

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name:

PERMAMOLD GDX

Recommended Use of the Chemical Refractory coating for foundry moulds. **and Restrictions on Use**

Supplier: NZBN: Street Address:	Ixom Operations Pty Ltd (Incorporated in Australia) 9429041465226 166 Totara Street Mt Maunganui South New Zealand
Telephone Number:	+64 9 368 2700
Facsimile:	+64 9 368 2710
Emergency Telephone:	0 800 734 607 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

SIGNAL WORD: WARNING

Subclasses: Subclass 6.5 Category B - Substances that are contact sensitisers.

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2017 Approval Number: HSR002503



Hazard Statement(s): H317 May cause an allergic skin reaction.

Precautionary Statement(s):

Prevention:

P103 Read label before use. P260 Do not breathe dust.

P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P302+P352 IF ON SKIN: Wash with plenty of soap and water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P321 Specific treatment (see First Aid Measures on the Safety Data Sheet). P363 Wash contaminated clothing before re-use.

Storage:

No storage statements. Product Name: PERMAMOLD GDX Substance No: 000000017552



Disposal:

P501 In case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Notice 2017. This may also include any method of disposal that must be avoided.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Graphite	7782-42-5	30-60%	-
Crystalline silica (Quartz)	14808-60-7	<1%	H350 H372
Hexahydro-1,3,5-tris(2-hydroxyethyl)-S-triazine	4719-04-4	0.1-<0.2%	H302 H317
Non hazardous component(s)	-	to 100%	-

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Seek medical advice if effects persist.

Skin Contact:

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water and soap. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye Contact:

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by the mouth to an unconscious patient. Seek medical advice.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

Not combustible, however, if material is involved in a fire use: Extinguishing media appropriate to surrounding fire conditions.

Specific hazards arising from the chemical:

Non-combustible material.

Special protective equipment and precautions for fire-fighters:

Not combustible, however following evaporation of the water component of the material, the residual material can burn if ignited. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

6. ACCIDENTAL RELEASE MEASURES



Emergency procedures/Environmental precautions:

Clear area of all unprotected personnel. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. Wash area down with excess water.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid skin and eye contact and breathing in vapour, mists and aerosols. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. Launder contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well ventilated place. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Standards: No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Exposure Standard(s) for component(s) that may present a dust hazard if product is sanded:

Graphite, all forms except graphite fibres: WES-TWA 3 mg/m³ Respirable dust containing < 1% free silica Particulates not otherwise classified: 8hr WES-TWA 10 mg/m³ (inhalable dust) or 3 mg/m³ (respirable dust) Silica-Crystalline Quartz (confirmed carcinogen): WES-TWA = 0.1 mg/m³ (Respirable dust), 6.7A Known or presumed human carcinogen

As published by the New Zealand Workplace Health & Safety Authority.

WES - TWA (Workplace Exposure Standard - Time Weighted Average) - The eight-hour, time-weighted average exposure standard is designed to protect the worker from the effects of long-term exposure.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.



Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES.



Wear overalls, safety glasses and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Colour: Odour: Solubility: **Specific Gravity:** Relative Vapour Density (air=1): Not available Vapour Pressure (20 °C): Flash Point (°C): Flammability Limits (%): Autoignition Temperature (°C): **Boiling Point/Range (°C): Decomposition Point (°C):** pH: Viscosity:

Liquid Dark Grev Very faint Dispersible in water. 1.25-1.29 @20°C Not available Not applicable Not applicable Not available 100 (water content) Not available Not available 18000-26000 cSt @20°C

10. STABILITY AND REACTIVITY

Reactivity:	No information available.
Chemical stability:	Stable under normal conditions of use.
Possibility of hazardous reactions:	None known. Hazardous polymerisation will not occur.
Conditions to avoid:	Avoid contact with foodstuffs.
Incompatible materials:	Incompatible with solvent or oil based coatings .
Hazardous decomposition products:	None known.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are: Product Name: PERMAMOLD GDX Issued: 16/12/2019 Substance No: 00000017552 Version: 5



Ingestion:	No adverse effects expected, however, large amounts may cause nausea and vomiting.		
Eye contact:	May be an eye irritant.		
Skin contact:	Contact with skin may result in irritation. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.		
Inhalation:	Breathing in mists or aerosols may produce respiratory irritation.		
Acute toxicity: No LD50 data available for the product.			
Respiratory or skin sensitisation:	A skin sensitiser.		

Chronic effects: No information available for the product.

Aspiration hazard: No information available.

The toxicity of crystalline silica is directly proportional to the ability of any particle to reach the lower respiratory tract. Quartz particles with an aerodynamic diameter below 10um are likely to be most harmful to humans, as they reach the lower respiratory tract and are less readily removed by the lungs.

Increases in lung cancer have been attributed to the inhalation of crystalline silica in a number of industries, including; ore mining, quarrying and granite works, ceramics, pottery, refractory brick and diatomaceous earth industries and in foundry workers.

The International Agency for Research on Cancer has classified crystalline silica as a Type 1 Carcinogen - Carcinogenic to Humans, based on sufficient evidence in humans and animals.

Increasing in vitro and in vivo evidence suggests that lung carcinomas in rats are a result of marked and persistent inflammation and epithelial proliferation.

Crystalline silica also causes a range of non-neoplastic pulmonary effects, including; inflammation, silicosis, lymph node fibrosis, airways disease, emphysema and increased permeability of the airspace epithelium.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Avoid contaminating waterways.
Persistence/degradability:	No information available.
Bioaccumulative potential:	No information available.
Mobility in soil:	No information available.

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Refer to local government authority for disposal recommendations. Dispose of contents/container in accordance with local/regional/national/international regulations.

14. TRANSPORT INFORMATION



Road and Rail Transport

Not classified as a Dangerous Good under NZS 5433:2012 Transport of Dangerous Goods on Land.

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Classification:

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

Subclasses:

Subclass 6.5 Category B - Substances that are contact sensitisers.

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2017 Approval Number: HSR002503

Hazard Statement(s):

H317 May cause an allergic skin reaction.

16. OTHER INFORMATION

Supplier Safety Data Sheet; 07/2018.

This safety data sheet has been prepared by Ixom Operations Pty Ltd (Toxicology & SDS Services).

Reason(s) for Issue:

Revised Primary SDS Change in Hazardous Chemical Classification

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.