SAFETY DATA SHEET

According to
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

Section 1. Identification of the material and the supplier

Product:	**PrimoShield MK-102 - Part A**
Product Use:	Part A of two component coating.
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	**Protective Coatings and Treatments Ltd**
Address:	50 Carroll Street Dunedin 9016
Telephone:	021 151 5389
Emergency No:	**0800 764 766 (National Poison Centre)**
Date of SDS Preparation:	2 November 2021

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval No: Surface Coatings and Colourants (Flammable) – HSR002662

Pictograms

Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Flammable Liquids Cat. 3	H226	Flammable liquid and vapour.
Skin irritation Cat. 2	H315	Causes skin irritation.
Skin sensitisation Cat. 1	H317	May cause an allergic skin reaction.
Narcotic effects	H336	May cause drowsiness or dizziness.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment chronic Cat. 3	H412	Harmful to aquatic life with long lasting effects.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.

P103	Read label before use.
P210	Keep away from heat, sparks, open flames or hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground, bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating and lighting.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust, fumes, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.

Response Code	**Response Statement**
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P362	Take off contaminated clothing and wash before re-use.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361+P353	IF ON SKIN (or hair): Remove/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 dry chemical powder and carbon dioxide.

Storage Code	**Storage Statement**
P405	Store locked up.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.

Disposal Code	**Disposal Statement**
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	**Wt%**	**CAS NUMBER.**
bisphenol A diglycidyl ether hydrogenated	10 - 20	30583-72-3
n-butyl acetate	1 - 10	123-86-4
n-butanol	1 - 10	71-36-3
Non hazardous	To bal	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes — Immediately rinse eyes with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician or transport to hospital.

If on Skin — Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing including footwear. Wash skin and hair with plenty of running water and soap. Continue flushing with water until advised to stop by the Poisons Information Centre. Transport to hospital, or doctor.

If Swallowed	Do not induce vomiting. Wash out mouth thoroughly with water. Never give anything to the mouth of an unconscious person. vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if needed.
If Inhaled	If fumes or combustion products are inhaled remove from contaminated area. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion: Not applicable.
Inhalation: May cause drowsiness or dizziness.
Skin: Causes skin irritation. May cause an allergic skin reaction.
Eye: Causes serious eye damage.
Chronic: May damage fertility or the unborn child.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Section 5. Fire Fighting Measures

Hazard Type	Flammable Liquid
Hazards from combustion products	Carbon dioxide (CO2) Carbon monoxide (CO) Nitrogen oxides (NOx) Aldehydes other pyrolysis products typical of burning organic material. May emit corrosive fumes.
Suitable Extinguishing media	Alcohol stable foam. Dry chemical powder. BCF (where regulations permit). Carbon dioxide. Water spray or fog - Large fires only.
Precautions for firefighters and special protective clothing	Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control fire and cool adjacent area. Avoid spraying water onto liquid pools. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.
HAZCHEM CODE	**3W**

Section 6. Accidental Release Measures

Wear protective gear as detailed in Section 8. Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Contain and absorb small quantities with vermiculite or other absorbent material. Wipe up. Collect residues in a flammable waste container. Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or disposal of material.
Check regularly for spills and leaks.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Keep away from heat, sparks, open flames or hot surfaces. No smoking.

- Keep container tightly closed.
- Ground bond container and receiving equipment.
- Use explosion-proof electrical, ventilating and lighting.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Avoid breathing dust, fumes, gas, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Do not use plastic buckts.
- When handling do not eat, drink or smoke.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed.
- Store in a well-ventilated place. Keep cool.
- Suitable container: Plastic containers may only be used if approved for flammable liquid.
- Check all containers are clearly labelled and free from leaks.
- Store in the original container approved for Flammable liquid storage area.
- Storage tanks should be above ground and diked to hold entire contents.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm	TWA mg/m³	STEL ppm	STEL mg/m³
n-Butyl alcohol [71-36-3]	Ceiling 50			
n-Butyl acetate [123-86-4]	150	713	200	950

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2020 12TH EDITION.

Engineering Controls

For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. equipment should be explosion-resistant.

Personal Protection Equipment

Eyes	Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly.

Hands	Wear elbow length PVC gloves. When handling corrosive liquids, wear trousers or overalls outside of boots to avoid spills entering boots. Note: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. For esters do not use natural rubber, butyl rubber., EPDM or polystyrene containing materials.
Skin	Wear overalls, PVC apron, PVC protective suit may be required if exposure severe. For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets). Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.
Respiratory	If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection. Type AK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)
General	Ensure eyewash unit and safety showers available.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Light Brown
Odour	Ester odour
Odour Threshold	Not available
pH	Not available
Boiling Point	Not available
Melting Point	Not available
Freezing Point	25t available
Flash Point	34^0C
Flammability	Flammable
Upper and Lower Explosive Limits	Lower limit: Not available Upper limit: 11.3%
Vapour Pressure	Not available
Vapour Density	Not available
Relative Density	1.08 (water=1)
Water Solubility	Not miscible with water, miscible with polar solvents.
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	500 cPs
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Possibility of hazardous reactions	Not available
Conditions to Avoid	Sources of ignition.
Incompatible Materials	Glycidyl ethers: may form unstable peroxides on storage in air ,light, sunlight, UV light or other ionising radiation, trace metals - inhibitor should be maintained at adequate levels may polymerise in contact with heat, organic and inorganic free radical producing initiators

	may polymerise with evolution of heat in contact with oxidisers, strong acids, bases and amines react violently with strong oxidisers, permanganates, peroxides, acyl halides, alkalis, ammonium persulfate, bromine dioxide attack some forms of plastics, coatings, and rubber Avoid cross contamination between the two liquid parts of product (kit). If two part products are mixed or allowed to mix in proportions other than manufacturer's recommendation, polymerisation with gelation and evolution of heat (exotherm) may occur. This excess heat may generate toxic vapour
Hazardous Decomposition Products	Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO).

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	May cause drowsiness or dizziness.
Eye	Causes serious eye damage.
Skin	Causes skin irritation. May cause an allergic skin reaction.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Individual component information:
Acute Toxicity:

Chemical Name	Oral – LD50	Dermal – LD50	Inhalation – LC50
n-Butanol	3494 mg/kg (Mouse)	5 235 mg/kg (rabbit)	>17.76 mg/L (Rat)

Section 12. Ecotoxicological Information

Harmful to aquatic life with long lasting effects.

Product:	
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility in Soil	No data available
Other adverse effects	No data available

Individual component information (Please refer to www.epa.govt.co.nz for full details):

n-butanol

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	96	Algae or other aquatic plants	225mg/l	2
NOEC(ECx)	504	Crustacea	4.1mg/l	2
EC50	48	Crustacea	>500mg/l	1

LC50	96	Fish	100-500mg/l	4
EC50	72	Algae or other aquatic plants	>500mg/l	1

bisphenol A diglycidyl ether hydrogenated

Endpoint	Test Duration (hr)	Species	Value	Source
LC50	96	Fish	~11.5mg/l	2
EC50	72	Algae or other aquatic plants	>100mg/l	2
EC50(ECx)	72	Algae or other aquatic plants	>100mg/l	2

n-butyl acetate

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	48	Crustacea	32mg/l	1
LC50	96	Fish	18mg/l	2
EC50	72	Algae or other aquatic plants	246mg/l	2
EC50(ECx)	96	Fish	18mg/l	2

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:
Spent media that has removed toxic chemicals should be examined for specific hazards. Spilled product may be recovered for use if it has not come in contact with liquids or been exposed to significant amounts of gaseous contaminants. Dispose of according to Local Regulations.

Ensure any container holding waste product or contaminated spill media is labelled "Hazardous Waste – Flammable" and that the label also has the appropriate Pictograms from section 2, waste type identifier, and the business name, address, and phone number.

Precautions or methods to avoid: Avoid release to the environment.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Road, Rail, Sea and Air Transport

UN No	1263
Subclass	3
Packing Group	III
Proper Shipping Name	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base)
Marine Pollutant	No
Special Provisions	If the product's individual container is below 1L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: **Surface Coatings and Colourants (Flammable) – HSR002662**

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required

Location Certificate	250L
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000L
Emergency Response Plan	10 000L
Secondary Containment	10 000L
Restriction of Use	Only use for the intended purpose.

Section 16 Other Information

Glossary

Cat	Category
EC_{50}	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC_{50}	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD_{50}	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2020 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the New Zealand distributor, if further information is required.

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