MATERIAL SAFETY DATA SHEET
Erosion Ceramic Coating
Epoxy Resin – Part A

HAZARDOUS ACCORDING TO THE CRITERIA OF SAFE WORK AUSTRALIA (NOHSC)

1. IDENTIFICATION OF MATERIAL AND SUPPLIER

Identification of Material

Product name: Erosion Ceramic Coating (Party A) - Resin
Product code:
Intended use: Epoxy Resin – Part A
Chemical Name: Bisphenol-A- Epoxy Resin

Identification of the Company

Manufacturer / Supplier: SHIMICOAT Pty Ltd, 9a Morse Road, BIBRA LAKE WA 6163
Phone: (+61) (08) 9434 3302
E-mail: info@shimi.com.au
Website: www.shimi.com.au
Emergency phone number: Poisons Information Centre
Phone (Australia 13 1126; New Zealand 03 4747000)

Additional Information:
It is the user's responsibility to determine the suitability of this product for their applications and their methods of use.

Other Information:
THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT SHIMICOAT SO WE CAN ATTEMPT TO PROVIDE ADDITIONAL INFORMATION. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS AVAILABLE ON OUR WEBSITE, SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST BY EMAIL OR POST.

2. HAZARD IDENTIFICATION

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOOD.
This product is an epoxy-based mixture of resin, pigments, and fillers. It is classified as hazardous according to the criteria of Safe Work Australia (NOHSC). It is not classified as a dangerous good.

Signal word: WARNING)

Hazard Statements
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H319 Causes serious eye irritation
H411 Toxic to aquatic life with long lasting effects

Precautionary Statements- Prevention
P273 Avoid release to the environment.
P280 Wear suitable gloves/protective clothing/eye protection/face protection

Precautionary Statements- Response
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
Precautionary Statements- Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Name	CAS Number	Concentration
Epoxy resin	25068-38-6	>60%
Benzyl Alcohol	100-51-6	<5%
Ingredients determined to be non-hazardous	N/A	balance

4. FIRST AID MEASURES

EYE CONTACT: If in eyes, IMMEDIATELY hold eyelids apart and flush the eye continuously with running water for
15 minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. Removal of contact lenses should only be done by skilled personnel. Seek medical attention immediately. Suitable emergency eye wash facility should be available in work area.
SKIN CONTACT: IMMEDIATELY remove contaminated clothing including footwear and wash the skin thoroughly with soap and water. Use water alone, if soap is unavailable. Seek medical attention if skin inflammation occurs. Wash clothing before reuse. Discard items that cannot be decontaminated, including leather articles such as shoes, belts and watchbands. Suitable emergency safety shower facility should be available in work area.
INGESTION: No emergency medical treatment necessary.
INHALATION: Remove affected persons to fresh air. Keep warm and at rest. If unwell, seek immediate medical attention.
ADVICE TO DOCTOR: Treat symptomatically.

5. FIREFIGHTING MEASURES

FIRE HAZARD: Combustible, may burn if involved in a fire situation but will not ignite readily. Slight fire hazard when exposed to heat or flames. Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is emitted when burned without sufficient oxygen.

HAZARDOUS COMBUSTION PRODUCTS: During a fire, smoke may contain the original material in addition to combustion products of varying composition that may be toxic and/or irritating. Combustion products may include and are not limited to: Phenolics, Carbon monoxide, Carbon dioxide.

FIRE FIGHTING PROCEDURES: Alert fire brigade and tell them the location and nature of the hazard. Keep people away. Isolate fire and deny unnecessary entry. Wear protective clothing and breathing apparatus. Use water as fine sprays to control fire and cool adjacent area. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently may be used as a blanket for fire extinguishment. Contain spillage from entering drains and water courses.

SUITABLE EXTINGUISHING MEDIA: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Water fog, applied gently may be used as a blanket for fire extinguishment.

UNSUITABLE EXTINGUISHING MEDIA: Do not use direct water stream. May spread fire.

PRECAUTIONS FOR FIREFIGHTERS: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self- contained breathing apparatus and fight fire from a remote location.

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment.

ENVIRONMENTAL PRECAUTIONS: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

CLEAN-UP PROCEDURES: In case of minor spills, contain spillage. Clean up all spills immediately. Avoid contact with eyes and skin. Avoid breathing vapours. Wear protective clothing, thick gloves, safety glasses and breathing apparatus. Contain and absorb spill with sand, Polypropylene fiber products, Polyethylene fiber products. Remove residual with soap and hot water. Collect in suitable and properly labelled containers. Residual can be removed with solvent. Solvents are not recommended for clean-up unless the recommended exposure guidelines and safe handling practices for the specific solvent are followed. In case of major spills, contain spillage. Evacuate personnel and move them upwind. Alert fire brigade and tell them the location and nature of the hazard. Wear protective equipment including breathing apparatus.

7. HANDLING AND STORAGE

HANDLING PROCEDURES: Remove all contaminated clothing and avoid contact with eyes and skin. Avoid all personal contact including inhalation. Wear protective clothing. Use in a well-ventilated area. Prevent concentration in hollows and sumps. Wash thoroughly after handling. Avoid use of electric band heaters. Failures of electric band heaters have been reported to cause drums of liquid epoxy resin to explode and catch fire. Application of a direct flame to a container of liquid epoxy resin can also cause explosion and/or fire.

SUITABLE CONTAINERS: Material can be stored in metal can or drum. Packing should be done as recommended by manufacturer. Containers should be clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY: Avoid reaction with amines, mercaptans, strong acids and oxidising agents. 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.

STORAGE REQUIREMENTS: Store in original containers and keep containers tightly sealed and protected against physical damage. Store in a cool, dry, well-ventilated area, away from sources of ignition, oxidising agents, foodstuffs and clothing and out of direct sunlight. Do not pressurize, cut, heat or weld containers as they may contain hazardous residues.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

EXPOSURE LIMITS
None established
ENGINEERING CONTROLS: Ventilation should be sufficient to maintain vapour levels below the appropriate exposure standard. Local exhaust ventilation is not normally necessary but should be considered if the product is used in poorly ventilated or very confined spaces. Process controls, which involve changing the way a job is done to reduce the risk. Isolation of emission source keeps a hazard away from personnel.
PERSONAL PROTECTION:

RESPIRATORY: Breathing apparatus of type A-P filter is recommended.
EYE: Wear tightly fitting chemical resistant safety goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. Policies should be put in place regarding the use of contact lens in workplace.

HANDS/FEET: Care must be taken when removing gloves and other protective equipment to avoid skin contact as the material may cause skin sensitisation. Remove all contaminated items such as shoes and belts. Use chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro- organisms. Examples of preferred glove barrier materials include: Butyl rubber, Ethyl vinyl alcohol laminate ("EVAL"), Nitrile/butadiene rubber ("nitrile" or "NBR"), Neoprene, Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a

glove with a protection class of 6 or higher (breakthrough time greater than 480 minutes according to AS/NZS 2161.10) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to AS/NZS 2161.10) is recommended.

SKIN PROTECTION: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

RESPIRATORY PROTECTION: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

INGESTION: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Viscous Amber liquid
Odour	Faint Phenolic
***p*H**	10
Vapour pressure	< 1.0 mmHg
Vapour Pressure	<1.0 mmHg
Boiling point	> 230^{O}C
Water solubility	Immiscible 0.25g/Lt
Density	1.09g/cm^{3}
Flash point	135.56°C
Explosive limits	Not applicable

10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Incompatible Materials	Sodium hypochlorite. Organic acids. Mineral acids. Nitrous acid and other nitrosating agents. Reactive metals (e.g. sodium, calcium, zinc, etc.) Materials reactive with hydroxyl compounds. Oxidising agents.
Hazardous Decomposition Products	Nitric acid. Ammonia. Oxides of nitrogen. Nitrogen oxides can react with water vapours to form corrosive nitric acid. Carbon monoxide. Carbon dioxide (CO2). Aldehydes. Flammable hydrocarbon fragments. Nitrosamine
Possibility of hazardous reactions	Product slowly corrodes copper, aluminium, zinc and galvanised surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. CAUTION! N-Nitrosamine, many of which are known to be potent carcinogens, may be formed when the product comes into contact with nitrous acid, nitriles or atmospheres with nitrous oxide concentrations.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity – Oral	LD50, rat: 2200 mg/kg
Acute Toxicity – Dermal	LD50, rabbit : >1000 mg/kg (estimated)
Acute Toxicity – Inhalation	No data is available on the product itself.
Ingestion	No data available.
Inhalation	No data available.
Skin	Causes skin irritation. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Eye	Severe eye irritation.
Skin Sensitisation	May cause sensitisation by skin contact. Sensitisation has occurred in laboratory animals after repeated exposures.
Germ cell mutagenicity	Results from a battery of short term genotoxicity tests on this material or its components indicate mutagenic activity.
Carcinogenicity	No data available.
Reproductive Toxicity	No data is available on the product itself.
STOT-single exposure	Skin, eyes, kidney, liver, pancreas, spleen.
STOT-repeated exposure	Absorption of phenolic solutions through the skin may be very rapid and can cause damage to the kidneys, live, pancreas and spleen and edema of the lungs.
Aspiration Hazard	No data available.
Serious eye damage/irritation	Severe eye irritation.
Mutagenicity	No data is available on the product itself.
Skin corrosion/irritation	Moderate skin irritation.

12. ECOLOGICAL INFORMATION

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested). Do not allow to contaminate waterways, sewers, soil or vegetation. Avoid release to the environment.

Ecotoxicity	No data is available on the product itself.
Persistence and degradability	Biodegradability - no data is available on the product itself.
Mobility	No data is available on the product itself.
Bio-accumulative Potential	No data is available on the product itself. Phenol - Low bioaccumulation potentiaL
Acute Toxicity - Daphnia	Phenol - EC50, Daphnia, 48h: 4 - 7 mg/L

13. DISPOSAL CONSIDERATIONS

- If possible, return to supplier for reuse/ recycling.
- If container cannot be cleaned or reuse to store the same material, then puncture containers and then disposed of as hazardous waste at an authorised landfill.
- Where possible retain label warnings and MSDS and observe all notices pertaining to the product.
- DO NOT allow wash water from cleaning or process equipment to enter drains or watercourses.
- If necessary, collect all wash water for treatment before disposal.
- Check local regulations for appropriate disposal method.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill

14. TRANSPORT INFORMATION

UN Number:	3082
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S
Hazard Class:	9
Hazchem group:	3Z
Packing group:	III

15. REGULATORY INFORMATION

POISONS SCHEDULE: S5
(According to the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

16. FURTHER INFORMATION

To the best of our knowledge, this MSDS summarizes the health and safety hazards, which may be posed by the product. However, SHIMICOAT makes no representation with regard to the completeness or accuracy of the information or of any recommendations contained in this data sheet, and it accepts no responsibility for loss or damages whatsoever resulting from the use of, or reliance upon, the information and any recommendations herein.

REFERENCES

Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals, February 2016

- Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)] and subsequent amendments
- Australian Code for the Transportation of Dangerous Goods by Road and Rail (ADG Code), Edition 7.3, August 2014
- Standard for the Uniform Scheduling of Drugs and Poisons No. 23, June 2008

Reason for issue:

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer, it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.

Product Name: Erosion Ceramic Coating / Part A
Issued: 01 Aug 2025
Version: V01

DISCLAIMER

Material Safety Data Sheet, Technical and Environmental Data Sheet can be provided upon request.
The information provided in this document is guidance only and considering the uses of this product are beyond the seller's control, the product is sold without guarantees or warranties. Warranties and guarantees shall be governed by SHIMICOAT Standard Terms of Sale. The purchaser shall make its own tests to determine the suitability for their specific application, and Shimicoat Pty Ltd is taking no responsibility for misuse of the product. The purchaser assumes all risk of use and handling of this product. This product will be happily replaced or credited back if defective. Beyond this, Shimicoat Pty Ltd is not liable for any damages caused by this product or its use. *This information and all further technical advice are based on our present knowledge and experience. The customer is not released from the obligation to conduct careful inspection and testing of supplied goods.*

MATERIAL SAFETY DATA SHEET
Erosion Ceramic Coating – Part B
Epoxy Hardener – Curing Agent

HAZARDOUS ACCORDING TO THE CRITERIA OF SAFE WORK AUSTRALIA (NOHSC)

1. IDENTIFICATION OF MATERIAL AND SUPPLIER

Identification of Material

Product name: Erosion Ceramic Coating (Party B) – Hardener / Curing Agent
Product code:
Intended use: Epoxy Resin – Part B
Chemical Name: Aliphatic Amine - Ethanediamine and Phenol

Identification of the Company

Manufacturer / Supplier: SHIMICOAT Pty Ltd, 9a Morse Road, BIBRA LAKE WA 6163
Phone: (+61) (08) 9434 3302
E-mail: info@shimi.com.au
Website: www.shimi.com.au
Emergency phone number: Poisons Information Centre
Phone (Australia 13 1126; New Zealand 03 4747000)

Additional Information:
It is the user's responsibility to determine the suitability of this product for their applications and their methods of use.

Other Information:
THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT SHIMICOAT SO WE CAN ATTEMPT TO PROVIDE ADDITIONAL INFORMATION. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS AVAILABLE ON OUR WEBSITE, SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST BY EMAIL OR POST.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture:
Acute Toxicity - Dermal: Category 4 Eye Damage/Irritation: Category 1 Germ Cell Mutagenicity: Category 2 Acute Toxicity - Inhalation: Category 3 STOT Repeated Exposure Category 2 Skin Corrosion/Irritation: Category 2 Sensitization - Skin: Category 1

Signal Word (s) DANGER
Hazard Statement (s):
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H331 Toxic if inhaled.
H341 Suspected of causing genetic defects.
H373 May cause damage to organs through prolonged or repeated exposure.

Pictogram (s) Corrosion, Health hazard, Skull and crossbones

Precautionary statement – Prevention

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash 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.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P310 Immediately call a POISON CENTER or doctor/physician.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.

Precautionary statement – Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Precautionary statement – Disposal

P501 Dispose of contents/container according to local regulations.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Name	CAS Number	Concentration
Formaldehyde, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and phenol	32610-77-8	**>60%**
Phenol	108-95-2	**20%**
Triethylenetetramine	112-24-3	**<20%**

4. FIRST AID MEASURES

First Aid Measures Seek medical advice. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.

Inhalation Move to fresh air.

Ingestion Never give anything by mouth to an unconscious person. Prevent aspiration of vomit. Turn victim's head to the side.

Skin Immediately remove contaminated clothing and any extraneous material, if possible, to do so without delay. Take off contaminated clothing and shoes immediately. NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritati

Eye contact Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available continue to irrigate for one hour.

5. FIREFIGHTING MEASURES

Fire Fighting Measures Do not allow run-off to enter drains or water courses.

Suitable extinguishing media Alcohol-resistant foam, carbon dioxide (CO2), dry chemical, dry sand, limestone powder.

Specific hazards arising from the chemical May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.

Decomposition Temp No data available.

6. ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up Approach suspected leak areas with caution. Place in appropriate chemical waste container.

Personal Precautions Use self-contained breathing apparatus and chemical protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

Environmental Precautions Construct a dike to prevent spreading.

Other Information If possible, stop flow of product

7. HANDLING AND STORAGE

Precautions for Safe Handling Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Suspected cancer-causing nitrosamine could be formed. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with skin and eyes. Use personal protective equipment. When using, do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities Store in steel containers preferably located outdoors, above ground and surrounded by dikes to contain spills or leaks. Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

Recommended Materials Do not store in reactive metal containers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Controls, Personal Protection The following Australian and New Zealand Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: AS/NZS 1715, Protective Gloves: AS 2161, Industrial Clothing: AS2919, Industrial Eye Protection: AS1336 and AS/NZS 1337, Occupational Protective Footwear: AS/NZS2210.

Occupational exposure limit values

Phenol	**STEL** / Short Term Exposure Limit	**TWA** / Time Weighted Average
	4mg/m^3	1ppm

Appropriate engineering Controls Provide readily accessible eye wash stations and safety showers. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits.

Respiratory Protection Wear appropriate respirator when ventilation is inadequate.

Eye Protection Chemical resistant goggles must be worn.

Hand Protection Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Butyl-rubber, nitrile rubber, neoprene gloves, impervious gloves, PVC disposable gloves.

Body Protection Long sleeve shirts and trousers without cuffs. Impervious clothing.

Special Protective Measures	Discard contaminated leather articles. Wash at the end of each workshift and before eating, smoking or using the toilet. Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Provide readily accessible eye wash stations and safety showers.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Amber Viscos Liquid
Odour	Distinctly Phenolic
pH	10
Vapour pressure	< 1 kPa at 21oC
Vapour density	Not determined
Boiling point	205oC
Freezing/melting point	Not determined
Water solubility	0.25 g/L
Density	1.09 g/cm3
Flash point	135.56 oC
Explosive limits	Not determined

10. STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Incompatible Materials	Sodium hypochlorite. Organic acids. Mineral acids. Nitrous acid and other nitrosating agents. Reactive metals (e.g. sodium, calcium, zinc, etc.) Materials reactive with hydroxyl compounds. Oxidising agents.
Hazardous Decomposition	Nitric acid. Ammonia. Oxides of nitrogen. Nitrogen oxides can react with water vapours to form corrosive nitric acid. Carbon monoxide. Carbon dioxide (CO2). Aldehydes. Flammable hydrocarbon fragments. Nitrosamine.
Products Possibility of hazardous reactions	Product slowly corrodes copper, aluminium, zinc and galvanised surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. CAUTION! N-Nitrosamine, many of which are known to be potent carcinogens, may be formed when the product comes into contact with nitrous acid, nitriles or atmospheres with igh nitrous oxide concentrations.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity – Oral	LD50, rat: 2200 mg/kg
Acute Toxicity – Dermal	LD50, rabbit : >1000 mg/kg (estimated)
Acute Toxicity – Inhalation	No data is available on the product itself.
Ingestion	No data available.
Inhalation	No data available.
Skin	Causes skin irritation. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Eye	Severe eye irritation.
Skin Sensitisation	May cause sensitisation by skin contact. Sensitisation has occurred in laboratory animals after repeated exposures.
Germ cell mutagenicity	Results from a battery of short term genotoxicity tests on this material or its components indicate mutagenic activity.
Carcinogenicity	No data available.
Reproductive Toxicity	No data is available on the product itself.
STOT-single exposure	Skin, eyes, kidney, liver, pancreas, spleen.
STOT-repeated exposure	Absorption of phenolic solutions through the skin may be very rapid and can cause damage to the kidneys, live, pancreas and spleen and edema of the lungs.
Aspiration Hazard	No data available.
Serious eye damage/irritation	Severe eye irritation.
Mutagenicity	No data is available on the product itself.
Skin corrosion/irritation	Moderate skin irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity	No data is available on the product itself.
Persistence and Degradability	Biodegradability - no data is available on the product itself.
Mobility	No data is available on the product itself.
Bioaccumulative Potential	No data is available on the product itself. Phenol - Low bioaccumulation potential.
Acute Toxicity – Daphnia	Phenol - EC50, Daphnia, 48h: 4 - 7 mg/L

13. DISPOSAL CONSIDERATIONS

Disposal Considerations	Dispose of waste according to applicable local, state and federal regulations.
Container Disposal	Dispose of container and unused contents in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

Transport Information	Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. Not regulated for transport of Dangerous Goods: ADG7, UN, IATA, IMDG.

15. REGULATORY INFORMATION

Poisons Schedule	S6
Hazard Category	Toxic,Corrosive
EINECS/ELINCS (EC)	Included on EINECS Inventory or polymer substance, monomers included on EINECS Inventory or no longer polymer
TSCA (USA)	Included on Inventory.
AICS (Australia)	All components of this material are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

16. FURTHER INFORMATION

To the best of our knowledge, this MSDS summarizes the health and safety hazards, which may be posed by the product. However, SHIMICOAT makes no representation with regard to the completeness or accuracy of the information or of any recommendations contained in this data sheet, and it accepts no responsibility for loss or damages whatsoever resulting from the use of, or reliance upon, the information and any recommendations herein.

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- Standard for the Uniform Scheduling of Drugs and Poisons No. 23, June 2008

Reason for issue:

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer, it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

Safety Data Sheets are updated frequently. Please ensure you have a current copy.

Product Name:	Erosion Ceramic Coating Epoxy / Part B
Issued:	28 May 2024
Version:	V01

Hazchem Code:

Emergency action code of numbers and letters that provide information to emergency services especially fire fighters

IARC:	International Agency for Research on Cancer
IOELV:	Indicative Occupational Exposure Limit Value
LC50:	Lethal Concentration, 50 percent
LD50:	Lethal Dose, 50 percent
NICNAS:	National Industrial Notification & Assessment Scheme
NIOSH:	National Institute for Occupational Safety & Health
NOAEL:	No Observed Adverse Effect Level
NOEC:	No Observed Effect Concentration
NOS:	Not otherwise specified
NTP:	National Toxicology Program (USA)
OEL:	Occupational Exposure Limit
OSHA:	Occupational Safety & Health Administration
PBT:	Persistent Bioaccumulative Toxic chemical
PMCC:	Pensky Martens Closed Cup
PNEC:	Predicted No Effect Concentration
R-Phrase:	Risk Phrase
STEL:	Short Term Exposure Limit
STOT-SE:	Specific Target Organ Toxicity (Single Exposure)
STOT-RE:	Specific Target Organ Toxicity (Repeated Exposure)
SUSMP:	Standard for the Uniform Scheduling of Medicines & Poisons
TWA:	Time Weighted Average
UN Number:	United Nations Number
vPvB:	Very Persistent and Very Bioaccumulative
WEEL:	Workplace Environmental Exposure Level
WEL-TWA:	Workplace Exposure Limit, Time Weighted Average

...End Of MSDS...

DISCLAIMER

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