

SAFETY DATA SHEET



SHIELD - 2 Pack HIGH BUILD EPOXY Primer

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010 According to Regulation (EC) No 1907/2006, Annex II

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name SHIELD - 2 Pack HIGH BUILD EPOXY Primer
 Product number 250 line
 Synonyms; trade names 11043 (Internal Ref)

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

Identified uses Paint.

1.3. Details of the supplier of the safety data sheet

Supplier SML Paints And Coatings
 The Downs,
 South Cerney,
 Cirencester,
 Gloucestershire,
 GL7 6DD
 01285 862132
 info@smlpaints.co.uk
 Contact person info@smlpaints.co.uk

1.4. Emergency telephone number

National emergency telephone +44 (0) 1285 862132 08:00-18:00 MON-FRI
 number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixtureClassification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226
 Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317
 Environmental hazards Aquatic Chronic 1 - H410

Classification (67/548/EEC or 1999/45/EC) Xi;R36/38. R43. N;R51/53. R10.

Human health Persons with a history of skin sensitization problems should not be employed in any process in which this product is used.
 Environmental This product may cause harm to the environment. See Section 12 Ecological Information.
 Physicochemical See Section 7.2 Storage Class. See Section 5.2 Hazardous combustion products. See Section 10: Stability and reactivity

2.2. Label elements

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

Pictogram



Signal word

Warning

Hazard statements

H226 Flammable liquid and vapour.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P261 Avoid breathing vapour/ spray.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/ container in accordance with national regulations.

Supplemental label information

EUH205 Contains epoxy constituents. May produce an allergic reaction.

Contains

TRIZINC BIS(ORTHOPHOSPHATE), EPOXY RESIN (Number average MW <= 700), XYLENE, ZINC OXIDE

Supplementary precautionary statements

P233 Keep container tightly closed.
 P240 Ground/ bond container and receiving equipment.
 P241 Use explosion-proof electrical equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P264 Wash contaminated skin thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P321 Specific treatment (see medical advice on this label).
 P332+P313 If skin irritation occurs: Get medical advice/ attention.
 P337+P313 If eye irritation persists: Get medical advice/ attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P391 Collect spillage.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

TRIZINC BIS(ORTHOPHOSPHATE)		10-30%
CAS number: 7779-90-0		EC number: 231-944-3
M factor (Acute) = 10		M factor (Chronic) = 10
Classification		Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 3 - H331		N;R50/53
Aquatic Acute 1 - H400		
Aquatic Chronic 1 - H410		
XYLENE		10-30%
CAS number: 1330-20-7		EC number: 215-535-7
Classification		Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 3 - H226		R10 Xn;R20/21 Xi;R38
Acute Tox. 4 - H312		
Acute Tox. 4 - H332		
Skin Irrit. 2 - H315		
EPOXY RESIN (Number average MW <= 700)		10-30%
CAS number: 25068-38-6		EC number: 500-033-5
Classification		Classification (67/548/EEC or 1999/45/EC)
Skin Irrit. 2 - H315		R43 Xi;R36/38 N;R51/53
Eye Irrit. 2 - H319		
Skin Sens. 1 - H317		
Aquatic Chronic 2 - H411		
2-METHOXY-1-METHYLETHYL ACETATE		1-5%
CAS number: 108-65-6		EC number: 203-603-9
Classification		Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 3 - H226		R10
WHITE SPIRIT		<1%
CAS number: 64742-88-7		EC number: 265-191-7
Classification		Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 3 - H226		Xn;R65. N;R51/53. R10.
STOT SE 3 - H336		
STOT RE 1 - H372		
Asp. Tox. 1 - H304		
Aquatic Chronic 2 - H411		

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

<p>ZINC OXIDE</p> <p>CAS number: 1314-13-2</p> <p>M factor (Acute) = 1</p>	<p style="text-align: right;"><1%</p> <p>EC number: 215-222-5</p> <p>M factor (Chronic) = 10</p>
<p>Classification</p> <p>Aquatic Acute 1 - H400</p> <p>Aquatic Chronic 1 - H410</p>	<p>Classification (67/548/EEC or 1999/45/EC)</p> <p>N;R50/53</p>

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	The severity of the symptoms described will vary depending on the concentration and the length of exposure. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Inhalation	Get medical attention. Place unconscious person on their side in the recovery position and ensure breathing can take place. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention. Symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Show this Safety Data Sheet to the medical personnel.
Ingestion	Remove affected person from source of contamination. Rinse mouth thoroughly with water. Give plenty of water to drink. DO NOT induce vomiting. Get medical attention immediately.
Skin contact	Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing. Use barrier creams to prevent skin contact. Remove contaminated clothing and rinse skin thoroughly with water.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. In case of insufficient ventilation, wear suitable respiratory equipment.

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	Harmful if inhaled Vapours may cause headache, fatigue, dizziness and nausea.
Ingestion	Harmful if swallowed. May cause nausea, stomach pain and vomiting.
Skin contact	Skin irritation. May cause sensitisation or allergic reactions in sensitive individuals.
Eye contact	May cause severe eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY! In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
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Notes:

SECTION 5: Firefighting measures

5.1. Extinguishing media

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire. Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Vapours are heavier than air and may travel along the floor and accumulate in the bottom of containers. Vapours may be ignited by a spark, a hot surface or an ember. Vapours may form explosive mixtures with air. If a fire or if heated, a pressure increase will occur and the container may burst with the risk of subsequent explosion. The product is flammable.

Hazardous combustion products In case of fire, toxic gases (CO, CO₂, NO_x) may be formed. Acid smoke or fumes. Other pyrolysis products typical of burning an organic material. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m³. In the event of a fire and/or explosion, do not breathe fumes.

5.3. Advice for firefighters

Protective actions during firefighting Containers close to fire should be removed or cooled with water. Do not allow water to contact any leaked material. Keep up-wind to avoid fumes. Control run-off water by containing and keeping it out of sewers and watercourses. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken without appropriate training or involving any personal risk.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Do not handle broken packages without protective equipment. If ventilation is inadequate, suitable respiratory protection must be worn. Take care as floors and other surfaces may become slippery. Wash thoroughly after dealing with a spillage. Where anti slip aggregates, powders or similar are added/post added to a paint, the potential for the generation of respirable dust during handling and use can occur. In such cases, occupational exposures to respirable dust should be monitored and controlled. In the case of exposure to prolonged or high levels of air borne dust, wear a personal respirator in compliance with national legislation. No smoking, sparks, flames or other sources of ignition near spillage.

For non-emergency personnel Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear suitable respirator when ventilation is inadequate. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering.

For emergency responders If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

Methods for cleaning up No smoking, sparks, flames or other sources of ignition near spillage. Collect and place in suitable waste disposal containers and seal securely. If involved in a fire, shut off flow if it can be done without risk. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Small Spillages: Absorb small quantities with paper towels and evaporate in a safe place. Large Spillages: Absorb in vermiculite, dry sand or earth and place into containers. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. The accumulation of contaminated rags and application cloths may result in spontaneous combustion. This is particularly important in the case of products containing a high level of drying oils such as teak oil, linseed oil etc. Good housekeeping standards and regular safe removal of waste materials will minimise the risks of spontaneous combustion and other fire hazards.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin and eyes. Eliminate all sources of ignition. Keep away from heat, sparks and open flame. All handling should only take place in well-ventilated areas. Static electricity and formation of sparks must be prevented. Dust may form explosive mixture with air. Take precautionary measures against static discharges. Storage tanks and other containers must be earthed. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Paints based on pitch, coal tar, high temp (CAS 65996-93-2) may cause sensitivity to sunlight. To reduce sun sensitivity, a sun blocking lotion (SPE 15+) can also be applied prior to application of a protective cream.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate hand lotion to prevent defatting and cracking of skin.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from food, drink and animal feeding stuffs. Keep away from oxidising materials, heat and flames. Paints containing aluminium must not get in contact with water during storage. Exercise caution when opening to allow pressure release. Keep container tightly closed and in a well-ventilated place. Avoid/separate from strong acids, alkalis, oxidising and reducing agents. Observe the label precautions. Store at temperatures between 5°C and 35°C (32 to 95°F).

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. Restricted to professional users.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm(Sk) 220 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 100 ppm(Sk) 441 mg/m³(Sk)

2-METHOXY-1-METHYLETHYL ACETATE

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

Long-term exposure limit (8-hour TWA): WEL 50 ppm(Sk) 274 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 100 ppm(Sk) 548 mg/m³(Sk)

WHITE SPIRIT

Long-term exposure limit (8-hour TWA): WEL 350 mg/m³(Sk)

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

XYLENE (CAS: 1330-20-7)

DNEL

- Inhalation; Short term : 442 mg/m³

8.2. Exposure controls

Protective equipment



Note:

When spraying, the use of a suitable/approved respirator is advised.

Appropriate engineering controls

No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.

Personal protection

Advice on personal protection is applicable for high exposure levels. Select proper personal protection based on a risk assessment of the actual exposure scenario.

Eye/face protection

The following protection should be worn: Chemical splash goggles. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent skin contamination. Use barrier creams to prevent skin contact.

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station. Provide eyewash station and safety shower. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Keep container tightly sealed when not in use.

Notes:

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

Appearance	Liquid.
Colour	Red Oxide
Odour	Characteristic/of solvents
Odour threshold	Not determined.
pH	Not relevant.
Melting point	Not determined.
Initial boiling point and range	Not determined.
Flash point	24°C CC (Closed cup).
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	No specific test data are available.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 0.8% Upper flammable/explosive limit: 10.5%
Other flammability pressure	Not known. Vapour
Vapour density	Not determined.
Relative density	1.75 - 1.90 @ 20°C
Bulk density	Not determined.
Solubility(ies)	Soluble in the following materials: Organic solvents.
Partition coefficient	Not available.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	May form explosive mixtures with air.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not determined.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information Soluble in most organic solvents.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Acids. Alkalis. Oxidising materials.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Further information on correct storage: refer to Section 7.

10.3. Possibility of hazardous reactions

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

Possibility of hazardous reactions None under normal processing Vapours may form explosive mixtures with air.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidising agents. Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to conditions to heat or sources of ignition. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m³. Avoid extremes of temperature and direct sunlight.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂). Oxides of nitrogen. Acrid smoke or fumes. In case of fire and/or explosion, do not breaths fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Based on the properties of the epoxy constituents and considering toxicological data on similar preparations, this preparation may be a skin sensitiser and an irritant. It contains low molecular epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the preparation and exposure to spray mist and vapour should be avoided.

Acute toxicity - dermal

ATE dermal (mg/kg) 15,037.96896688

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 111.69100177

General information This product is unlikely to harm health, given normal and proper handling and hygienic precautions. Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation Harmful by inhalation. Irritating to respiratory system.

Ingestion Irritating. May cause nausea, stomach pain and vomiting.

Skin contact Harmful in contact with skin. Irritating to skin.

Eye contact Harmful in contact with eyes. Irritating to eyes.

Acute and chronic health hazards The product contains an epoxy resin. May cause sensitisation or allergic reactions in sensitive individuals.

Route of entry Inhalation Ingestion. Skin and/or eye contact Oral

Additional Information: For further information, please refer to Sections 4 and 8 respectively..

Toxicological information on ingredients.

XYLENE

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

Toxicological effects	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. High vapour concentrations can cause headaches, dizziness and nausea.
<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD ₅₀ mg/kg)	4,300.0
Species	Rat
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD ₅₀ mg/kg)	2,000.0
Species	Rabbit
ATE dermal (mg/kg)	2,000.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC ₅₀ vapours mg/l)	11.0
Species	Rat
ATE inhalation (vapours mg/l)	11.0
<u>Skin corrosion/irritation</u>	
Animal data	No information available.
Human skin model test	Irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes eye irritation
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	There is no evidence that the product can cause respiratory hypersensitivity.
<u>Skin sensitisation</u>	
Skin sensitisation	No information available.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	No evidence of carcinogenicity
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	This substance has no evidence of toxicity to reproduction.
Reproductive toxicity - development	No information available.
<u>Specific target organ toxicity - single exposure</u>	

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

STOT - single exposure	Central and/or peripheral nervous system damage.
Target organs	Central nervous system Liver Kidneys
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	No information available.
<u>Aspiration hazard</u>	
Aspiration hazard	Aspiration hazard if swallowed.
.	
General information	Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.
Inhalation	Harmful by inhalation.
Ingestion	Irritating. May cause nausea, stomach pain and vomiting.
Skin contact	Harmful in contact with skin. Irritating to skin.
Eye contact	The product is irritating to eyes and skin.
Route of entry	Oral Skin and/or eye contact Inhalation Ingestion
Target organs	Central nervous system
Medical symptoms	Allergies. Irritation of eyes and mucous membranes. Headache. Fatigue. Dizziness.

SECTION 12: Ecological Information

12.1. Toxicity

Toxicity This product contains substances which are harmful to aquatic organisms. Do not discharge into drains, water courses or onto the ground.

Ecological information on ingredients.

TRIZINC BIS(ORTHOPHOSPHATE)

Toxicity	This product contains substances which are harmful to aquatic organisms. Do not discharge into drains, water courses or onto the ground.
<u>Acute aquatic toxicity</u>	
LE(C) ₅₀	0.01 < L(E)C ₅₀ ≤ 0.1
M factor (Acute)	10
Acute toxicity - fish	No information available
Acute toxicity - aquatic invertebrates	, EC ₅₀ 48 hours 0.413 mg Zn ⁺⁺ /lt (Ceriodaphnia dubia) : EC ₅₀ 48 hours 2.44 mg Zn ₃ (P ₀₄)/lt (Ceriodaphnia dubia) ,
Acute toxicity - aquatic plants	No information available.
Acute toxicity - microorganisms	, ErC ₅₀ 72 hours 0.136 mg Zn ⁺⁺ /lt (Selenastrum capricornutum) : EC ₅₀ 72 hours 0.8 mg Zn ₃ (P ₀₄) ₂ (Selenastrum capricornutum) ,
Acute toxicity - terrestrial	No information available.
<u>Chronic aquatic toxicity</u>	

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

M factor (Chronic) 10

EPOXY RESIN (Number average MW ≤ 700)

Toxicity This product contains substances which are harmful to aquatic organisms. Do not discharge into drains, water courses or onto the ground. The acute aquatic toxicity data is based on the values for the epoxy resin (number av. mol. wt. ≤700).

Acute toxicity - fish , LC50 96 hours 1.3 mmg/lit (Fish - Trout) : ,

Acute toxicity - aquatic invertebrates , EC50 48 hours 2.1 mg/lit (Daphnia) : ,

Acute toxicity - aquatic plants No information available.

Acute toxicity - microorganisms , LC50 72 hours > 11mg/lit (Algae) : ,

Acute toxicity - terrestrial No information available.

ZINC OXIDE

Toxicity This product contains substances which are harmful to aquatic organisms. Do not discharge into drains, water courses or onto the ground.

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C50 ≤ 1

M factor (Acute) 1

Acute toxicity - fish , LC50 96 hours 50.6 mg/lit (Poecilia Reticulata - guppy) : ,

Acute toxicity - aquatic invertebrates , EC50 48 hours 49.1 mg/lit (Gammarus fassciatus (freshwater shrimp)) : ,

Acute toxicity - aquatic plants No information available.

Acute toxicity - microorganisms , EC50 72 hours 184.57m mg/lit (Scenedesmus capricornutum (fresh water algae)) : ,

Acute toxicity - terrestrial No information available.

Chronic aquatic toxicity

M factor (Chronic) 10

12.2. Persistence and degradability

Persistence and degradability Solvent will evaporate, residue will not readily biodegrade. There are no data on the degradability of this product.

Ecological information on ingredients.

TRIZINC BIS(ORTHOPHOSPHATE)

Persistence and degradability No data available.

Biodegradation No data available.

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

EPOXY RESIN (Number average MW <= 700)

Persistence and degradability	This substance is not readily degradable.
Biodegradation	Not readily biodegradable.

ZINC OXIDE

Persistence and degradability	This substance is not readily degradable.
Biodegradation	No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential	The product contains potentially bioaccumulating substances.
Partition coefficient	Not available.

Ecological information on ingredients.TRIZINC BIS(ORTHOPHOSPHATE)

Bioaccumulative potential	No data available on bioaccumulation.
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EPOXY RESIN (Number average MW <= 700)

Bioaccumulative potential	Low potential for bioaccumulation.
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ZINC OXIDE

Bioaccumulative potential	No data available on bioaccumulation.
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12.4. Mobility in soil

Mobility	The product is insoluble in water. Mobile liquid, solvent will evaporate leaving a semi-solid mass.
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Ecological information on ingredients.TRIZINC BIS(ORTHOPHOSPHATE)

Mobility	No information available.
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EPOXY RESIN (Number average MW <= 700)

Mobility	Not considered mobile.
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ZINC OXIDE

Mobility	The product is non-volatile.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
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Ecological information on ingredients.TRIZINC BIS(ORTHOPHOSPHATE)

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

EPOXY RESIN (Number average MW <= 700)

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

ZINC OXIDE

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not known.

Ecological information on ingredients.

ZINC OXIDE

Other adverse effects Aqueous solutions are strongly alkaline (pH in the region of 10 - 12).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. This material and its container must be disposed of in a safe way. The generation of waste should be minimised or avoided wherever possible. The company encourages the recycle, recovery and reuse of materials, wherever possible.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Avoid the spillage or runoff entering drains, sewers or watercourses. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Dispose of waste via a licensed waste disposal contractor. Dispose of contents/container in accordance with national regulations.

SECTION 14: Transport information

General To avoid the risk of spillage, always store and transport in a secure, upright position. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.1. UN number

UN No. (ADR/RID)	1263
UN No. (IMDG)	1263
UN No. (ICAO)	1263
UN No. (ADN)	1263

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	PAINT
Proper shipping name (IMDG)	PAINT
Proper shipping name (ICAO)	PAINT
Proper shipping name (ADN)	PAINT

SHIELD - 2 Pack HIGH BUILD EPOXY Primer

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



14.4. Packing group

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

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-E, S-E
ADR transport category	3
Emergency Action Code	•3YE
Hazard Identification Number (ADR/RID)	33
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations	Petroleum (Consolidation) Act, as amended 1984 SI 1244. Highly Flammable Liquid Regulations 1972. Rivers (Prevention of Pollution) Act 1961. Control of Pollution (Special Waste) Regulations 1980 (as amended). Control of Substances Hazardous to Health Regulations 2002 (as amended).
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EU legislation	<p>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).</p> <p>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 (as amended).</p> <p>Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (as amended).</p> <p>Commission Regulation (EU) No 453/2010 of 20 May 2010.</p>
Guidance	<p>Workplace Exposure Limits EH40.</p> <p>Introduction to Local Exhaust Ventilation HS(G)37.</p> <p>CHIP for everyone HSG228.</p> <p>Approved Classification and Labelling Guide (Sixth edition) L131.</p> <p>Safety Data Sheets for Substances and Preparations.</p>

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information	Product to be used in industrial and/or professional applications.
Issued by	BOD
Revision date	27/02/2015
Revision	0
SDS number	20616
Risk phrases in full	<p>R10 Flammable.</p> <p>R11 Highly flammable.</p> <p>R20 Harmful by inhalation.</p> <p>R20/21 Harmful by inhalation and in contact with skin.</p> <p>R36/37/38 Irritating to eyes, respiratory system and skin.</p> <p>R36/38 Irritating to eyes and skin.</p> <p>R37 Irritating to respiratory system.</p> <p>R38 Irritating to skin.</p> <p>R43 May cause sensitisation by skin contact.</p> <p>R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> <p>R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> <p>R65 Harmful: may cause lung damage if swallowed.</p>

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Hazard statements in full	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H340 May cause genetic defects. H350 May cause cancer. H372 Causes damage to organs through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure. 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.
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The product should not be used for the purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. 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.