SAFETY DATA SHEET 2025

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name : ShieldPoly F-15 (za)

Other means of Identification : None

Component : Resin

Relevant identified uses of the substance

or mixture and uses advised against : SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Application of the Substance / Mixture : Coating

Manufacturer/Importer/Supplier/Distributor

Name : ShieldCrete® International

Company Name : ShieldCrete® International Sdn Bhd

Address : No. 14, Jalan Anggerik Mokara 31/60, Kota Kemuning Industry Area, 40460 Shah Alam, Selangor, Malaysia

Contact Numbers : +6(03) 5131 2101

Email : info@shieldcreteinternational.com

Website : www.shieldcreteinternational.com

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification according to Regulation (EC) No 1272/2008

GHS08 Health Hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure

.

GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

Label Elements

Labelling according to Regulation (EC) No 1272/2008:

The product is classified and labelled according to the GB CLP regulation.

Hazard Pictograms:

GHS05  GHS08  GHS09 

Signal Word:

Danger

Hazard-determining Components of Labelling:

- polioxipropilendiamina
- diethylmethylbenzenediamine
- glyceryl poly(oxypropylene) triamine

Hazard Statements:

- H314 Causes severe skin burns and eye damage.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P260	Do not breathe dusts or mists.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents/container in accordance with regional/national regulations.

Additional Information:

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed.
Do not breathe spray or mist.

Other Hazards

- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

SECTION 3: COMPOSITES / INFORMATION ON INGREDIENTS

Mixtures

Description: Mixture: consisting of the following components.

DANGEROUS COMPONENTS		
CAS: 9046-10-0 Reg.nr.: 01-2119557899-12	Polioxipropilendiamina Resp Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Chronic 3, H412	50-75%
CAS: 68479-98-1 EINECS: 270-877-4 Reg.nr.: 01-2119486805-25	Diethylmethylbenzenediamine STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Acute Tox. 4, H312; Eye Irrit. 2, H319	≥10-<25%
CAS: 64852-22-8 Reg.nr.: -	Glyceryl Poly(oxypropylene) Triamine Eye Dam. 1, H318; Skin Irrit. 2, H315; Aquatic Chronic 3, H412	≥3-<10%
CAS: 7727-43-7 EINECS: 231-784-4 Reg.nr.: 01-2119491274-35	Barium Sulfate substance with a Community workplace exposure limit	2.5-10%
CAS: 51274-00-1 EINECS: 257-098-5 Reg.nr.: 01-2119457554-33	Hydrated Iron (III) Oxide Nanoform: Elongated, crystalline nanoform, set including crystalline nanoforms where the individual nanoforms consist of particles with more than one different crystal structure, crystalline forms, non-surface-treated nanoforms	≤0.5%

Additional information: This mixture contains ≥ 1% titanium dioxide (CAS 13463-67-7).
The Annex VI classification of Titanium dioxide does not apply to this mixture according to its Note 10.
For the wording of the listed hazard phrases refer to section 16.

SECTION 4: FIRST AID MEASURES

General Information: Immediately remove any clothing soiled by the product.

Inhalation: In case of unconsciousness place patient stably in side position for transportation.

Skin Contact: Immediately wash with water and soap and rinse thoroughly.

Eye Contact: Rinse opened eye for several minutes under running water. Then, consult a doctor.

Ingestion: Drink plenty of water and provide fresh air. Call for a doctor immediately.

Most important symptoms and effects, both acute and delayed:

No further relevant information available.

Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media:

Use fire extinguishing methods suitable to surrounding conditions.

Special Hazards arising from the Substance or Mixture:

During heating or in case of fire poisonous gases are produced.

Advice for Firefighters:

Protective equipment: Mount respiratory protective device.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures:

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Environmental Precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

Methods and Material for Containment and Cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling:

Ensure good ventilation/exhaustion at the workplace.

Avoid inhalation of spray application of the product.

To remove contaminated clothing and protective equipment before entering eating areas.

To wash hands after use.

Not to eat, drink and smoke in work areas.

Information about fire - and explosion protection: Keep respiratory protective device available.

Conditions for Safe Storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s):

No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 7727-43-7 barium sulfate

WEL Long-term value: 10* 4** mg/m³

*inhalable dust **respirable dust

DNELs		
CAS: 9046-10-0 polioxipropilendiamina		
Dermal	DNEL Long term systemic effects	2.5 mg/kg bw/24h (workers)
Inhalative	DNEL Short term systemic effects	1.36 mg/m3 (workers)
CAS: 7727-43-7 barium sulfate		
Oral	DNEL Long term systemic effects	13,000 mg/kg/day (consumers)
Inhalative	DNEL Short term systemic effects	10 mg/m3 (consumers)
		10 mg/m3 (workers)
	DNEL Short term systemic effects	10 mg/m3 (workers)
PNECs		
CAS: 9046-10-0 polioxipropilendiamina		
PNEC Water	0.015 mg/l (fresh water)	
	0.014 mg/l (marine water)	
	0.15 mg/l (intermittent release)	
PNEC Sediment	0.125 mg/kg (marine sediment)	
	0.132 mg/kg (freshwater sediment)	
PNEC STP	7.5 mg/l (sewage treatment plant)	
PNEC Soil	0.018 mg/kg (soil)	

Additional information: The lists valid during the making were used as basis.

Exposure Controls

Appropriate engineering controls: No further data; see item 7.

Individual protection measures, such as personal protective equipment

General Protective and Hygienic Measures:

Keep away from foodstuffs, beverages, and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Respiratory Protection:

Select respiratory protection suitable for the actual or predicted level of exposure, the type of compound and its level of danger, certified in accordance with applicable standards. For low exposure applications, use respiratory masks with adequate protection / filters. For applications with an exposure level above the Workplace Exposure Limits (WEL), use breathing masks with adequate filters or assisted breathing masks, according to the risk assessment carried out by the occupational risk prevention services.

Protection of Hands:

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/Face Protection:

Tightly sealed goggles.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Appearance	Fluid
Color	According to product specification
Odor	Characteristic
Odor Threshold	Not determined
pH Value	Not determined
Melting Point / Freezing Point	Undetermined
Initial Boiling Point and Boiling Range	Undetermined
Flash Point	141°C (ISO 3679, CAS: 68479-98-1 diethylmethylbenzenediamine)
Flammability	Not applicable
Ignition Temp	420 °C
Decomposition Temp	Not determined
Explosion Limits (Lower)	Not determined
Explosion Limits (Upper)	Not determined
Kinematic Viscosity 40 °C	> 20.5 (mm2/s)
Solubility in Water	Not miscible or difficult to mix
Partition Coefficient: N-octanol/Water	Not determined
Vapor Pressure at 20°C	Not determined
Density at 20 °C	1.066 g/cm³
Relative Density	Not determined
Vapor Density	Not determined

Form	Fluid
Auto-ignition Temp	Product is not self-igniting
Explosive Properties	Product does not present an explosion hazard.
Solids Content (w/w)	99.3 %
Evaporation Rate	Not determined

Other information: The provisions of directive 2004/42/CE on VOC apply to this product. Refer to the product label and /or technical data sheet for further information.

Information with regard to Physical Hazard Classes:

- Explosives Void
- Flammable gases Void
- Aerosols Void
- Oxidizing gases Void
- Gases under pressure Void
- Flammable liquids Void
- Flammable solids Void
- Self-reactive substances and mixtures Void
- Pyrophoric liquids Void
- Pyrophoric solids Void
- Self-heating substances and mixtures Void
- Substances and mixtures, which emit flammable gases in contact with water Void
- Oxidizing liquids Void
- Oxidizing solids Void
- Organic peroxides Void
- Corrosive to metals Void
- Desensitized explosives Void

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No further relevant information available.

Chemical Stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute Toxicity: Based on available data, the classification criteria are not met.

LD/LC50 Values Relevant for Classification		
CAS: 9046-10-0 Polioxipropilendiamina		
Oral	LD50	2,885.3 mg/kg (rat)
Dermal	LD50	2,979.7 mg/kg (rabbit)
	LC50/72 h	135 mg/l (algae)
CAS: 68479-98-1 Diethylmethylbenzenediamine		
Oral	LD50	738 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

CAS: 64852-22-8 Glyceryl Poly(oxypropylene) Triamine		
Oral	LD50	2,690 mg/kg (rat)
Dermal	LD50	12,500 mg/kg (rabbit)
CAS: 51274-00-1 Hydrated Iron (III) Oxide		
Oral	LD50	>10,000 mg/kg (rat)

Primary Irritant Effect:
Skin corrosion/irritation: Causes severe skin burns and eye damage.
Serious eye damage/irritation: Causes serious eye damage.
Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

CMR Effects (Carcinogenity, Mutagenicity and Toxicity for Reproduction):
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard Based on available data, the classification criteria are not met.

Information on other hazards:
Endocrine disrupting properties: None of the ingredients is listed.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic Toxicity	
CAS: 9046-10-0 Polioxipropilendiamina	
EC50/48 h	80 mg/l (daphnia magna)
EC50/96 h	>15 mg/l (oncorhynchus mykiss (rainbow trout))
LC50/96 h	772.14 mg/l (fish)
CAS: 68479-98-1 Diethylmethylbenzenediamine	
EC50/24 h	>170 mg/l (pseudomonas putida)
EC50/48 h	5.8 mg/l (daphnia magna)
EC50/72 h	104 mg/l (desmodesmus suspicatus)
LC50/96 h	>106 mg/l (pim)
LC50/48 h	200 mg/l (fish)
CAS: 64852-22-8 Glyceryl Poly(oxypropylene) Triamine	
LC50/96 h	68 mg/l (fish) 68 mg/l (microorganism)
CAS: 51274-00-1 Hydrated iron (III) Oxide	
EC50/48 h	>100 mg/l (daphnia magna)
LC50/14 d	>195 mg/kg (rat)
LC50/96 h	>100,000 mg/l (danio rerio)

Persistence and Degradability: No further relevant information available.

Bioaccumulative Potential: No further relevant information available.

Mobility in Soil: No further relevant information available.

Results of PBT and vPvB Assessment: PBT: Not applicable.
vPvB: Not applicable.

Endocrine Disrupting Properties: The product does not contain substances with endocrine disrupting properties.

Other Adverse Effects

Remark: Toxic for fish

Additional Ecological Information

General Notes: Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unnaturalized.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Product

Recommendation: Disposal must be made according to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
The information given is based on Directive (EU) 2008/98.

European Waste Catalogue: This product is considered hazardous waste as defined by EU Directive 2008/98/EC.

European Waste Catalogue: Recommended identification code 08 01 11* - waste paint and varnish containing organic solvents or other dangerous substances.

Uncleaned Packaging

Recommendation: Disposal must be made according to official regulations.
The package should be properly drained.

SECTION 14: TRANSPORT INFORMATION

UN Number or ID Number

ADR, IMDG, IATA UN3267

UN Proper Shipping Name

ADR 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (polioxipropilendiamina), ENVIRONMENTALLY HAZARDOUS

IMDG CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (polioxipropilendiamina, diethylmethy lbenzenediamine), MARINE POLLUTANT

IATA CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (polioxipropilendiamina)

Transport Hazard Class(es)

ADR, IMDG

Class 8 Corrosive substances
Label 8

IATA

Class 8 Corrosive substances
Label 8

Packing Group

ADR, IMDG, IATA III

Environmental Hazards	Product contains environmentally hazardous substances: diethylmethylbenzenediamine
Marine Pollutant:	Symbol (fish and tree)
Special Marking (ADR):	Symbol (fish and tree)
Special Precautions for User	Warning: Corrosive substances
Hazard identification number (Kemler code):	80
EMS Number:	F-E, S-B
Segregation Groups:	Alkalis
Stowage:	Category B
Stowage Code:	SW2 Clear of living quarters
Segregation Code:	SG35 Stow "separated from" SGG1-acids
Maritime transport in bulk according to IMO instruments	Not Applicable
Transport/Additional Information	
ADR	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
Transport category	3
Tunnel restriction code	E
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation"	UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N. O. S. (POLIOXIPROPILENDIAMINA), 8, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: REGULATORY INFORMATION

Safety, Health, and Environmental Regulations/Legislation specific for the Substance or Mixture

Directive 2012/18/EU

Named Dangerous Substances - ANNEX I

None of the ingredients is listed.

Seveso Category

E2 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements

200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements

500 t

List of Substances Subject to Authorization (ANNEX XIV)

None of the ingredients is listed.

Regulation (EC) No 1907/2006 ANNEX XVII

Conditions of restriction: 3

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

Water Hazard Class

Water hazard class 2 (Self-assessment): hazardous for water.

Other Regulations, Limitations, and Prohibitive Regulations

Substance of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant Phrases from Sections 2 and 3

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
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.
H412 Harmful to aquatic life with long lasting effects.

Classification according to Regulation (EC) No 1272/2008

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

- Skin corrosion/irritation
- Serious eye damage/eye irritation
- Specific target organ toxicity (repeated exposure)
- Hazardous to the aquatic environment – longterm (chronic) aquatic hazard

Abbreviations and Acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (GB REACH)

PNEC: Predicted No-Effect Concentration (GB REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3