

IDENTIFICATION

Chemical Name:	Metallic Tint	Packing Group:	III
UN No.	3082	Hazchem Code:	2X
Hazard Class:	9	Proper Shipping Name:	Environmentally hazardous substance, Liquid, N.O.S
Dangerous Goods:	Not Applicable	Primary Supplier:	ALL PURPOSE COATINGS PTY LTD
Product Use:	Part A for Epoxy Coating Kit	Poisons Schedule:	5

PHYSICAL DATA

Appearance & Odour:	Tinted Liquid, Slight Odour	Boiling Point:	Not Measured
Freezing Point:	Not Applicable	Vapour Pressure:	Not Measured
pH:	Not Measured	Specific Gravity:	1.4 (H2O = 1)
Flammability Limits:	Not Applicable	Evaporative Rate:	Not Applicable
Solubility (Water):	Not Measured g/l (25 Deg.C)	Flash Point	Open Cup > 150
Density:	1120kg/m3 @ 25 Deg.C	Auto-ignition:	(ASTM D-1929): 400 Deg.C

INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Bisphenol A Epoxy Resin	25068-38-6	<35	
Bisphenol F Epoxy Resin	28064-14-4	<10	
Aliphatic Glycidal ether	68609-97-2	<10	

HEALTH HAZARD INFORMATION

First Aid

Ingestion: Rinse mouth with water. Give water to drink. DO NOT induce vomiting. Seek medical attention immediately.

Eye: Flush with large quantities of water for 30 minutes and seek medical attention.

Skin: Immediately wash contaminated skin with plenty of soap and water. Remove contaminated clothing and wash before reuse. If swelling, redness, blistering or irritation occurs seek immediate medical advice.

Inhaled: Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume comfortable position & keep warm. Keep at rest until fully recovered. If breathing is laboured or stopped seek immediate medical advice.

Advice to Doctors: Treat symptomatically.

ACCIDENTAL RELEASE MEASURES

Remove all sources of ignition, may burn though not readily ignitable. Clear area of all unprotected personnel. Ventilate area. Contain – prevent run-off into drains and waterways. If contamination of waterways or sewers has occurred, advise the local emergency services.

Small Spill: For clean-up of a spill from a single shipping pack soak up with an absorbent material such as sand or other non-combustible absorbent material and place material in a closed container. If applicable, wash the area with detergent and water.

Large Spill: Eliminate all sources of sparks or open flame. Wear protective clothing. Stop further release or spread of spilled material. For clean-up, pump or scoop up liquid into a salvage drum. Absorb remaining liquid as for small spills. Place clean up material and damaged containers into salvage drums for disposal. If applicable, wash the area with detergent and water.

HANDLING AND STORAGE

Handling: When filling, transferring, or emptying of containers, adequate suctioning close to work place necessary. Ensure adequate ventilation. If the occupational exposure limits are exceeded, suitable respiratory protective equipment must be worn.

Storage: Keep container tightly closed in a cool, well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Do not store with acids.

STABILITY AND REACTIVITY

Stability: Stable.

Hazardous Polymerisation: Will not occur

Incompatibility: Avoid contact with strong oxidizing agents, strong acids and strong bases.

Conditions to Avoid: Avoid high temperatures.

Hazardous Decomposition

Products: Will not occur.

TOXICOLOGICAL INFORMATION

Based on the properties of the resin.

Swallowed: Oral LD50 is >2,000mg/kg. This material has a corrosive effect on mucous membranes.

Skin: Dermal LD50 is >2000mg/kg. This material has a corrosive effect on skin.

Inhalation: No specific data available

Eyes: This material has a corrosive effect on eyes.

Acute/Chronic Toxicity: This product does not contain 0.1% or more of any substance which is listed as a carcinogen by Worksafe.

Product specific toxicological data are not known. The product has not been tested. The information is derived from the properties of the resin.

ECOLOGICAL INFORMATION

Based on the individual components present in the formulation

Environmental Fate

Movement and Partitioning: No information was found on any of the components

Degradation and Persistence: Mobility: sinks in water. Not readily biodegradable. Has the potential to bio-accumulate. Acute toxicity (fish): Toxic, $1 < LC_{50} < 10\text{mg/l}$. Sewage treatment: $EC > 1 - 10\text{mg/l}$, to organisms in sewage treatments plants. Toxic to aquatic organisms, may cause long – term adverse effects in the aquatic environment. Do not allow product to enter drains, sewers or water courses – inform the local authorities if this occurs.

No degradation and persistence data was found for any of other components

Ecotoxicology: The product is toxic to aquatic organisms

Acute LD50 for Rainbow trout (*Oncorhynchus mykiss*) is 82mg/l

Acute LD50 for fish is 1490mg/l

Acute LD50 for Water flea (*Daphnia magna*) is 600-1000 mg/l

Acute LD50 for Flathead minnow (*Pimephales promelas*) is 1700 mg/l

ECOLOGICAL INFORMATION

No ecotoxicology data was found for any of the other ingredients.

General Information: Do not allow spillage to soil or waterways.

DISPOSAL CONSIDERATIONS

Refer to State/Territory Land Waste Management Authority. Normally suitable for incineration by approved agent.

TRANSPORT INFORMATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code)

PRECAUTIONS FOR USE

Exposure controls / Personal Protection

EXPOSURE STANDARDS

No exposure standards have been established for this material by State Work Australia. However, exposure should be kept to lowest possible levels.

Engineering Controls

Use only in well ventilated areas. Maintain concentration below recommended exposure limit. Keep in a well ventilated place when not in use. Take precautionary measures against static discharges.

Personal Protection

Do not breathe vapours or mist. The following personal protective equipment is recommended:

- Eye/face protection e.g., safety goggles or glasses, face-shield.
- Gloves e.g., Butyl, EVAL-Laminate
- Suitable protective clothing e.g., overall, safety shoes
- No respiratory protection is usually required under normal conditions of use
- Use of a hand barrier cream is recommended

Flammability: Not Flammable

Fire Fighting Measures

Flammable Properties

Combustible liquid, will not burn unless preheated. Isolate from sources of heat, naked flames or sparks. Refer to AS1940 – Storage and handling of flammable and combustible liquids and AS2865 – Safe working in a confined space, for more specific information on these subjects.

Polymerisation No specific data available

Hazardous Combustion Products

In the event of a fire the following substances can be released: Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x).

Fire & Explosion Hazards

This product will not burn unless preheated. Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gases. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.

Special Fire Fighting Procedures

Evacuate personnel to a safe area. If the product is on fire wear a self-contained breathing apparatus and full protective clothing. Cool endangered containers with water spray jet. Fire residues and contaminated fire extinguishing media must be disposed of in accordance with local regulation. Do not allow fire extinguishing media from fire to enter water supplies or drainage systems.

EMERGENCY 24 HOURS:

POISONS INFORMATION CENTRE

Herston Rd, Herston

13 11 26 (All Hours)

Hazards Identification

HAZARDOUS ACCORDING TO THE CRITERIA OF WORKSAFE (AUSTRALIA). NON-DANGEROUS ACCORDING TO THE CRITERIA OF THE ADG CODE Note: This product is classed as a MARINE POLLUTANT only and so the Dangerous Goods classification that follows is for AIR and MARINE transport only. NOT classed as a Dangerous Good for Storage and Road and Rail transport.

Classification

IrritantCarc. Cat. 3; R40

Xi; R36/38

R43

N; R51/53

Risk Phrases

R40- Limited evidence of a carcinogenic effect.

R36/38- Irritating to eyes and skin.

R43- May cause sensitisation by skin contact.

R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Statement of hazardous nature

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

Safety Phrases

Avoid contact with skin & eyes

Do not empty into drains

Wear suitable protective clothing

Wear suitable gloves

Wear eye/face protection

COMPOSITION/INFORMATION ON INGREDIENTS

Reaction product. Bisphenol F & A -(epichlorhydrin); epoxy resin 1,3-Propanediol, 2-ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane. WHMS Trade Secret. Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Environmental Hazards: Not classified as a dangerous good by Road/ADG, Rail/RID. Classed as a dangerous good by IMDG, IATA-DGR. Marine Pollutant (IMDG).

Extinguishing Media

Use water fog, foam, dry chemical or Carbon dioxide.

Note: Special Provision AU01

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in:

- a) packagings;
- b) IBCs; or
- c) any other receptacle not exceeding 500 Kg(L).



IMPORTANT NOTICE: Read the SDS and TDS carefully prior to the use of any product. Application, performance & safety data may change from time to time. In emergency, contact the Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice. **IF THE SITUATION IS LIFE THREATENING, DIAL 000.**

PRODUCT DISCLAIMER: Read the SDS & TDS carefully before use of any product. These documents contain information in context to how you will apply the product, including if it is being used in conjunction with any other products, the type of surfaces and the manner in which the product will be applied. All Purpose Coatings Pty Ltd does not accept any liability either directly or indirectly for any losses that arise from the use or application of the product in accordance with any advice, specification, recommendation or information given by All Purpose Coatings Pty Ltd.

Designed and Formulated in Australia by APC

DESCRIPTION

This Industrial Floor epoxy is a 100% solids, two-pack cycloaliphatic amine cured epoxy resin matrix. USDA acceptable for incidental food contact, EPO100T epoxy flooring resin is designed as a stand-alone topcoat or as a binder for non-skid surfaces. It is non-blushing and non-water spotting, high gloss, self-levelling and colour stable.

Designed for use in a wide range of commercial & Industrial environments where a lasting solution to floor maintenance problems is required. The exceptional resistance to a wide variety of chemical spillage and fumes makes this product ideal for use in high traffic commercial environments.

RECOMMENDED USES

- Mechanical Workshops
- Factories
- Warehouses
- Food processing industry
- Chemical/pharmaceutical industry
- Power stations
- Plastics industry
- Laboratories
- Clean rooms, exhibition halls and showrooms.
- Demonstration areas and training rooms
- Washrooms, cloakrooms
- Wet and dry process areas
- Warehouses, loading bays and ramps
- Hangars

FOR USE ON MINERAL-BASED SUBSTRATE SUCH AS:

- Concrete
- Mortar
- Stone
- Epoxy Modified Mortars

FEATURES AND BENEFITS

- High Gloss
- One Epoxy for all systems
- Excellent Adhesion
- Self-Levelling
- No VOC's (Volatile Organic Compounds)
- Low Viscosity
- Tenacious bond to most substrates
- High mechanical properties
- Good abrasion resistance
- Good chemical resistance
- High durability
- Coloured / Tinted
- Solvent free
- Seamless
- Easy and fast to apply
- Easily cleaned and maintained
- Waterproof

PHYSICAL PROPERTIES

Compressive Strength:	ASTM D695 12,000 psi
Tensile Strength:	ASTM D638 3,900 psi
Elongation at Break:	ASTM D638 7.00%
CS-17 wheel, 1 kg load:	ASTM D4060 0.10gm loss
Water Absorption:	D570 0/07% (2-hour boil)
Flexural Strength:	ASTM D790 7,800 psi
Shore D Hardness:	ASTM D2240 89
Heat Distortion Temperature:	ASTM D649 50 Deg.C
Bond Strength to Concrete:	100% Concrete failure
Freezer Temperature	Up to -40 deg. C

RESISTANCE TO CHEMICAL SPILLS (7 days at 25deg.C):

Ammonia Solution (20%)	Sodium Hydroxide (30%)
Sulphuric Acid (30%)	Kerosene
Lactic Acid (5%)	Aviation Fuels
Sodium Chloride (50%)	Petrol
Tannic Acid	Hydrochloric Acid (20%)
Acetic Acid (5%)	Toluene

COLOURS ARE PRODUCED AS CLOSE AS POSSIBLE TO PRODUCTION

STANDARDS

- Where colour shade is critical, a site trial is strongly recommended prior to proceeding with the work.
- Ensure that finishing and application techniques remain consistent to prevent colour variations
- Note that some bright colours may require additional pigment packs to prevent opacity

SURFACE PREPERATION

Surfaces must be clean, dry and free from all traces of loose material, old coatings, curing compounds, release agents, laitance, oil and greases etc. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa and with moisture content below 4%.

Structurally unsound layers and surface contaminants must be removed. Substrates heavily impregnated with oil must be cleaned via suitable solvent cleaning methods. To check that all traces of oil have been completely removed, sprinkle a few drops of water over the surface. If all water is quickly absorbed, the surface is sufficiently oil and grease free. If water forms into globules that remain on the surface, further thorough treatment of the substrate is necessary.

When used as a self-levelling floor topping it will not profile irregular substrates. For profiling defects on horizontal surfaces a suitable patching mortar is required. The patching mortar can be of epoxy or cementitious base depending on the scope, particular conditions and requirements of the work.

MIXING

Mix Part 'A' thoroughly using a power drill with paint mixing attachment.

Mix 3 parts resin 'A' with 1 part hardener 'B' thoroughly using a power drill with a paint mixing attachment for 2 minutes. Ensure that all the material on the sides and on the mixer, is incorporated. Take care to avoid air entrapment in the mix.

APPLICATION

First thoroughly stir the epoxy base to redistribute the pigment. If using more than one kit, compare the epoxy base (Part A) for colour matching. Base colours may vary slightly between different batches. If the colours are noticeably different, mix all the epoxy base containers together to obtain a uniform colour before mixing with the curing agent.

Mix EPO100T Coating Kit epoxy base (Part A) with the EPO100T Coating Kit curing agent (Part B). Use a mechanical mixer to ensure thorough mixing. The mixing ratio is 3/1 (base/curing agent) by volume. Make sure that both components are thoroughly mixed along sides and bottom of container. Unmixed components will result in 'hot spots' that will never cure. EPO100T Coating Kit does not require a 'sweat-in' or induction time and the mixed components should be used immediately.

We recommend thinning the first coat with up to 20% Epoxy Thinners to ensure high penetration and adhesion, subsequent coats can be thinned but sufficient curing time is needed to release thinner out of coating 12hrs at 20deg. Second coat up to 10% Epoxy Thinners.

Apply using a brush, or roller. Use a lint free epoxy roller to apply the product.

For a lightly textured finish, add 10 to 15% Ceramic SLG powder to the mixed epoxy. If a more non-skid surface is desired, broadcast the chosen grade of aggregate over the wet epoxy to 'refusal'. Allow the epoxy to rest for 12 hours and sweep off the excess aggregate. A topcoat of clear or pigmented epoxy is rolled over the exposed aggregate.

If recoating after 72 hours a light sand will be required to ensure inter coat adhesion.

Note: Exposure to sunlight and UV radiation can result in discolouration and slight chalking. This will have no adverse effect on the protective function of the coating. EPO100T Coating Kit can be top-coated with a UV blocking coating absorber such as 500T Tetrathane (Non Yellowing Urethane)

COVERAGE

3 – 6 M2 per litre depending on method of application and porosity of the surface.

Normally 2 to 3 coats are required, film thickness will be approximately 300 microns per coat.

RETURN TO SERVICE

Light foot traffic 24 hours after completion of the job. Vehicle 24-48 hours. Sure hardness 72 hours. Full Chemical Cure 7 Days

SHELF LIFE

2 Years, keep in a cool dry area out of direct sunlight.

POT LIFE

Depending on the temperature 30 – 45 minutes.

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