

MATERIAL SAFETY DATA SHEET

STATEMENT OF HAZARDOUS NATURE

This product is classified as a Hazardous Substance according to the criteria of NOHSC / Safe Work Australia.

Manufacturer: SinoSource Enterprise Co., Ltd
Address: 20/F Ming Cheng Bldg, Renmin East Rd, Changsha 410016, China

Telephone: +86-731-8866 0555
Fax: +86-731-8866 0599

Australian Contact Information: +612 9571 6569 (Business hours) No Blast Pty Ltd, 3Coneill Place, Forest Lodge, NSW 2037
Poisons Information Centre (NSW): 131126

IDENTIFICATION

PRODUCT NAME: Non-Explosive Demolition Agent (Expansive Mortar)

UN No: None allocated for this product. (UN number for Calcium Oxide is 1910)
Dangerous Goods Class: None allocated by Australian Code for the Transport of Dangerous Goods by Road and Rail. Classified as Class 8 Corrosive for Air Transport only
Hazchem Code: None allocated
Poisons Schedule: None allocated

Use: Non-explosive break-up of materials due to expansion when product reacts with water.

PHYSICAL DESCRIPTION / PROPERTIES:

Appearance & Odour:	Grey powder, odourless	Flash Point (Cels):	Does not burn
Vapour Pressure:	Not relevant	Autoignition Temp. (Cels):	Not relevant
Specific Gravity:	3.2	Volatility:	Not relevant
Flammability Limits:	Non-flammable	Solubility in Water:	Slight
Boiling Point:	Not relevant		
Melting Point:	> 1000 C		

INGREDIENTS:

Substance Name	CAS Number	Proportion
Calcium Oxide	1305-78-8	89.6 %
Ferric Oxide	1309-37-1	2.5 %
Other non-hazardous ingredients	-	< 10%

Note: This product is a mixture based on Portland type cement and organic resin

HEALTH HAZARD INFORMATION

HEALTH EFFECTS:

Risk of serious damage to eyes. May cause irritation or burning to skin. Corrosive to mucous membranes.

Acute Effects:

Swallowed: May cause discomfort if swallowed.

Eyes: Risk of serious eye damage.

Skin: This product may cause irritation of the skin.

Inhaled: May irritate respiratory system or lungs.

Chronic Effects:

Inhaled: Repeated or prolonged exposure may aggravate asthma, and lead to inflammatory pulmonary disease.

FIRST AID:

Swallowed: DO NOT INDUCE VOMITING. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS If conscious get affected person to drink large volumes of water to dilute the chemical. Obtain medical advice. Provide rest, warmth and fresh air.

Eye Contact: Promptly wash eyes with plenty of water while lifting eye lids. Continue to rinse for at least 15 minutes. Seek medical attention if redness or irritation develops.

Skin Contact: Remove affected person from source of contamination. Wash skin thoroughly with mild soap and water. Get medical attention if irritation develops.

Inhaled: Move the exposed person to fresh air immediately. Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention if any discomfort continues.

ADVICE TO DOCTOR: Treat symptomatically.

EXPOSURE CONTROLS / PRECAUTIONS FOR USE

EXPOSURE STANDARDS: *NOHSC / Safe Work Australia*)

Ingredients	Occupational Exposure Standards
Crystalline Silica (Quartz)	0.1 mg/m ³ time-weighted average (TWA) respirable dust
Dust (NOS - not otherwise specified)	10 mg/m ³ time-weighted average (TWA) as inspirable dust
Calcium Oxide	2 mg/m ³ TWA as inspirable dust
Aluminium Oxide	10 mg/m ³ time-weighted average (TWA) as inspirable dust
Ferric Oxide	5 mg/m ³ TWA as inspirable dust

NOTE: WHEN MIXING THE PRODUCT WITH WATER, DO NOT GET CLOSE TO HOLES FILLED WITH THE MIXTURE OF PRODUCT AND WATER, TO AVOID ANY ACCIDENTS TO BE CAUSED BY BLOWN OUT SHOTS.

ENGINEERING CONTROLS:

Avoid generating dust. Provide general or local ventilation when using in confined areas. If the above recommended practices are not followed, wear suitable personal protection. (see Personal Protection).

When sweeping up debris and dust, use water to suppress dust and wear a Class P1 or P2 particulate respirator.

Use hygienic work routines – wash hands at the end of each usage, before eating, smoking, or using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. No eating drinking or smoking while working with this material.

PERSONAL PROTECTION:

Eye: Wear dust resistant safety goggles where there is risk of eye contact. AS/NZS1336-1997 “Recommended Practices for Eye Protection in the Industrial Environment” provides further guidance.

Skin: Loose comfortable clothing should be worn. Direct skin contact with dust should be avoided by wearing long sleeved shirts and long trousers, a cap or hat, and gloves - standard duty leather, rubber or other equivalent conforming to AS 2161-1978 “Industrial Safety Gloves and Mittens”. Work clothes should be washed regularly.

Inhalation: It is recommended to use an approved particulate dust mask (AS/NZS 1715 & 1716) such as Class P2 or P3 respirators, as appropriate. Use only respirators which bear the Australian Standards mark and ensure correct fitting. Note that persons with facial hair will have difficulty in obtaining a satisfactory face seal. Refer to AS/NZS 1715: *Selection, use and maintenance of respiratory protective devices.*

Warn others in area where dust is being generated.

Other protection: Wear necessary clothing to prevent repeated or prolonged skin contact. Wet cement burns can be painless at first so prevention of contact with skin is vital. Provide eye wash station.

FLAMMABILITY: Non-flammable.

SAFE HANDLING INFORMATION

HANDLING AND STORAGE:

Store the product under dry conditions and avoid contact with water at all times.

Wear Safety Goggles: For eye protection to avoid accidental splashes. Refer to AS/NZS1336-1997 “Recommended Practices for Eye Protection in the Industrial Environment”.

Wear a Respiratory Mask: Use P2 or P3 disposable dust mask, in accordance with AS/NZS 1715: Selection, use and maintenance of respiratory protective devices.

Use Rubber, PVC or other resistant gloves: Gloves should extend up arms as, like cement, this product can irritate the skin. Refer AS 2161-1978 “Industrial Safety Gloves and Mittens”.

Working Clothes: Normal working clothes, preferably long sleeved shirt and long trousers.

ACCIDENTAL RELEASE MEASURES

Precautions to Protect Environment: Avoid subsoil penetration. Prevent product from entering drains. Do not contaminate surface water.

Spills and Disposal:

1. Gather the released or spilled product with a broom or shovel
2. Mix it with sufficient water to fully hydrate the lime.
3. Dispose of in accordance with local, state and federal regulations. Contact a specialist chemical waste disposal company or the local waste regulator for advice.

FIRE / EXPLOSION HAZARD:

Extinguishing Media: This material is not flammable. Use extinguishing media that is appropriate for surrounding fire.

NOTE: WHEN MIXED WITH WATER, THE PRODUCT EXPANDS UNDER HIGH TEMPERATURE DEVELOPMENT AND WHEN IN HOLES THE FRICTION CAUSED BY THE EXPANSION WITHIN THIS CONFINED SPACE INCREASES TO HIGH TEMPERATURE.

STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of use, storage and temperature.

Conditions to Avoid: Humid conditions or moisture.

Materials to Avoid: Water, except while using for expansion work.

Hazardous Decomposition Products: None.

ECOLOGICAL INFORMATION

Environmental Hazards: Not regarded as dangerous for the environment

TRANSPORT INFORMATION

Road and Rail Transport: Not regulated

Sea Transport: Not regulated

Air Transport: Classified as Dangerous Goods, Corrosive Class 8. See ICAO Rules or IATA Regulations

REGULATORY INFORMATION

Label for Supply: Xi (Irritant)

Risk Phrases: R14 Reacts violently with water
R34 Causes burns
R41 Risk of serious damage to the eyes

Safety Phrases: S22 Do not breathe dust
S24/25 Avoid contact with skin and eyes
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection
S38 In case of insufficient ventilation, wear suitable respiratory protection

EC Directives: European Communities (Classification, Packaging, Labelling and Notification of Dangerous Substances) Regulations 2003 (SI No 116 of 2003).
European Communities (Classification, Packaging, Labelling and Notification of Dangerous Substances) Regulations 2004 (SI No 62 of 2004).

OTHER INFORMATION

INFORMATION SOURCES:

Dangerous Properties of Industrial Materials Report, N. Sax et al.

Australian Code for the Transport of Dangerous Goods (ADG Code)

Exposure Standards for Atmospheric Contaminants in the Occupational Environment, Guidance Note and National Exposure Standards NOHSC:3008 and NOHSC 1003. (Safe Work Australia0

MSDS Date of Preparation: Revision 2, 20 February 2015

Reason for Revision: 5 year update