

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: CALDE PATCH PT 88 U

Recommended Use of the Chemical Unshaped refractory material.

and Restrictions on Use Restricted to industrial or professional users for application as safety or wear linings and

maintenance of both in all industrial devices at temperatures >1000°C.

Supplier: Ixom Operations Pty Ltd (Incorporated in Australia)

NZBN: 9429041465226 Street Address: 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: DANGER

Subclasses:

Subclass 6.8 Category A - Substances that are known or presumed human reproductive or developmental toxicants.

Subclass 8.3 Category A - Substances that are corrosive to ocular tissue.

Additives, Process Chemicals and Raw Materials (Subsidiary Hazard) Group Standard 2017

Approval Number: HSR002503





Hazard Statement(s):

H318 Causes serious eye damage.

H360 May damage fertility or the unborn child.

Precautionary Statement(s):

Prevention:

P103 Read label before use.

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P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P281 Use personal protective equipment as required.

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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.

P310 Immediately call a POISON CENTER or doctor/physician.

P308+P313 IF exposed or concerned: Get medical advice/attention.

Storage:

P405 Store locked up.

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
Aluminium oxide	1344-28-1	50-<90%	-
Aluminium tris(dihydrogen phosphate)	13530-50-2	2.5-<10%	H318
Boric acid	10043-35-3	<5.5%	H360FD

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 contact occurs, remove contaminated clothing and wash skin with soap and water. If irritation occurs, seek medical advice.

Eye Contact:

Immediately wash in and around the eye area with large amounts of water for at least 15 minutes. Eyelids to be held apart. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport promptly to hospital or medical centre.

Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Never give anything by the mouth to an unconscious patient. Seek medical advice.

Indication of immediate medical attention and special treatment needed:

Treat symptomatically. Can cause corneal burns.

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.

Unsuitable Extinguishing Media:

None known.

Specific hazards arising from the chemical:

Non-combustible material.

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Special protective equipment and precautions for fire-fighters:

Decomposes on heating emitting toxic fumes, including those of oxides of phosphorus. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Isolate spill or leak area immediately. Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up: Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. After cleaning, flush away any residual traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid skin and eye contact and breathing in dust. When using do not eat, drink or smoke. Wash hands before breaks and at the end of the work day. Provide eye wash station.

Conditions for safe storage, including any incompatibilities: Store in a cool, dry, well ventilated place and out of direct sunlight. Keep only in the original container. Do not store above 40°C. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Standards: No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for constituent(s):

Aluminium oxide: 8hr WES-TWA = 10 mg/m³

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.

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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, CHEMICAL GOGGLES, GLOVES, DUST MASK.









Wear overalls, chemical goggles and impervious gloves. Avoid generating and inhaling dusts. If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Wet mixture of aggregates and fine powders

Colour: Grey

Odour: Not specified

Solubility: Slightly soluble in water.

Specific Gravity: 2.03

Relative Vapour Density (air=1): Not applicable Vapour Pressure (20 °C): Not applicable Flash Point (°C): Not applicable Flammability Limits (%): Not applicable Autoignition Temperature (°C): Not applicable

Melting Point/Range (°C): >1650 pH: 3-<5

10. STABILITY AND REACTIVITY

Reactivity: Reacts with strong alkalis.

Chemical stability: This material is chemically stable.

Possibility of hazardous

reactions:

Reacts exothermically with strong alkalis.

Conditions to avoid: Avoid dust generation. Avoid freezing temperatures.

Incompatible materials: Incompatible with strong alkalis, metals, bases, nitrates, chlorates, calcium

carbide, cyanides, sulfites, sulfur compounds.

Hazardous decomposition

products:

Oxides of phosphorus. Phosphine.

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:

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Ingestion: Swallowing may result in nausea, vomiting, diarrhoea, gastrointestinal irritation.

A severe eye irritant. Contamination of eyes can result in permanent injury. Eye contact:

Skin contact: Contact with skin may result in irritation.

Inhalation: Breathing in mists or aerosols may produce respiratory irritation.

Acute toxicity: No LD50 data available for the product.

Respiratory or skin

No information available.

sensitisation:

Chronic effects:

Mutagenicity: Not classified. Carcinogenicity: Not classified.

Reproductive toxicity: May damage fertility or the unborn child.

Specific Target Organ Toxicity

Not classified.

(STOT) - single exposure:

Specific Target Organ Toxicity

Not classified.

(STOT) - repeated exposure:

Aspiration hazard: Not applicable.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways. **Ecotoxicity**

Persistence/degradability: Inorganic salts are basically not biodegradable.

Bioaccumulative potential: No information available.

No information available. Mobility in soil:

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.

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15. REGULATORY INFORMATION

Classification:

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Subclasses:

Subclass 6.8 Category A - Substances that are known or presumed human reproductive or developmental toxicants. Subclass 8.3 Category A - Substances that are corrosive to ocular tissue.

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16. OTHER INFORMATION

Supplier Safety Data Sheet; 04/2018. CALDE is a registered trademark.

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

Reason(s) for Issue:

First Issue Primary SDS

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.

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