SAFETY DATA SHEET 2022

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name : ShieldPrime CV - Hardener
Other means of Identification : None
Chemical Family : Epoxy Based High Solids Primer
Recommend Use : Inter coat Primer for Metals and Non-metals
Restrictions : None
Manufacturer/Importer/Supplier/Distributor
Information : ShieldCrete® International
Company Name : ShieldCrete® International Sdn Bhd
Address : 66 Jalan Setiakasih 9 Bukit Damansara, Kuala Lumpur, Malaysia 50490
Contact Numbers : +66 928 639 833 | +63 966 465 5362
Email : info@shieldcreteinternational.com
Website : www.shieldcreteinternational.com

SECTION 2: HAZARDS IDENTIFICATION

This product is classified as dangerous as per Directive1999/45/EC.

Physical Hazards: Not Classified

Label Elements: GHS07  GHS08  GHS09 

Risk & Safety Phrases:

R20	Harmful by inhalation
R36/37/38	Irritating to eyes, respiratory system, and skin
R42/43/Xi	May cause sensitization by inhalation and skin contact
S23	Do not breathe spray or vapor
S24	Avoid Contact with skin
S36/37/39	Wear suitable protective clothing, gloves, and eye/face protection
S45	In case of accident or if you feel unwell, seek medical advice immediately.

Potential Health Effects
Primary Routes of Entry: Inhalation, Skin contact, Eye contact, Ingestion
Medical Conditions aggravated by Exposure: Skin disorders, Respiratory disorders, Eye disorders

Human Effects and Symptoms of Overexposure
Inhalation: Vapors are unlikely due to physical properties.
Skin Contact: May cause skin sensitization, an allergic reaction, which becomes evident on repeated exposure to this material.
Eye Contact: May cause slight transient (temporary) eye irritation.
Ingestion: No hazard in normal industrial use.

SECTION 3: COMPOSITES / INFORMATION ON INGREDIENTS

Compositional Details

COMPONENTS	CAS No.	WEIGHT %	OSHA PEL	AGIH TLV	MFG TLV	VAPOR PRESSURE
Bisphenol A Epichlorohydrin epoxy resin </ =700 MW	25069-38-6	35-50	N/A	N/A	N/A	N/A
Bisphenol F epoxy resin	9003-36-5	2.5-10	N/A	N/A	N/A	N/A
Oxirane C 12-C14 alkyloxy derivatives	68609-97-02	2.5-10	N/A	N/A	N/A	N/A
Benzyl Alcohol	100-51-6	1-3	N/A	N/A	N/A	N/A

SECTION 4: FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water, preferably lukewarm water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and treated by medical personnel.

Skin Contact: Wash material off the skin thoroughly with plenty of soap and water. If redness, itching or a sensation develops get medical attention. Wash contaminated clothing and decontaminate footwear before use.

Inhalation: Move to an area free from risk of further exposure. Remove contaminated clothing and loosen remaining clothing. Administer oxygen or artificial respiration if needed. Seek medical attention.

Ingestion: Rinse mouth with water. Do not induce vomiting. Give 1 or 2 glasses of water to drink and refer person to medical personnel. Do not give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media:
Dry chemical, foam, and carbon dioxide.

Special Fire Fighting Procedures:
Wear approved self-contained breathing apparatus in positive pressure mode with full face-piece. Boots gloves (neoprene), goggles and full protective clothing are also required. Excessive pressure or temperature may cause explosive rupture of containers.

Hazardous Combustion
Decomposed products may include CO_2, CO, halogenated compounds, metal oxides.

Unusual Fire and Explosion Hazards:
The bi-products produced are carbon dioxide, phenolic and water. Do not reseal contaminated containers as pressure build up may cause rupture of containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Put on protective equipment. Ensure adequate ventilation/exhaust extraction. Keep unauthorized persons away.

Environmental Precautions:
Do not flush into surface water or sanitary sewer system.

Methods for Cleaning up:
Wear skin, eye, and respiratory protection during cleaning. Soak the material with absorbent and shovel into a chemical waste container. Cover container, but do not seal & remove from work area.

SECTION 7: HANDLING AND STORAGE

Handling / Storage Precautions:

Keep in cool, dry ventilated storage area, in closed containers and out of direct sunlight. Store in containers above ground and surrounded by dikes to contain spills or leaks. Keep containers closed when not in use. Check regularly for leakage.

Eating, drinking, and smoking should be prevented in areas where the material is handled. Keep away from heat, sparks, open flames, or other ignition sources.

Contain and collect spillage with noncombustible, absorbent materials like sand, earth, vermiculite, and place in containers and dispose of according to local regulations.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

Recommended Monitoring Procedures	Reference should be made to EU Standard EN 689 for methods of assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances. If needed, use local exhaust ventilation to keep airborne concentrations below the TLV. Exhaust air may need to be cleaned by scrubbers of filters to reduce environmental contamination.
Ventilation	Good general ventilation should be sufficient to control airborne levels.
Respiratory Protection	In poorly ventilated areas, a cartridge mask NIOSH approved for organic vapors is recommended.
Protective Clothing	Where contact is likely, wear chemical resistant gloves, rubber boots, and chemical safety goggles.
Eye Protection	Wear chemical safety glasses with side shields or goggles.
Other Protective Equipment and Measures	Nitrile rubber gloves, wash hands before eating. Remove contaminated clothing and wash before reuse. Follow all MSDS/Label precautions even after container is emptied because they may retain product residues. Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing.
Hygiene Measures	Wash thoroughly after handling chemicals before eating, drinking, or smoking. Wash contaminated clothing before reusing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form	Thixotropic Viscous liquid
Color	Grey
Odor	Characteristic
pH	Not applicable
Flash Point	> 100 °C
Specific Gravity	1.35 @20 °C
Vapor Pressure	N/A
Vapor Density	< 7
Evaporation Rate	Slower than ether
Solubility in Water	Not soluble (Reacts with water forming bi-products)
Further Information	The indicated values do not necessarily correspond to the product specification. Please refer to the technical information sheet for specification data.

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: Excess heating above 60°C over long periods of time degrades resin. Avoid source of ignition.

Incompatibility (Materials to avoid): Bases, acids, amines, and oxidizing materials.

Hazardous Decomposition /By-products: Carbon dioxide, carbon monoxide, nitrogen oxides and other toxic fumes.

Hazardous Polymerization: Will not occur under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity, oral: Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Acute toxicity, inhalation: Material may be irritant to mucous membranes and respiratory tract.

Primary skin irritation: Contact with skin will result in irritation. A skin sensitizer. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Toxicological data for Bisphenol A, F Resin LD50: >5000 mg/kg o-rat

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Do not allow to escape into water ways, wastewater, or soil.
Material is highly toxic to aquatic organisms on an acute basis under aerobic static laboratory conditions is below detectable limits.

Persistence & degradability: Not readily degradable.

Mobility: Insoluble in water.

SECTION 13: DISPOSABLE CONSIDERATIONS

Waste Disposal Method:
Dispose of in compliance with all relevant local, state, and federal laws and regulations regarding treatment.

Empty Container Precautions:
Empty containers must be handled with care due to product residue. Decontaminate container prior to disposal.

SECTION 14: TRANSPORTATION INFORMATION

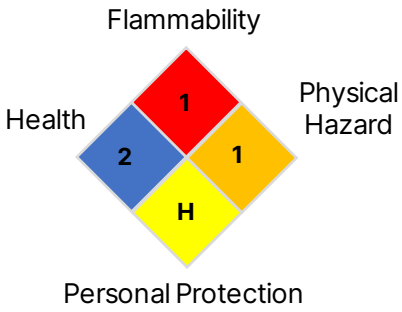
AD	UN No: 3082; Clause: 9; Classification Code: M6; Packing Group: III
Proper Shipping Name	Environmentally Hazardous Substance, liquid, n.o.s
Contains	Epoxide Resin
IMDG	UN No: 3082; Clause: 9; Packing Group: III
Proper Shipping Name	Environmentally Hazardous Substance, liquid, n.o.s
Contains	Epoxide Resin
Emergency Schedule	F-A, S-F
Marine Pollutant	P
Label No:	9
IATA	UN No: 3082; Clause: 9; Packing Group: III
Proper Shipping Name	Environmentally Hazardous Substance, liquid, n.o.s
Contains	Epoxide Resin
Label No:	9

SECTION 15: REGULATORY INFORMATION

EU Regulations: Classification and labeling have been determined according to EU Directive 67/548/EEC and 1999/45/EC including amendments and take into account the intended product use.

Hazardous Symbol/s:	Xi, N	
Contains:	Reaction Product: Bisphenol A, (Mw=<700), Oxirane, mono (C12-C14 alkyloxy) derivs Reaction Product: Bisphenol F, (Mw=<700)	
Risk Phase:	R36/38	irritating to eyes and skin
	R43	May cause sensitization by skin contact
	R51/53	Toxic to aquatic Organisms, may cause long term adverse effects in the aquatic environment
Safety Phrase:	S24- Avoid contact with skin S37-Wear Suitable Gloves	
Additional Warning:	Contains Epoxy constituents	
VOC Content (w/w):	< 5%	
National Regulations:	Refer and Follow country specific Hazard Information and Packaging Control of Substances hazard to Health Health and Safety at work Environmental Protection Hazardous waste Carriage of dangerous goods act	
Others:	Code of Practice – management of health and safety at work, HSE	

SECTION 16: OTHER INFORMATION



HMIS RATING	
Minimal	0
Slight	1
Moderate	2
Serious	3
Severe	4
Chronic Health Hazard	*

Disclaimer

The information contained herein is, to the best of our knowledge and belief, accurate and current as of the date of the MSDS However, since the conditions of handling and use are beyond our control; we make no guarantee of results and assume the liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Finding determination of solubility of chemical is the sole responsibility of the user. No representations or warranties, either expressed implied of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal and local laws and regulation.