

Product Metalshield Hammered Gold
 Revision date 28 May 2019
 Revision 1



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 Metalshield Hammered Gold
Synonyms, Trade names 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.
 P243 Take precautionary measures against static discharge.
 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 + P235 Store in a well-ventilated place. Keep cool.

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	30-60%
Aluminium powder (stabilised)	CAS-No.: 7429-90-5 EC No.: 231-072-3	Flam. Sol 1- H228, Water-react 2 - H261	1-10%
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	1-10%
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	1-10%
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	0-1%
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	0-1%
2-ethylhexanoic acid, zirconium salt	CAS-No.: 22464-99-9 EC No.: 245-018-1	Repr. 2 - H361d	0-1%
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	0-1%
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	0-1%
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	0-1%
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	0-1%
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	CAS-No.: 108-88-3 EC No.: 203-625-9 REACH Reg No.: 01-2119471310-51-XXXX	Skin Irrit.2 - H315, Asp. Tox - H304, Flam. Liq 2- H225, Repr. 2 - H361, STOT SE 3 - H336, STOT RE 2 - H373	0-1%
octane 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

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 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.

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. Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet to extinguish fire.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	During fire, gases hazardous to health may be formed.
Unusual fire & explosion hazards	The product is classified as a flammable liquid and vapour.
Specific hazards	If heated, harmful vapours may be formed.

5.3 Advice for firefighters

Special fire fighting procedures	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.
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**

Personal precautions	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 through spilled material. Read and follow manufacturer's recommendations.
For emergency responders	Follow safe handling advice and personal protective equipment recommendations for normal use of product.

6.2 Environmental precautions

Environmental precautions	Prevent any material from entering drains or waterways.
----------------------------------	---

6.3 Methods and material for containment 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, including any incompatibilities

Storage precautions	Store in tightly closed original container in a cool, dry and well-ventilated place. Keep upright, locked up and out of reach of children. Keep away from incompatible materials (see section 10). Protect against static discharge and keep away from sources of ignition.
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 1.2.
Usage description	Use only according to directions. Replace and tighten cap after use.

Section 8: Exposure controls/Personal protection**8.1 Control parameters**

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
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 Ireland, Occupational Exposure Limits 2018.

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

Use respirators and components tested and approved under appropriate government standards such as CEN (EU).

Hand protection

Handle in accordance with good industrial hygiene and safety practices. Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374. Gloves must be selected according to the application and duration of use at the workstation. Protective gloves need to be selected according to their suitability for the workstation in question: other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

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 suitable protective clothing as protection against splashing or contamination.

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

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	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.
Flammability state	Liquid
Flammability limit - lower(%)	Flammability Lower: 1.48%
Flammability limit - upper(%)	Flammability Upper: 13.74%
Vapour pressure	No information available.
Vapour density (air=1)	Vapour density 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 cm ² /s
Explosive properties	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 418g/l (max) Volume Solids 46% Weight Solids 51%

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 reactions	Flammable liquid and vapour.
Hazardous polymerisation	No information available.
Polymerisation description	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

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other harmful gases or vapors.
---	---

Section 11: Toxicological information

11.1 Information on toxicological effects

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

Respiratory sensitisation	No information available.
Skin sensitisation	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Specific target organ toxicity - Single exposure:	
STOT - Single exposure	No information available.
Specific target organ toxicity - Repeated 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:	No information available.
Reproductive toxicity:	No information available.

Section 12: Ecological information

12.1 Toxicity

Acute toxicity - Fish	No information available.
Acute toxicity - Aquatic invertebrates	No information available.
Acute toxicity - Aquatic plants	No information available.
Acute toxicity - Microorganisms	No information available.
Chronic toxicity - Fish	No information available.
Chronic toxicity - Aquatic invertebrates	No information available.
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 toxicological information	Harmful to aquatic life with long lasting effects.

12.2 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.

12.3 Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Bioaccumulation factor	No information available.
Partition coefficient; n-Octanol/Water	No information available.

12.4 Mobility in soil

Mobility	No information available.
-----------------	---------------------------

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment The product does not contain any PBT or vPvB Substances.

12.6 Other adverse effects

Other adverse effects	None known.
------------------------------	-------------

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**14.1 UN number**

UN no. (ADR) UN1263
 UN no. (IMDG) UN1263
 UN no. (IATA) UN1263

14.2 UN proper shipping name

ADR proper shipping name PAINT or PAINT RELATED MATERIAL
 IMDG proper shipping name PAINT or PAINT RELATED MATERIAL
 IATA proper shipping name 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 No
 IMDG No
 IATA No

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 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

the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005).

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 Regulation (EC) No 453/2010.
Revision comments	This is a first issue.
Revision date	28 May 2019
Revision	1
Safety data sheet status	Approved.

Hazard 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	Causes serious eye damage.
H351	Suspected of causing cancer .
EUH066	Repeated exposure may cause skin dryness or cracking.
H412	Harmful to aquatic life with long lasting effects.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H361	Suspected of damaging fertility or the unborn child .
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 .
H302	Harmful if swallowed.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.

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.