

Hazardous Chemical, NON - Dangerous Goods

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	TPA Lite
Product Code(s)	105-755
Synonyms	None
Relevant identified uses of the substance or mixture and uses advised against	
Recommended Use	Tile Adhesive

Supplier	Tiling Products Australia
Address	PO Box 33 Archerfield BC, Queensland 4108
Telephone	+61 (7) 3722 3822
Email	info@tpa-us.com.au

Emergency Contact	Australian Poisons Information Centre 13 11 26
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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture	HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.
Poisons Schedule	Not Applicable
Classification [1]	Skin Corrosion/Irritation - Category 2 Serious Eye Damage/Irritation - Category 1 Skin Sensitisation - Category 1 Germ Cell Mutagenicity - Category 2 Specific Target Organ Toxicity (Single Exposure) - Category 3 Respiratory Tract Irritation Specific Target Organ Toxicity (Repeated Exposure) - Category 2

Single word	DANGER 
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HAZARD STATEMENTS	
H315	Causes skin irritation.
H317	May Cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Supplementary statement(s)	Not Applicable
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PRECAUTIONARY STATEMENTS - PREVENTION	
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective clothing, gloves, eye/face protection and a suitable respirator.
P261	Avoid breathing dust/fume.
P264	Wash all exposed external body areas thoroughly after handling.
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.
P310	Immediately call a POISON CENTER or doctor/physician.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
PRECAUTIONARY STATEMENTS - STORAGE	
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
PRECAUTIONARY STATEMENTS - DISPOSAL	
P501	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

3. COMPOSITION INFORMATION

SUBSTANCES		
See section below for composition of mixtures.		
Chemical Name	CAS Number	Proportion %
Graded sand	14808-60-7	10-30
Portland cement	65997-15-1	30-60
Ingredients determined to be non-hazard	-	To 100

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone 131 126).	
Inhalation	<p>If fumes or combustion products are inhaled remove from contaminated area.</p> <p>Lay patient down. Keep warm and rested.</p> <p>Prostheses such as false teeth, which may block airways, should be removed, where possible, prior to initiating first aid procedures.</p> <p>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained.</p> <p>Perform CPR if necessary.</p> <p>Transport to hospital, or doctor, without delay.</p>
Ingestion	<p>Immediately give a glass of water.</p> <p>First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</p>

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Skin Contact	<p>If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.</p>
Eye Contact	<p>If this product makes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</p>

Indication of any immediate medical attention and special treatment needed.

- Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing media	
<ul style="list-style-type: none"> • There is no restriction on the type of extinguisher which may be used. • Use extinguishing media suitable for surrounding area. 	
Special hazards arising from the substrate or mixture.	
Fire Incompatibility	None known.
Advice for firefighters	
Fire Fighting	<p>Alert the Fire Brigade and tell them the location and nature of the hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use firefighting procedures suitable for surrounding area.</p>
Fire/Explosion Hazard	<p>The material is not readily combustible under normal conditions. However, it will break down under fire conditions and the organic component may burn. Not considered to be a significant fire risk. Heat may cause expansion or decomposition with violent rupture of containers. Decomposition may produce toxic fumes of: silicon dioxide (SiO₂) metal oxides When aluminum oxide dust is dispersed in air, firefighters should wear protection against inhalation of dust particles, which can also contain hazardous substances from the fire absorbed on the alumina particles. May emit poisonous fumes. May emit corrosive fumes.</p>
Hazchem	Not Applicable.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures	
See section 8.	
Environmental precautions	
See section 12.	
Methods and material for containment and cleaning up	
Minor Spills	Clean up all spills immediately. Avoid breathing dust and contact with skin and eyes. Wear protective clothing, gloves, safety glasses and dust respirator. Use dry clean up procedures and avoid generating dust.
Major Spills	Store in original containers. Keep containers securely sealed. Store in a cool, dry area protected from environmental extremes. Store away from incompatible materials and foodstuff containers

7. HANDLING AND STORAGE

Precautions for safe handling.	
Safe Handling	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
Other Information	Store in original containers. Keep containers securely sealed. Store in a cool, dry area protected from environmental extremes. Store away from incompatible materials and foodstuff containers.
Conditions for safe storage, including any incompatibilities:	
Suitable Container	Multi-ply paper bag with sealed plastic liner or heavy gauge plastic bag. NOTE: Bags should be stacked, blocked, interlocked, and limited in height so that they are stable and secure against sliding or collapse. Check that all containers are clearly labelled and free from leaks. Packing as recommended by manufacturer.
Storage Incompatibility	WARNING: Avoid or control reaction with peroxides. All transition metal peroxides should be considered as potentially explosive. For example, transition metal complexes of alkyl hydroperoxides may decompose explosively. The pi-complexes formed between chromium (0), vanadium (0) and other transition metals (haloarene-metal complexes) and mono-or poly-fluorobenzene show extreme sensitivity to heat and are explosive. Avoid strong acids, acid chlorides, acid anhydrides and chloroformates. Avoid contact with copper, aluminium, and their alloys.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS.

Occupational Exposure Limits (OEL)

Ingredient Data

Source	Ingredients	Material Name	TWA	STEL	Peak	Notes
Australian Exposure Standards	Graded Sand	Silica-Crystalline: Quartz (respirable dust)	0.05 mg/m ³	Not Available	Not Available	Not Available
Australian Exposure Standards	Portland Cement	Portland cement	10 mg/m ³	Not Available	Not Available	(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.

EMERGENCY LIMITS

Ingredients	Teel-1	Teel-2	Teel-3
Graded Sand	0.075 mg/m ³	33 mg/m ³	200 mg/m ³

EMERGENCY LIMITS

Ingredients	Original IDLH	Revised IDLH
Graded Sand	25 mg/m ³ / 50 mg/m ³	Not Available
Portland Cement	5,000 mg/m ²	Not Available

Exposure controls

Appropriate engineering controls	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.</p>
Personal protection	
Eye and face protection	<p>Safety glasses with side shields.</p> <p>Chemical goggles.</p> <p>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.</p>

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Skin protection	See hand protection below
Hands/feet protection	<p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact breakthrough time for substances must be obtained from the manufacturer of the protective gloves and must be observed when making a final choice.</p> <p>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands.</p> <p>Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.</p> <ul style="list-style-type: none"> • neoprene rubber gloves • polychloroprene. • nitrile rubber. • butyl rubber.
Body protection	See Other protection below
Other protection	<p>Overall's. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit.</p>

RESPIRATORY PROTECTION

Type - P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
Up to 10 x ES	P1	-	PAPR-P1
	-	-	-
Up to 50 x ES	Air-line**	P2	PAPR-P2
	-	P3	-
Up to 100 x ES	-	Air line*	-
	-	Air line**	PAPR-P3

* - Negative pressure demand ** - Continuous flow

A (All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide (HCN), B3 = Acid gas or hydrogen cyanide (HCN), E = Sulfur dioxide (SO₂), G = Agricultural chemicals, K = Ammonia (NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds (below 65 degC)

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- Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that considers toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).
- Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
- Use approved positive flow mask if significant quantities of dust become airborne.
- Try to avoid creating dust conditions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties			
Appearance	Various white powder; slightly soluble in water forming an alkaline (caustic) product.		
Physical state	Divided solids	Vapour pressure (kPa)	Not Available
Odour	Not Available	Vapour density (Air = 1)	Not Available
Odour threshold	Not Available	Relative density (Water = 1)	1.0
pH (as supplied)	Not Available	Flash point (°C)	Not Available
Viscosity (cSt)	Not Available	Flammability	Not Available
pH as a solution (1%)	>11 (1:1 with water)	Volatile Component (%vol)	Not Available
Solubility in water	Partly miscible	VOC g/L	<1

10. STABILITY AND REACTIVITY

Reactivity	See section 7.
Chemical Stability	The product is considered stable and hazardous polymerization will not occur.
Possibility of Hazardous reaction	See section 7.
Conditions to avoid	See section 7.
Incompatible materials	See section 7.
Hazardous decomposition products	See section 5.

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11. TOXICOLOGICAL INFORMATION

Inhaled	<p>The material can cause respiratory irritation in some people. The body's response to such irritation can cause further lung damage.</p> <p>People with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.</p> <p>If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures. Effects on lungs are significantly enhanced in the presence of respirable particles.</p>
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual.
Skin Contact	<p>This material can cause inflammation of the skin on contact in some people. The material may accentuate any pre-existing dermatitis condition.</p> <p>Open cuts abraded or irritated skin should not be exposed to this material.</p> <p>Entry into the bloodstream, though, for example, cuts, abrasions, or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.</p>
Eye	If applied to the eyes, this material causes severe eye damage.
Chronic	<p>Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Skin contact with the material is more likely to cause a sensitisation reaction in some people compared to the general population.</p> <p>Cement contact dermatitis (CCD) may occur when contact shows an allergic response, which may progress to sensitisation. Sensitisation is due to soluble chromates (chromate compounds) present in trace amounts in some cements and cement products. Soluble chromates readily penetrate intact skin. Cement dermatitis can be characterised by fissures, eczematous rash, dystrophic nails, and dry skin; acute contact with highly alkaline mixtures may cause localised necrosis.</p> <p>Overexposure to the breathable dust may cause coughing, wheezing, difficulty in breathing and impaired lung function. Chronic symptoms may include decreased vital lung capacity and chest infections. Repeated exposures in the workplace to high levels of fine-divided dusts may produce a condition known as pneumoconiosis, which is the lodgement of any inhaled dusts in the lung, irrespective of the effect. This is particularly true when a significant number of particles less than 0.5 microns (1/50000 inch) are present.</p>

TPA Lite	TOXICITY	IRRITATION
	Not Available	Not Available

Graded Sand	TOXICITY	IRRITATION
	Oral (rat) LD50; 500 mg/kg[2]	Not Available

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Portland Cement	TOXICITY	IRRITATION
	Not Available	Not Available

Legend:

- Value obtained from Europe ECHA Registered Substances - Acute toxicity
- * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

Portland Cement	<p>The following information refers to contact allergens as a group and may not be specific to this product.</p> <p>Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia.</p>
Portland Cement & Graded Sand	No significant acute toxicological data identified in literature search.

Acute Toxicity	✘	Carcinogenicity	✘
Skin Irritation/Corrosion	✔	Reproductivity	✘
Serious Eye Damage/Irritation	✔	STOT - Single Exposure	✔
Respiratory or Skin Sensitisation	✔	STOT - Repeated Exposure	✘
Mutagenicity	✘	Aspiration Hazard	✘

Legend:

- ✘ Data either not available or does not fill the criteria for classification
- ✔ Data available to make classification

12. ECOLOGICAL INFORMATION

Toxicity					
TPA Lite	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available

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Graded Sand	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available

Portland Cement	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity
 2. * Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

DO NOT discharge into sewer or waterways.

Persistence and degradability		
Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential	
Ingredient	Bioaccumulative
	No Data available for all ingredients

Mobility in soil	
Ingredient	Mobility
	No Data available for all ingredients

13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Product / Packaging disposal	<p>DO NOT allow wash water from cleaning or process equipment to enter drains.</p> <p>It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible or consult the manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorized landfill. Recycle containers if possible or dispose of in an authorized landfill.</p>

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14. TRANSPORT INFORMATION

Labels Required	
Marine Pollutant	No
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code	
Portland Cement	Not Available
Graded Sand	Not Available

15. REGULATORY INFORMATION

Safety, health, and environmental regulations / legislation specific for the substance or mixture.

Portland cement is found on the following regulatory lists
Australian Inventory of Industrial Chemicals (AIIC)

Graded sand is found on the following regulatory lists	
Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals	Chemical Footprint Project - Chemicals of High Concern List
Australia Model Work Health and Safety Regulations – Hazardous chemicals (other than lead) requiring health monitoring	International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
Australian Inventory of Industrial Chemicals (AIIC)	International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans.

National Inventory Status	
National Inventory	Status
Australia – AIIC / Australia Non – Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (graded sand; portland cement)
China - IECSC	Yes

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Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (portland cement)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	No (portland cement)
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	Yes
Vietnam - NCI	Yes
Russia - FBEPH	Yes
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets)

16. OTHER INFORMATION

Material Safety Data Sheets are updated frequently. Please ensure that you have a current copy. MSDS may be obtained from the following website: www.tpa-aus.com.au

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Tiling Products Australia. This MSDS summarizes at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since Tiling Products Australia cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace.

It is the user's obligation to evaluate and use this product safely, and to comply with all relevant Federal, State and Local Government laws and regulations. Tiling Products Australia shall not be responsible for loss, damage or injury resulting from reliance upon or failure to adhere to any recommendation or information contained herein, from abnormal use of the material, or any hazard inherent in the nature of the material.

DOCUMENT CONTROL	
Product	TPA Lite
Initial Issue	February 2019
Technical Amendment	March 2024
Author	SR