No.: 201-176-3	Skin Corr. 1B - H314	<0.1%
octane	CAS-No.: 111-65-9 EC No.: 203-892-1	Aquatic Chronic 1 - H410, Skin Irrit.2 - H315, Asp. Tox - H304, Flam. Liq 2- H225, STOT SE 3 - H336	<0.1%

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.

Proprionic Acid: Specific Concentration Limits - Eye Irrit. 2; H319: 10 % <= C < 25 %, STOT SE 3; H335: C >= 10 %, Skin Corr. 1B; H314: C >= 25 %, Skin Irrit. 2; H315: 10 % <= C < 25 %.

Cobalt bis(2-ethylhexanoate): M (acute) = 1.

Section 4: First aid measures

4.1 Description of first aid measures

General information

General first aid, rest, warmth and fresh air. As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing in an unconscious person. Show this safety data sheet or product label to medical personnel.

Inhalation

Remove the affected person to fresh air, obtain medical attention if symptoms persist.

Ingestion Rinse mouth thoroughly. DO NOT induce vomiting. Get medical attention immediately. Remove contaminated clothing immediately and wash skin with soap and water. Launder Skin contact

contaminated clothing before reuse. Get medical attention if symptoms persist.

Eve contact Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes

with plenty of water while lifting the eye lids. Rinse with a gentle stream water for at least

15 minutes. Get prompt medical attention.

4.2 Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependant of the concentration and the

length of exposure.

Inhalation May cause drowsiness or dizziness.

Ingestion Prolonged exposure to product may cause irritation to lining of the mouth.

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

reaction.

Eve 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. Use water fog, foam, dry

chemical or carbon dioxide (CO2) to extinguish flames.

Unsuitable extinguishing media High volume water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products May produce hazardous combustion products such as carbon monoxide, carbon dioxide and

unknown hydrocarbons.

Unusual fire & explosion hazards

Specific hazards

No unusual fire or explosion hazards noted. If heated, harmful vapours may be formed.

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. Do not scatter spilled material with more water

than needed to fight the fire Do not get water inside container

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

Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke, For non-emergency personnel

use open fire or other sources of ignition. Make safe all sources of ignition. Avoid contact

with skin and eves.

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

use of product.

6.2 Environmental precautions

Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled **Environmental precautions**

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 Stop leak if possible without risk. Wear necessary protective equipment. 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. Wash thoroughly after dealing with a spillage.

6.4 Reference to other sections

Reference to other sections For waste disposal, see section 13. See section 1 for emergency contact. For personal

protection, see section 8

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. Avoid spilling, skin and eye contact. Do not use contact lenses. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Observe occupational exposure limits and minimise the risk of inhalation of vapours and mist. Ensure adequate ventilation. Vapours are heavier than air and may spread along floors. 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 dry, cool and well-ventilated place. Keep

upright. Keep locked up and out of reach of children. Avoid storing for very long periods. Keep container tightly sealed when not in use. Bags or containers, which are opened, must be carefully resealed to prevent leakage. Avoid contact with oxidising agents. Store away from acids. Store separate from alkalis. Store in cool dry areas away from direct sunlight or

sources of ignition. Store away form other chemicals.

Storage class Flammable liquid storage.

7.3 Specific end use(s)

Specific end use(s)The identified uses for this product are detailed in Section 1.Usage descriptionUse 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
1-methoxy-2-propanol	OEL	100 ppm	375 mg/m ³	150 ppm	568 mg/m ³	
1-methoxy-2-propanol	OEL	100 ppm	375 mg/m ³	150 ppm	568 mg/m ³	
naphthalene	OEL	10 ppm	50 mg/m ³	15 ppm	75 mg/m ³	
dodecane-1-thiol	OEL	0.1 ppm				
nonane	OEL	200 ppm	1050 mg/m ³			
propionic acid	OEL	10 ppm	31 mg/m ³	20 ppm	62 mg/m ³	
octane	OEL	300 ppm	1450 mg/m ³			

Ingredient comments

Ireland, Occupational Exposure Limits 2021.

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 EN143 should be used, and suitable respirator cartridges as a backup to engineering controls. Use type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. Use respirators and components tested and approved under

appropriate government standards such as CEN (EU). Change filters frequently. Consult

manufacturer for specific advice.

Hand protection Use suitable protective gloves if there is a risk of skin contact. 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. Suggested material: Nitrile rubber gloves.

Minimum layer thickness: 0.7mm. Minimum breakthrough time / gloves: 480 min.

Eve 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 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 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

Process conditions Keep container tightly sealed when not in use. Ensure that eye flushing systems 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 Black.

Odour Faint hydrocarbon 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 Not applicable.

pH-Value, Diluted solution Not applicable.

Melting point Not applicable.

Initial boiling point and boiling

range

Not applicable.

Flash point 40.00 °C

Evaporation rate Not applicable.

Flammability state Liquid.

Flammability limit - lower(%) Lower: 1.48%

Flammability limit - upper(%) Upper: 13.74%

Vapour pressure Not applicable.

Vapour density (air=1) Highest known value: 1.1 kPa (8.5 mm Hg) (at 20°C)

Relative density 1.22

Bulk density No information available as testing has not been completed.

Solubility Insoluble 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) Lowest known value: 270°C

Viscosity Kinematic (25°C): = $5.63 \text{ cm}^2/\text{s}$ **Explosive properties** Formation of explosive vapour is possible.

Oxidising properties The product does not meet the criteria to be classified as oxidising.

9.2 Other information

Molecular weight No information available as testing has not been completed.

Volatile organic compound 388g/l (max)

Other information Volume solids: 67.0 +/- 1.0%

Weight Solids: 64.0% +/- 1.0%

Section 10: Stability and reactivity

10.1 Reactivity

Reactivity Reactions may occur with strong oxidising agents.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

Hazardous reactions For information on hazardous reaction see section 10.1.

Hazardous polymerisationUnknown.Polymerisation descriptionUnknown.

10.4 Conditions to Avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Extremes of temperature and direct

sunlight.

10.5 Incompatible materials

Materials to avoid Strong oxidising substances. 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 hazard classses as defined in Regulation (EC) No. 1272/2008

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 May cause temporary eye irritation.

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 sensitisationThe 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 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 May cause drowsiness or dizziness.

Ingestion Prolonged exposure to product may cause irritation to lining of the mouth.

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

reaction.

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
1-methoxy-2-propanol	=4016.00mg/kg Rat		=6500.00ppmV Rat 4 Hours
propionic acid	2600.00mg/kg Rat	525.00mg/kg Rabbit	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	>5000.00mg/kg Rat >5000.00mg/kg Rat	>5000.00mg/kg Rabbit	>6.10mg/l (vapours) Rat 4 Hours>6.10mg/l (vapours) Rat 4 Hours
2-ethylhexanoic acid, zirconium salt	>5.00g/kg Rat	>5.00g/kg Rabbit	

11.2 Information on other hazards

Information on other hazards None known.

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.

invertebrates

Chronic toxicity - Aquatic plants

No information available as testing has not been completed.

No information available as testing has not been completed.

Ecotoxicity

The product contains substances which are toxic to aquatic organisms and which may cause

long term adverse effects in the aquatic environment. $% \left(\mathbf{r}\right) =\left(\mathbf{r}\right)$

Eco toxilogical information The product contains a substance which is toxic to aquatic organisms.

12.2 Persistence and degradability

DegradabilityThe degradability of the product has not been stated.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 No data available on bioaccumulation.

Bioaccumulation factorPartition coefficient; nNo information available as testing has not been completed.
No information available as testing has not been completed.

Octanol/Water

12.4 Mobility in soil

Mobility Insoluble 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		v · •	Acute toxicity (Aquatic plants)
1-methoxy-2-propanol	5.	Danhnia magna	EC50 =1000.00mg/l Selenastrum Capricornutum
propionic acid	LC50 96 Hours 51.00ppm Onchorhynchus mykiss (Rainbow Trout)	EC50 48 Hours 22.70ppm Daphnia magna	EC50 96 Hours 43.00mg/l
	Freshwater FishLC50 96 Hours	LC50 48 Hours >100.00ppm Daphnia magnaLC50 48 Hours >100.00ppm 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.

13.1 Waste treatment methods

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

accordance with all local, national and international regulations.

Section 14: Transport information

14.1 UN number or ID number

 UN no. (ADR)
 UN1263

 UN no. (IMDG)
 UN1263

 UN no. (IATA)
 UN1263

14.2 UN proper shipping name

ADR proper shipping name
IMDG proper shipping name
PAINT OF PAINT RELATED MATERIAL
PAINT OF PAINT RELATED MATERIAL
PAINT
PAINT

14.3 Transport hazard class(es)

ADR class 3
IMDG class 3
IATA class 3

Transport labels



14.4 Packing group

ADR/RID/ADN packing group III
IMDG packing group III
IATA packing group III

14.5 Environmental hazards

ADR Yes

IMDG Yes IATA Yes

14.6 Special precautions for user

EMS F-E, S-E **Emergency action code** A3 A72 A192

Hazard no. (ADR) 30 **Tunnel restriction code** (D/E)

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 Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC.

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. Reach Regulation (EC) No 453/2010. 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 [1]Information updated. [2]Information updated. [3]Information updated. [4]Information

updated. [5]Information updated. [8]Information updated. [9]Information updated.

[11]Information updated. [12]Information updated. [15]Information updated. This is a second

issue.

Revision date 02 November 2021

Revision 2

Safety data sheet status Approved.

Hazard statements in full

EUH066 Repeated exposure may cause skin dryness or cracking.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H302 Harmful if swallowed.H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.H361 Suspected of damaging fertility or the unborn child .

H351
 H317
 H360
 H314
 Suspected of causing cancer .
 May cause an allergic skin reaction.
 May damage fertility or the unborn child .
 Causes severe skin burns and eye damage.

H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H225 Highly flammable liquid and vapour.

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.