ProductMetalshield Hammered SilverRevision date28 May 2019Revision1

- for COLOURFUL LIVES -

Safety Data Sheet (SDS)

according to Regulation (EC) No. 1907/2006

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

1.1 Product identifier

Product name Synonyms, Trade names **Metalshield Hammered Silver** No information available.

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

Identified uses	Paint or paint related material. For industrial use.
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	Flam. Liq 3- H226
Human health	STOT SE 3 - H336
Environment	Aquatic Chronic 3 - H412

2.2 Label elements

Contains	Not applicable
Label in accordance with (EC) no. 1272/2008	
Signal word	Warning
Hazard statements	H226 Flammable liquid and vapour. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	 Prevention P210 Keep away from heat/ sparks/open flames/hot surfaces. — No smoking. P261 Avoid breathing dust/fume/ gas/mist/vapours/spray. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. Response P312 Call a POISON CENTER or doctor/physician if you feel unwell.

Storage P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

None known.

Section 3: Composition/identification of ingredients

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Reg. EU 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		
Aluminium powder (stabilised)	CAS-No.: 7429-90-5 EC No.: 231-072-3	Flam. Sol 1- H228, Water-react 2 - H261		
1-methoxy-2-propanol monopropylene glycol methyl ether	CAS-No.: 107-98-2 EC No.: 203-539-1	Flam. Liq 3- H226, STOT SE 3 - H336		
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	CAS-No.: EC No.: 919-446-0 REACH Reg No.: 01-2119458049-33-XXXX	Aquatic Chronic 2 - H411, Asp. Tox - H304, Flam. Liq 3- H226, STOT SE 3 - H336, STOT RE 1 - H372		
Hydrocarbons, C9, aromatics	CAS-No.: EC No.: 918-668-5 REACH Reg No.: 01-2119455851-35-XXXX	Aquatic Chronic 2 - H411, Asp. Tox - H304, Flam. Liq 3- H226, STOT SE 3 - H336, STOT SE 3 - H335	1-10%	
2-butanone oxime ethyl methyl ketoxime ethyl methyl ketone oxime	CAS-No.: 96-29-7 EC No.: 202-496-6	Acute Tox 4 - H312, Skin. Sens 1 - H317, Eye Dam. 1 - H318, Carc. 2 - H351	0-1%	
naphtha (petroleum) Hydrotreated Heavy	CAS-No.: 64742-48-9 EC No.: 265-150-3 REACH Reg No.: 01-2119463258-33	Flam. Liq 3- H226, STOT SE 3 - H336, Asp. Tox - H304		
2-ethylhexanoic acid, zirconium salt	CAS-No.: 22464-99-9 EC No.: 245-018-1	Repr. 2 - H361d		
xylene	CAS-No.: 1330-20-7 EC No.: 215-535-7 REACH Reg No.: 01-2119488216-32-XXXX	Acute Tox 4 - H312, Acute Tox 4 - H332, Skin Irrit.2 - H315, Flam. Liq 3- H226		
calcium carbonate	CAS-No.: 471-34-1 EC No.: 207-439-9 REACH Reg No.: 01-2119486795-18-XXXX		0-1%	
Cobalt bis (2-ethylhexanoate)	CAS-No.: 136-52-7 EC No.: 205-250-6	Skin. Sens 1 - H317, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410		
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS-No.: 64742-48-9 EC No.: 919-857-5 REACH Reg No.: 01-2119463258-33-xxxx		STOT SE 3 - H336, Asp. Tox - H304, Flam. Liq 3- H226		
ethylbenzene	CAS-No.: 100-41-4 EC No.: 202-849-4	Flam. Liq 2- H225, Asp. Tox - H304, Acute Tox 4 - H332, STOT RE 2 - H373	0-1%	
naphtha (petroleum)	CAS-No.: 64741-65-7 EC No.: 265-067-2 REACH Reg No.: 01- 2119471991-29XXXX	Asp. Tox - H304, Flam. Liq 3- H226, Aquatic Chronic 2 - H411		
nonane	CAS-No.: 111-84-2 EC No.: 203-913-4 REACH Reg No.: 01-2119463259-31-XXXX	Aquatic Chronic 1 - H410, Skin Irrit.2 - H315, Asp. Tox - H304, Flam. Liq 3- H226, STOT SE 3 - H336		
Nonane	CAS-No.: 111-84-2 EC No.: 203-913-4	Acute Tox 4 - H332, Flam. Liq 3- H226	0-1%	
Propionic acid	CAS-No.: 79-09-4 EC No.: 201-176-3	Skin Corr. 1B - H314, Eye Dam. 1 - H318, STOT SE 3 - H335, Flam. Liq 3- H226	0-1%	

toluene	REACH Reg No.: 01-2119471310-51-XXXX	H361, STOT SE 3 - H336, STOT RE 2 - H373	0-1%
loctane n-octane	CAS-No.: 111-65-9 EC No.: 203-892-1	Flam. Liq 2- H225, Asp. Tox - H304, Skin Irrit.2 - H315, STOT SE 3 - H336, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	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.

Section 4: First aid measures

<u>4.1 Description of first aid measures</u>

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 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 breathing is difficult, give oxygen. If breathing has stopped or the exposed person experiences difficulty in breathing, administer artificial respiration and seek immediate medical assistance.
Ingestion	Rinse mouth thoroughly. Provide fresh air, warmth and rest. Do not induce vomiting. Never give anything by mouth if victim is unconscious, is rapidly losing consciousness or is convulsing. Seek medical advice (show the label where possible). If vomiting occurs, the head should be kept low so that stomach content doesn't enter the lungs.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues after rinsing.
Eye contact	Do not rub eye. Avoid contaminating unaffected eye. Remove contact lenses if present and easy to do so. Promptly wash eye(s) 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 dependent on the concentration and the length of exposure.
Inhalation	May cause drowsiness or dizziness.
Ingestion	No specific symptoms noted.
Skin contact	No specific symptoms noted.
Eye contact	No specific symptoms noted.

<u>4.3 Indication of any immediate medical attention and special treatment needed</u>

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

5.1 Extinguishing media

Extinguishing media Unsuitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials. Extinguish with foam carbon dioxide, dry powder or water fog. Do not use water jet to extinguish fire.	
5.2 Special hazards arising from the sul	bstance or mixture	
Hazardous combustion products Unusual fire & explosion hazards Specific hazards 5.3 Advice for firefighters	During fire, gases hazardous to health may be formed. The product is classified as a flammable liquid and vapour. If heated, harmful vapours may be formed.	
Special fire fighting procedures Protective equipment for firefighter	Ventilate closed spaces before entering them. Water spray should be used to cool containers. If possible, fight fire from protected position. Keep up-wind to avoid fumes. s 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 equ	uipment and emergency procedures		
Personal precautions For emergency responders	Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection. Wear protective clothing as described in Section 8 of this safety data sheet. If necessary evacuate surrounding areas. Eliminate all sources of ignition. Avoid inhalation of vapours and contact with skin and eyes. Do not touch or walk throug spilled material. Read and follow manufacturer's recommendations. Follow safe handling advice and personal protective equipment recommendations for not use of product.		
6.2 Environmental precautions			
Environmental precautions	Prevent any material from entering drains or waterways.		
6.3 Methods and material for containme	ent and cleaning up		
Spill clean up methods	Wear appropriate personal protective equipment as specified in Section 8. Prevent further leakage or spillage if safe to do so. Ventilate and evacuate the area. Eliminate all sources of ignition. Dam and absorb spillage using a spill kit, sand, earth or other non-combustible material. Prevent entry to into sewers, water course, basement or confined areas. Use non sparking tools or equipment. Recover by pumping or with suitable absorbent. Place spilled material into suitable labelled sealed containers. Remove waste promptly to a safe area.		
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 only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Wear suitable personal protective equipment, as detailed in Section 8. Keep away from heat, sparks and open flame. Earth all equipment. Use only non-sparking tools. Avoid contact with skin and eyes. Avoid inhalation of vapours. Do not use contact lenses. Avoid prolonged or repeated contact. Read and follow manufacturer's recommendations. Keep container tightly closed.		
7.2 Conditions for safe storage, includir	ng 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 against static discharge and keep away from sources of ignition. Flammable liquid storage.		
Storage class 7.3 Specific end use(s)	r minimasie nyuta storage.		

Specific end use(s) Usage description

The identified uses for this product are detailed in Section 1.2. 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
Aluminium powder (stabilised)	OEL		1 (R) mg/m ³			
1-methoxy-2-propanol monopropylene glycol methyl ether	OEL	100 ppm	375 mg/m ³	150 ppm	568 mg/m ³	
2-butanone oxime ethyl methyl ketoxime ethyl methyl ketone oxime	OEL	3 ppm	10 mg/m ³	10 ppm	33 mg/m ³	
xylene	OEL	50 ppm	221 mg/m ³	100 ppm	442 mg/m ³	
ethylbenzene	OEL	100 ppm	442 mg/m ³	200 ppm	884 mg/m ³	

nonane	OEL	200 ppm	1050 mg/m ³			
Propionic acid	OEL	10 ppm	31 mg/m ³	20 ppm	62 mg/m ³	
toluene	OEL	50 ppm	192 mg/m ³	100 ppm	384 mg/m ³	
octane n-octane	OEL	300 ppm	1450 mg/m ³			
Ingredient comments	Irel	and, Occupational 1	Exposure Limits 2018	3.		
8.2 Exposure Controls						
Protective equipment						
Engineering measures		-	ilation, including app xposure limit is not e	-	extraction, to e	ensure that the
Respiratory equipment		respirators and co dards such as CEN	mponents tested and I (EU).	approved und	er appropriate	government
Hand protection	pro Glo Pro que	ective gloves that ves must be selecte tective gloves need stion: other chemic	with good industrial l are resistant to chem ed according to the ap to be selected accord cal products that may t protection), level of	ical agents in a oplication and ding to their so be handled, n	accordance wi duration of use uitability for th ecessary physi	th standard EN374. e at the workstation. e workstation in
Eye protection	Wea	ar safety goggles of	face shield to preven ed and approved und	nt any possibil	ity of eye conta	
Other protection			ve clothing as protect			
Hygiene measures	eati	ng, smoking and us mptly remove any o	ORK AREA! Wash ha sing the toilet. Wash p clothing that becomes	promptly if ski	n becomes wet	t or contaminated.
Process conditions	Ens	ure that eye flushir	ng systems and safety	showers are l	ocated close b	y in the work place.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance Colour Odour	Viscous liquid. Various. Hydrocarbon, (slight).
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	No information available as testing has not been completed.
pH-Value, Diluted solution	No information available as testing has not been completed.
Melting point	No information available as testing has not been completed.
Initial boiling point and boiling range	No information available as testing has not been completed.
Flash point	Closed cup: 400 C
Evaporation rate	No information available as testing has not been completed.
Flammability state	Liquid
Flammability limit - lower(%)	Lower: 1.48%
Flammability limit - upper(%)	Upper: 13.74%
Vapour pressure	No information available.
Vapour density (air=1)	Highest known value: 1.1 kPa (8.5 mm Hg) (at 20°C)
Relative density	1.00
Bulk density	No information available.

Solubility	Insoluble in water.
Decomposition temperature	Stable under normal handling and storage conditions.
Partition coefficient; n- Octanol/Water	No information available.
Auto ignition temperature (°C)	Lowest known value: 270°C
Viscosity	Kinematic (25° C): = 5.63 cm2/s
	The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air 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.
Volatile organic compound	No information available.
Other information	Volume Organic Compounds 450g/l (max) Volume Solids 48% Weight Solids 55%
Section 10: Stability and reactivity	
10.1 Reactivity	
Reactivity	No specific reactivity hazards associated with this product.
10.2 Chemical stability	
Stability	Stable under normal temperature conditions and recommended use.
10.3 Possibility of hazardous reactions	
Hazardous polymerisation	Flammable liquid and vapour. No information available. Unknown.
10.4 Conditions to Avoid	
Conditions to avoid	Heat, sparks, open flames, temperature extremes and direct sunlight.
10.5 Incompatible materials	
Materials to avoid	Do not mix with other chemicals unless listed on directions.
10.6 Hazardous decomposition products	

Section 11: Toxicological information

11.1 Information on toxicological effects

Toxicological information	No Information available.
Acute toxicity (Oral LD50) Acute toxicity (Dermal LD50) Acute toxicity (Inhalation LD50)	No information available. No information available. No information available.
Serious eye damage/irritation	Product is not classified as an eye irritant.
Skin corrosion/irritation	No information available.

Respiratory sensitisation Skin sensitisation	No information available. No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Specific target organ toxicity - Sing	le exposure:
STOT - Single exposure	No information available.
Specific target organ toxicity - Rep	eated exposure:
STOT - Repeated exposure	No information available.
Inhalation	May cause drowsiness or dizziness.
Ingestion	No specific symptoms noted.
Skin contact	No specific symptoms noted.
Eye contact	No specific symptoms noted.
Waste management	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
Routes of entry	No information available.
Target organs	Respiratory system, lungs.
Aspiration hazards: Reproductive toxicity:	No information available. No information available.

Section 12: Ecological information

12.1 Toxicity

	Acute toxicity - Fish	No information available.
	Acute toxicity - Aquatic invertebrate	
	Acute toxicity - Aquatic plants	No information available.
	Acute toxicity - Microorganisms	No information available.
	Chronic toxicity - Fish	No information available.
	Chronic toxicity - Aquatic	No information available.
	invertebrates	
	Chronic toxicity - Aquatic plants	No information available.
	Chronic toxicity - Microorganisms	No information available.
	Ecotoxicity	The product contains a substance which is toxic to aquatic life with long lasting effects.
	Eco toxilogical information	Harmful to aquatic life with long lasting effects.
<u>12.2</u>	Persistence and degradability	
	Degradability	The degradability of the product has not been stated.
	Biological oxygen demand	No information available.
	Chemical oxygen demand	No information available.
<u>12.3</u>	Bioaccumulative potential	
	Bioaccumulative potential	No data available on bioaccumulation.
	Bioaccumulation factor	No information available.
	Partition coefficient; n-	No information available.
	Octanol/Water	
<u>12.4</u>	<u>Mobility in soil</u>	
	Mobility	No information available.

12.5 Results of PBT and vPvB assessment

 $\label{eq:results} \textbf{Results of PBT and vPvB assessment} \ \ \textbf{The product does not contain any PBT or vPvB Substances}.$

12.6 Other adverse effects

Other adverse effects

None known.

	Revision Date: 28 May 2019 - Revision
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. For waste disposal, use a licensed industrial waste disposal agent.
Section 14: Transport information	
4.1 UN number	
UN no. (ADR) UN no. (IMDG) UN no. (IATA)	UN1263 UN1263 UN1263
4.2 UN proper shipping name	
ADR proper shipping name IMDG proper shipping name IATA proper shipping name	PAINT or PAINT RELATED MATERIAL PAINT or PAINT RELATED MATERIAL PAINT
4.3 Transport hazard class(es)	
ADR class IMDG class IATA class	3 3 3
Transport labels	
14.4 Packing group	•
ADR/RID/ADN packing group IMDG packing group IATA packing group	III III III
4.5 Environmental hazards	
ADR IMDG IATA	No No No
14.6 Special precautions for user	
EMS Emergency action code Hazard no. (ADR) Tunnel restriction code	F-E, S-E A3 A72 A192 30 (D/E)

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

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 453/2010 of 20th May 2010 amending regulation (EC) No 1907/2006.
Approved code of practice	2018 Code of Practice for the Chemical Agents Regulations in accordance with section 60 of

	Revision Date: 28 May 2019 - Re
	the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005).
Chemical safety assessment	No chemical safety assessment has been carried out.
ion 16: Other information	
General information	This Safety Data Sheet is in accordance with Reach Regulation (EC) No 453/2010.
Revision comments	This is a first issue.
Revision date	28 May 2019
Revision	1
Safety data sheet status	Approved.
ard statements in full	
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H228	Flammable solid.
H261	In contact with water releases flammable gases.
H372	Causes damage to organs through prolonged or repeated exposure .
H411	Toxic to aquatic life with long lasting effects.
H335	May cause respiratory irritation.
H312	Harmful in contact with skin.
H317	May cause an allergic skin reaction.
H318 H351	Causes serious eye damage.
EUH066	Suspected of causing cancer . Repeated exposure may cause skin dryness or cracking.
H361	Suspected of damaging fertility or the unborn child .
H315	Causes skin irritation.
H315 H332	Harmful if inhaled.
H352 H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H225	Highly flammable liquid and vapour.

H373 May cause damage to organs through prolonged or repeated exposure . H360 May damage fertility or the unborn child . Causes severe skin burns and eye damage. H314 H412 Harmful to aquatic life with long lasting effects.

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.