Product METALSHIELD BASE B
Revision date 02 November 2020

Revision 1



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 BASE B
Other means of identification ME6X-0ETX-120F-MPXG

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 Eye Irrit.2A - H319, STOT SE 3 - H336

Environment Aquatic Chronic 2 - H411

2.2 Label elements

Contains Butanone oxime

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

octane nonane

Label in accordance with (EC) no.

1272/2008



Signal word Warning

Hazard statements H226 Flammable liquid and vapour.

H319 Causes serious eye irritation. 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.

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.

Disposal

P501 Dispose of contents/ container to a licensed hazardous waste disposal facility in accordance with all applicable regulations.

EUH statements

 $\hbox{EUH208 Contains Butanone oxime and cobalt bis (2-ethylhexanoate). May produce an allergic reaction.}$

2.3 Other hazards

None known.

Section 3: Composition/identification of ingredients

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Regulation (EC) No 1272/2008	%
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	40-50%
trizinc bis(orthophosphate)	CAS-No.: 7779-90-0 EC No.: 231-944-3	Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	5-10%
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	1-5%
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	1-5%
Butanone 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	0.1-0.9%
Isopropoxyethanol	CAS-No.: 109-59-1 EC No.: 203-685-6 REACH Reg No.: 1-2119494720-35-xxxx	Acute Tox 4 - H312, Acute Tox 4 - H332, Skin Irrit.2 - H315, Eye Irrit.2A - H319, Flam. Liq 3- H226	0.1-0.9%
cobalt bis(2-ethylhexanoate)	CAS-No.: 136-52-7 EC No.: 205-250-6	Aquatic Acute 1 - H400, Aquatic Chronic 3 - H412, Eye Irrit.2A - H319, Repr. 2 - H361, Skin. Sens 1 A- H317, Repr. 1B- H360	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%
Ethanol	CAS-No.: 64-17-5 EC No.: 200-578-6 REACH Reg No.: 01-2119457610-43	Eye Irrit.2A - H319, Flam. Liq 2- H225	<0.1%
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%
propionic acid	CAS-No.: 79-09-4 EC No.: 201-176-3	Skin Corr. 1B - H314	<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%
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.

Section 4: First aid measures

4.1 Description of first aid measures

General information General first aid, rest, warmth and fresh air.

InhalationRemove the affected person to fresh air, obtain medical attention if symptoms persist.IngestionRinse mouth thoroughly. DO NOT induce vomiting. Get medical attention immediately.Skin contactRemove contaminated clothing immediately and wash skin with soap and water. Launder

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

Eye 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 May be fatal if swallowed and enters airways.

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

reaction.

Eye contact Causes serious eye irritation.

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

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

Unusual fire & explosion hazards

Specific hazards

When heated, toxic and corrosive vapours/gases may be formed

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 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. Do not smoke,

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

with skin and eyes.

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. Spillages or uncontrolled

discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency

or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Spill clean up methods 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 personal protection, see section 8 For waste disposal, see section 13. See section 1 for

emergency contact.

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 No information available.

7.3 Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

Usage description Use only according to directions. Replace and tighten cap after use.

Section 8: Exposure controls/Personal protection

8.1 Control parameters

Component	STD	TWA (8 Hrs)	STEL (1	l5mins)	Notes
1-methoxy-2-propanol monopropylene glycol methyl ether	OEL	100 ppm	375 mg/m ³	150 ppm	568 mg/m ³	IOELV
1-methoxy-2-propanol monopropylene glycol methyl ether	WEL	100 ppm	375 mg/m ³	150 ppm	560 mg/m ³	Sk
Butanone oxime	OEL	3 ppm	10 mg/m ³	10 ppm	33 mg/m ³	Sens.
Isopropoxyethanol	OEL	25 ppm	106 mg/m ³			Sk
Ethanol	OEL			1000 ppm		
Ethanol	WEL	1000 ppm	1920 mg/m ³			
dodecane-1-thiol	OEL	0.1 ppm				Sens.
Naphthalene	OEL	10 ppm	50 mg/m ³			IOELV
propionic acid	OEL	10 ppm	31 mg/m ³	20 ppm	62 mg/m ³	IOELV
propionic acid	WEL	10 ppm	31 mg/m^3	15 ppm	46 mg/m ³	
nonane	OEL	200 ppm	1050 mg/m ³			_
octane	OEL	300 ppm	1450 mg/m ³			

Ingredient comments Ireland, Occupational Exposure Limits 2020.

Workplace Exposure Limits Guidance Note EH40/2005.

8.2 Exposure Controls

Protective equipment



Hand protection

Eye protection





Engineering measures Provide adequate ventilation, including appropriate local extraction, to ensure that the

defined occupational exposure limit is not exceeded.

Respiratory equipment 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). Type A/organic vapour protective components recommended.

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.

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.

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before **Hygiene measures**

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 Clear.

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.

Not applicable. Melting point

Initial boiling point and boiling

range

Not applicable.

40.00 °C Flash point

Evaporation rate Not applicable.

Flammability state Highly flammable liquid and vapour.

1.48% Flammability limit - lower(%)

Flammability limit - 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

Bulk density No information available as testing has not been completed. **Solubility** Insoluble in cold water.

Decomposition temperature No information available as testing has not been completed.

Partition coefficient; n-

Octanol/Water

No information available as testing has not been completed.

Auto ignition temperature (°C) 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 430g/l (max)

Other information Volume Solids 49.0 % +/- 1.0%

Weight Solids: 54.0% +/- 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 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 toxicological effects

Toxicological information No toxicological information for the overall finished product.

Acute toxicity (Oral LD50)

Acute toxicity (Dermal LD50)

Acute toxicity (Inhalation LD50)

No information available as testing has not been completed.

No information available as testing has not been completed.

No information available as testing has not been completed.

Serious eye damage/irritation Causes serious 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 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 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 May be fatal if swallowed and enters airways.

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

reaction.

Eye contact Causes serious 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 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 monopropylene glycol methyl ether	=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 >5000.00mg/kg Rabbit	>6.10mg/l (vapours) Rat 4 Hours>6.10mg/l (vapours) Rat 4 Hours
Isopropoxyethanol	5600.00mg/kg Rat	1440.00mg/kg Rabbit	
Ethanol	7060.00mg/kg Rat		124.70mg/l (vapours) Rat 4 Hours
Naphthalene	>2000.00mg/kg Rat	>2000.00mg/kg Rabbit	

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
Acute toxicity - Microorganisms
Chronic toxicity - Fish
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 plantsNo 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.

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 factor Partition coefficient; n-Octanol/Water No information available as testing has not been completed. No information available as testing has not been completed.

12.4 Mobility in soil

Mobility 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 Other adverse effects

Other adverse effects None known.

Name	Acute toxicity (Fish)	J ` ±	Acute toxicity (Aquatic plants)
Butanone oxime	LC50 48 Hours 560.00mg/l LC50 96 Hours 46.00mg/l Lepomis macrochirus (Bluegill)	LC50 48 Hours 750.00mg/l Daphnia magna	LC50 72 Hours 83.00mg/l
1-methoxy-2-propanol monopropylene glycol methyl ether	LC50 96 Hours =6812.00mg/l Leuciscus idus (Golden Orfe)	Danhnia magna	EC50 =1000.00mg/l Selenastrum Capricornutum
propionic acid	LC50 96 Hours 51.00ppm Onchorhynchus mykiss (Rainbow Trout)	1 11 1	EC50 96 Hours 43.00mg/l
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	LC50 96 Hours >100.00ppm Freshwater FishLC50 96 Hours >100.00ppm Freshwater Fish	LC50 48 Hours >100.00ppm Daphnia magnaLC50 48 Hours >100.00ppm Daphnia magna	
Isopropoxyethanol		EC50 48 Hours 3610.00ppm Daphnia magna	
Ethanol	LC50 96 Hours 100.00mg/l Pimephales promelas (Fat-head Minnow)		

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

 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
IATA proper shipping name
PAINT OF PAINT RELATED MATERIAL
PAINT OF PAINT RELATED MATERIAL
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 Transport in bulk according to annex II of MARPOL73/78 and the IBC code

Not applicable.

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/Legislation specific for the substance or mixture

EU legislation 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. Commission Regulation (EU) 2019/1691 of 9 October 2019 amending Annex V to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration,

Evaluation, Authorisation and Restriction of Chemicals (REACH)

Approved code of practice 2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents)

Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens)

Regulations (2001-2019)

Workplace Exposure Limits Guidance Note EH40/2005.

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 commentsThis is a first issue. **Revision date**02 November 2020

Revision 1

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.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.H411 Toxic to aquatic life with long lasting effects.

H315 Causes skin irritation.

H318	Causes serious eye damage.
H312	Harmful in contact with skin.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer .
H319	Causes serious eye irritation.
H302	Harmful if swallowed.
H361	Suspected of damaging fertility or the unborn child .
H332	Harmful if inhaled.
H360	May damage fertility or the unborn child .
H412	Harmful to aquatic life with long lasting effects.
H225	Highly flammable liquid and vapour.
Н335	May cause respiratory irritation.
H314	Causes severe skin burns and eve damage.

EUH208 Contains Butanone oxime and cobalt bis(2-ethylhexanoate). May produce an allergic

reaction.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.