



1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER	
Product Name:	Nasahi (AAC) Adhesive
Product Code:	-
Other Names:	-
Product Use:	Adhesive for Nasahi Cladding System. Nasahi AAC Adhesive is supplied as a blended dry powder. Prior to application, the powder is mixed with water to a slurry and is then trowelled onto panels or block work.
Supplier Name:	Nasahi Building Materials Australia Pty Ltd T/A Nasahi
Address	1331 Stud Road Rowville VIC 3178
Telephone	1300 2 NASAHI (1300 262 724)
Email Address:	info@nasahi.net.au
Web Site:	www.nasahi.net.au
Facsimile:	+61 3 9790 6406
Emergency Phone Number:	000 Fire Brigade and Police (in Australia only)
Poison Information Centre:	13 11 26 (in Australia only)

NOTICE:

This Material Safety Data Sheet (MSDS) is issued by Nasahi[®] in accordance with NOHSC guidelines and as such, the information within should not be altered in any way.

2. HAZARD IDENTIFICATION	
Nasahi Adhesive is classified as a non-dangerous material in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail. Dust of the supplied dry product will contain some respirable crystalline silica. Once wet, the risk of inhalation is minimal; however, dust from cutting or grinding the set product may contain respirable crystalline silica.	
Safety Phrases:	S22 – Do not breathe dust. S24/25 – Avoid contact with skin and eyes. S29 – Do not empty into drains. S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.
Risk Phrases:	R36/37/38 – Irritating to eyes, respiratory System and skin. R42/43 – May Cause sensitisation by inhalation and skin contact. R48/20 – Harmful: danger of serious damage to health by prolonged exposure through inhalation. R66 - Repeated exposure may cause skin dryness or cracking.

3. COMPOSITION / INFORMATION ON INGREDIENTS		
Ingredient (common name)	CAS Number	Proportion
Silicon dioxide, non-respirable	14808-60-7	65 - 75%
Portland Cement	65997-15-1	20 - 35%
Gypsum	10101-41-4	<1%
Limestone	1317-65-3	<2%
Crystalline silica (quartz), respirable	14808-60-7	<0.1%
Mullite	1302-93-8	<2%

The chemical composition of Portland cement is essentially oxides of various elements, the most prevalent being oxides of calcium (Ca), silica (Si), aluminium (Al), iron (Fe), titanium (Ti), chromium (Cr) mostly as insoluble chromium III but it is possible that water soluble chromium IV could be present at concentrations of less than 10ppm. Trace amounts of oxide of magnesium (Mg), potassium (K) and phosphorous (P) may also be present.



4. FIRST AID MEASURES

Inhalation	If inhaled, remove person to fresh air away from dusty area. Seek medical attention if symptoms persist.
Ingested	Rinse the mouth and lips giving the victim plenty of water to drink. DO NOT induce vomiting. Seek medical attention if symptoms persist.
Skin	Remove contaminated clothing and wash effected areas thoroughly with soap and water, shower if necessary. Seek medical attention for persistent redness, irritation or burning of the skin.
Eyes	In case of eye contact, check for and remove contact lenses. Immediately irrigate eyes with plenty of running water for at least 15 minutes, keeping eyelids open. Seek medical attention for persistent redness, irritation or burning of the skin.
First Aid Facilities	Eye wash station. Washing facilities with running water.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	For major fires call the Fire Brigade. Ensure that an escape path is available from the fire. Carbon dioxide, foam, water or dry chemical. Remove contaminated clothing and wash effected areas thoroughly with soap and water, shower if necessary. Seek medical attention for persistent redness, irritation or burning of the skin.
Hazardous from Combustion Products:	None
Fire fighting Equipment:	Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.
Unusual Fire or Explosion Hazards:	This product is non-combustible. Does not support combustion of other materials.
HAZCHEM Code:	None allocated

6. ACCIDENTAL RELEASE MEASURES

Control Measures:	Wear appropriate personal protective equipment. Ventilate area of dust. Avoid generating dust collect and reuse where possible. A fine water spray should be used to suppress dust when sweeping. Vacuum or sweep up material and place into suitable containers for disposal or salvage.
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7. HANDLING AND STORAGE

Handling:	Nasahi AAC Adhesive in 11L (20kg) multiply valve pack paper bags. Manual handling of this product is to be performed in accordance with Manual Handling Regulations and Code of Practice.
Storage:	Store in cool, dry, well-ventilated area in the original bags. Shelf life is six (6) months.
Incompatibilities:	None

8. STABILITY REACTION

Chemical Stability:	Stable under normal conditions
Incompatible Materials:	Hydrogen fluoride (hydrofluoric acid) and other components containing fluorine.
Conditions to Avoid:	Keep away from moisture during storage.
Hazardous Decomposition:	None
Hazardous	None



9. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Standards (Safe Work Australia):	Total dust (of any type or particle size) - TWA: 10mg/m ³ Crystalline silica (quartz) as respirable dust - TWA: 0.1mg/m ³ (<7 micron particles equivalent aerodynamic diameter). Portland Cement - TWA: 10 mg/m ³ Limestone - TWA: - ppm / 10 mg/m ³
Engineering Controls:	Outdoor ventilation should be sufficient for most conditions. Local exhaust ventilation is recommended when dust can be released in excess of established airborne exposure limits.
Respiratory Protection:	A Safe Work Australia approved full-face class P1 or P2 particulate respirator if high airborne concentration of material is present. See Australian Standards AS/NZS 1715 and 1716 for more information.
Eye Protection:	Safety Spectacles with side shields or safety goggles (dust resistant AS/NZ 1336).
Skin Protection:	Use impervious elbow length gloves (AS 2161), such as PVC impervious boots and full-length clothing to protect the skin from contact with the dust, particularly wetted dust or wet adhesive.
Hygienic Practice:	Food, beverages and tobacco products should not be stored or consumed where this material is in use. Provide eye wash fountains and safety showers in close proximity to points of potential exposure. Wash hands before eating, drinking. Using the toilet, or smoking. Wash work clothes regularly.

10. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Blended powder white to off-white colour
Odour:	None
Solubility in water:	Alkaline slurry is formed with water.
pH:	11-12
Boiling point (oC):	N/A
Melting point:	>1200 oC
Vapour Pressure (kPa):	N/A
Specific Gravity:	1.3 to 1.7
Density:	2 – 3 g/cm ³
Flash Point:	N/A
Flammable Limit Lower:	N/A
Flammable Limit Upper:	N/A

11. TOXICOLOGY INFORMATION

Short Term Effects

Inhalation	Irritation of the nose, throat, and airways, resulting in coughing and sneezing. Certain susceptible individuals may experience wheezing (spasms of the bronchial airways) on inhaling dust during sanding or sawing operations. May cause burning sensation and abdominal discomfort.
Ingested	Unlikely under normal use. Mildly abrasive and corrosive to mouth and throat. May cause nausea, stomach cramps and constipation.
Skin	Irritating and drying to skin. May cause alkaline burns and irritant or allergic dermatitis, especially as an ingredient in plastic (unhardened) wet concrete mortar and slurry.
Eyes	May cause conjunctivitis, redness or watering of eyes and may cause alkaline burns.

Long Term Effects

Repeated exposure may lead to contact dermatitis. Inhalation of dust containing crystalline silica through prolonged, repeated exposure can cause bronchitis and silicosis (scarring of the lung.) It may also increase the risk of scleroderma (a disease effecting the connective tissue of the skin, joints, blood vessels and internal organs) and lung cancer. Portland cement is not recognised as a carcinogen by NTP, OSHA, or IARC. However, it may contain trace amounts of heavy metals recognized as carcinogens by these organizations. In addition, IARC classifies crystalline silica, a trace constituent, as a known human carcinogen (Group I). NTP has characterized respirable silica as "reasonably anticipated to be a carcinogen". It is recommended that PPE is worn when exposure to dust is likely.


12. ECOLOGICAL INFORMATION

Ecotoxicity:	Product forms an alkaline slurry when mixed with water.
Degradability:	Product has a low degradability and should be disposed of as general waste.
Mobility:	Product is expected to have low mobility in a landfill environment.

13. DISPOSAL CONSIDERATIONS

Disposal methods and containers:	Dispose according to applicable local and state government regulations as the product can be treated as common waste. The necessary measures should be taken to prevent dust generation during disposal.
Special precautions for landfill or incineration:	Consult your State Land Waste Management Authority. Keep out of storm water and sewer drains.

14. TRANSPORTATION INFORMATION

Not classified as a dangerous good according to the Australian Code of Transport of Dangerous goods by road or rail	
UN Number	N/A
Proper Shipping Name	N/A
Dangerous Goods Class	N/A
Hazchem Code	N/A
Packing Group	N/A
Special Precautions	N/A

15. REGULATORY INFORMATION

Portland cement, gypsum, limestone, crystalline silica (quartz) and mullite are listed in the Australian Inventory of Chemical Substances (AICS).	
Poison schedule:	None Scheduled
Exposure by inhalation to high levels of dust may be regarded under the Hazardous Substance Regulation (State) as they are applicable to respirable Crystalline Silica, requiring exposure assessment, controls and health surveillance (ASCC/NOHSC).	

16. OTHER INFORMATION

For further information on this product, please contact: Nasahi Building Materials Australia Pty Ltd T/A NASAHI (ABN 93 606 367 873), 1331 Stud Road, Rowville, VIC 3178, Australia.	
Phone:	+61 3 9795 3540
Facsimile:	+61 3 9790 6406

17. AUSTRALIAN STANDARD REFERENCES

AS 1336	Recommended Practices for Occupational Eye Protection
AS 1715	Selection, Use and Maintenance of Respiratory Protective Devices
AS 1716	Respiratory Protective Devices
AS 2161	Industrial Safety Gloves and Mittens (excluding electrical and medical gloves)


18. OTHER REFERENCES

Model Code of Practice	Preparation of Safety Data Sheet (SDA) for Hazardous Chemicals, December 2011, Safe Work Australia. Labelling of Worksafe Hazardous Chemicals, December 2011, Safe Work Australia.
ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th edition, National Transport Commission.
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals (GHS), 3rd revised edition, United Nations, New York and Geneva, 2009.
NOHSC: 1008 (2004)	Approved Criteria for Classifying Hazardous Substances.
NOHSC: 10005 (1999)	List of Designated Hazardous Substances, April 1999, National Occupational Health and Safety Commission, Sydney.
NOHSC: 2007 (1994)	National Code of Practice for the Control of Workplace Hazardous Substances (Australian States have similar Code of practice in each State).
WES	Workplace Exposure Standards for Airborne Contaminants, December 2011, Safe Work Australia.

The information contained in this material safety data sheet (MSDS) is provided in good faith and is believed to be accurate at the date of issue. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used. Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by Nasahi® for any loss or damage caused by any person acting or refraining from action as a result of this information.

Please read all installation guides / product labels before use.

