ACS Floor Pro Self Levelling Compound Applied Concrete Solutions

Chemwatch Hazard Alert Code: 3

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Chemwatch: 5457-61 Version No: 4.1.2.1

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

SECTION 1 Identification of the substance / mixture and of the company / undertaking

Product Identifier		
Product name	ACS Floor Pro Self Levelling Compound	
Chemical Name	Not Applicable	
Synonyms	Self-levelling compound	
Chemical formula	Not Applicable	
Other means of identification	Not Available	

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Construction materials.
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Details of the supplier of the safety data sheet

Registered company name	Applied Concrete Solutions	
Address	orner Riverland and Monte-Khoury Drive Loganholme QLD 4129 Australia	
Telephone	1800 077 744 (07) 3412 8111	
Fax	Not Available	
Website	http://www.appliedconcretesolutions.com.au/	
Email	acs@riversands.com.au	

Emergency telephone number

Association / Organisation	Applied Concrete Solutions	
Emergency telephone numbers	1800 077 744	
Other emergency telephone numbers	Not Available	

SECTION 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	ot Applicable		
Classification [1]	prosion/Irritation Category 2, Skin Sensitizer Category 1, Serious Eye Damage/Eye Irritation Category 1, Specific target organ toxicity - xposure Category 3 (respiratory tract irritation), Carcinogenicity Category 1A, Specific target organ toxicity - repeated exposure Category		
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI		

Label elements

Hazard pictogram(s)	
Signal word	Danger

Hazard statement(s)

H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H335	May cause respiratory irritation.	
H350	May cause cancer.	
H373	May cause damage to organs through prolonged or repeated exposure.	

Not Applicable

Precautionary statement(s) Prevention

P201	Obtain special instructions before use.	
P260	o not breathe dust/fume.	
P271	Use only outdoors or in a well-ventilated area.	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.	
P272	Contaminated work clothing should not be allowed out of the workplace.	

Precautionary statement(s) 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.	
P308+P313	F exposed or concerned: Get medical advice/ attention.	
P310	mediately call a POISON CENTER/doctor/physician/first aider.	
P302+P352	ON SKIN: Wash with plenty of water and soap.	
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.	
P362+P364	Take off contaminated clothing and wash it before reuse.	
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	

Precautionary statement(s) Storage

P405	Store locked up.	
P403+P233	Store in a well-ventilated place. Keep container tightly closed.	

Precautionary statement(s) Disposal

Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

SECTION 3 Composition / information on ingredients

P501

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
14808-60-7	30-60	silica crystalline - quartz
65997-15-1	10-30	portland cement
7778-18-9	1-10	calcium sulfate
Not Available	balance	Ingredients determined not to be hazardous
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L * EU IOELVs available	

SECTION 4 First aid measures

Description of first aid measures If this product comes 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 Eye Contact 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. If skin or hair contact occurs: Immediately flush body and clothes with large amounts of water, using safety shower if available. Skin Contact Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. Transport to hospital, or doctor. If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Inhalation Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary Transport to hospital, or doctor, without delay. If swallowed do NOT induce vomiting If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Indestion Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Continued...

For acute or short-term repeated exposures to highly alkaline materials:

- Respiratory stress is uncommon but present occasionally because of soft tissue edema.
- Unless endotracheal intubation can be accomplished under direct vision, cricothyroidotomy or tracheotomy may be necessary.
- Oxygen is given as indicated.
- ▶ The presence of shock suggests perforation and mandates an intravenous line and fluid administration.

• Damage due to alkaline corrosives occurs by liquefaction necrosis whereby the saponification of fats and solubilisation of proteins allow deep penetration into the tissue. Alkalis continue to cause damage after exposure.

INGESTION:

Milk and water are the preferred diluents

No more than 2 glasses of water should be given to an adult.

- Neutralising agents should never be given since exothermic heat reaction may compound injury.
- * Catharsis and emesis are absolutely contra-indicated.

* Activated charcoal does not absorb alkali.

* Gastric lavage should not be used.

Supportive care involves the following: • Withhold oral feedings initially.

- If endoscopy confirms transmucosal injury start steroids only within the first 48 hours.
- Carefully evaluate the amount of tissue necrosis before assessing the need for surgical intervention.
- Patients should be instructed to seek medical attention whenever they develop difficulty in swallowing (dysphagia).

SKIN AND EYE:

Injury should be irrigated for 20-30 minutes.
 Eye injuries require saline. [Ellenhorn & Barceloux: Medical Toxicology]

SECTION 5 Firefighting measures

Extinguishing media

- 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	 When silica dust is dispersed in air, firefighters should wear inhalation protection as hazardous substances from the fire may be adsorbed on the silica particles. When heated to extreme temperatures, (>1700 deg.C) amorphous silica can fuse. Alert Fire Brigade and tell them location and nature of 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 fire fighting procedures suitable for surrounding area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire. Equipment should be thoroughly decontaminated after use. 		
Fire/Explosion Hazard	 Non combustible. Not considered a significant fire risk, however containers may burn. Decomposition may produce toxic fumes of: silicon dioxide (SiO2) metal oxides When aluminium 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. 		
HAZCHEM	Not Applicable		

SECTION 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 waste regularly and abnormal 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. Vacuum up or sweep up. NOTE: Vacuum cleaner must be fitted with an exhaust micro filter (HEPA type) (consider explosion-proof machines designed to be grounded during storage and use). Dampen with water to prevent dusting before sweeping. Place in suitable containers for disposal.
Major Spills	 Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by all means available, spillage from entering drains or water courses. Consider evacuation (or protect in place). No smoking, naked lights or ignition sources.

Increase ventilation.
Stop leak if safe to do so.
Water spray or fog may be used to disperse / absorb vapour.
Contain or absorb spill with sand, earth or vermiculite.
Collect recoverable product into labelled containers for recycling.
Collect solid residues and seal in labelled drums for disposal.
Wash area and prevent runoff into drains.
After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.
If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

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. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers.
	 Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
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. Protect containers against physical damage and check regularly for leaks. Observe manufacturer's storage and handling recommendations contained within this SDS. For major quantities: Consider storage in bunded areas - ensure storage areas are isolated from sources of community water (including stormwater, ground water, lakes and streams). Ensure that accidental discharge to air or water is the subject of a contingency disaster management plan; this may require consultation with

Conditions for safe storage, including any incompatibilities

Suitable container	 Polyethylene or polypropylene container. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	 Avoid strong acids, acid chlorides, acid anhydrides and chloroformates. Avoid contact with copper, aluminium and their alloys.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	silica crystalline - quartz	Silica - Crystalline: Quartz (respirable dust)	0.05 mg/m3	Not Available	Not Available	Not Available
Australia Exposure Standards	portland cement	Portland cement	10 mg/m3	Not Available	Not Available	(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Australia Exposure Standards	calcium sulfate	Calcium sulphate	10 mg/m3	Not Available	Not Available	(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.

Emergency Limits

Ingredient	TEEL-1	TEEL-2	TEEL-3	
silica crystalline - quartz	0.075 mg/m3 33 mg/m3		200 mg/m3	
Ingredient	Original IDLH		Revised IDLH	
silica crystalline - quartz	25 mg/m3 / 50 mg/m3		t Available	
portland cement	5,000 mg/m3		Not Available	
calcium sulfate	Not Available		t Available	

Exposure controls

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. The basic types of engineering controls are:

Appropriate engineering controls

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. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.
	 Employees exposed to confirmed human carcinogens should be authorized to do so by the employer, and work in a regulated area. Work should be undertaken in an isolated system such as a "glove-box". Employees should wash their hands and arms upon completion of the assigned task and before engaging in other activities not associated with the isolated system. Within regulated areas, the carcinogen should be stored in sealed containers, or enclosed in a closed system, including piping systems, with any sample ports or openings closed while the carcinogens are contained within.
	 Open-vessel systems are prohibited. Each operation should be provided with continuous local exhaust ventilation so that air movement is always from ordinary work areas to the
	 operation. Exhaust air should not be discharged to regulated areas, non-regulated areas or the external environment unless decontaminated. Clean make-up air should be introduced in sufficient volume to maintain correct operation of the local exhaust system. For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to wear clean, impervious garments, including gloves, boots and continuous-air supplied hood. Prior to removing protective garments the employee should undergo decontamination and be required to shower upon removal of the garments and hood. Except for outdoor systems, regulated areas should be maintained under negative pressure (with respect to non-regulated areas).
	 Exception outdoor systems, regulated aleas strong de maintained inequal volumes to replaced air. Local exhaust ventilation requires make-up air be supplied in equal volumes to replaced air. Laboratory hoods must be designed and maintained so as to draw air inward at an average linear face velocity of 0.76 m/sec with a minimum of 0.64 m/sec. Design and construction of the fume hood requires that insertion of any portion of the employees body, other than hands and arms, be disallowed.
Personal protection	
Eye and face protection	 Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure. Chemical goggles.whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted. Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afford face protection. Alternatively a gas mask may replace splash goggles and face shields. 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. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and the left the median of the soft of the device of the device of the soft of the device of the soft of the device of the device of the device of the soft of the device of the soft of the device of the soft of the device of the d
	remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]
Skin protection	See Hand protection below
Hands/feet protection	 Elbow length PVC gloves NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. 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 annot be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended. Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: frequency and duration of contact, chemical resistance of glove material, glove thickness and dexterity Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.1.0.1 or national equivalent) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.1.0.1 or national equivalent) is r
	 use. Contaminated gloves should be replaced. As defined in ASTM F-739-96 in any application, gloves are rated as: Excellent when breakthrough time > 480 min Good when breakthrough time > 20 min Fair when breakthrough time < 20 min Poor when glove material degrades For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended. It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times. Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task. Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example: Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of. Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

	Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.
Body protection	See Other protection below
Other protection	 Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area. [AS/NZS ISO 6529:2006 or national equivalent] Employees engaged in handling operations involving carcinogens should be provided with, and required to wear and use half-face filter-type respirators with filters for dusts, mists and fumes, or air purifying canisters or cartridges. A respirator affording higher levels of protection may be substituted. [AS/NZS 1715 or national equivalent] Emergency deluge showers and eyewash fountains, supplied with potable water, should be located near, within sight of, and on the same level with locations where direct exposure is likely. Prior to each exit from an area containing confirmed human carcinogens, employees should be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers must be identified with suitable labels. For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to wear clean, impervious garments, including gloves, boots and continuous-air supplied hood. Prior to removing protective garments the employee should undergo decontamination and be required to shower upon removal of the garments and hood. Overalls. P.V.C apron. Barrier cream. Skin cleansing cream. Eye wash unit.

Respiratory protection

Particulate. (AS/NZS 1716 & 1715, EN 143:2000 & 149:001, ANSI Z88 or national equivalent)

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

If inhalation risk above the TLV exists, wear approved dust respirator.

- Use respirators with protection factors appropriate for the exposure level.
- ▶ Up to 5 X TLV, use valveless mask type; up to 10 X TLV, use 1/2 mask dust respirator
- ▶ Up to 50 X TLV, use full face dust respirator or demand type C air supplied respirator
- ▶ Up to 500 X TLV, use powered air-purifying dust respirator or a Type C pressure demand supplied-air respirator
- Over 500 X TLV wear full-face self-contained breathing apparatus with positive pressure mode or a combination respirator with a Type C positive pressure supplied-air full-face respirator and an auxiliary self-contained breathing apparatus operated in pressure demand or other positive pressure mode
- 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 takes into account 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.
- Use approved positive flow mask if significant quantities of dust becomes airborne.
- Try to avoid creating dust conditions.

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

and a second s			
Appearance	Grey powder with no odour; insoluble in water.		
Physical state	Divided Solid	Relative density (Water= 1)	2.7
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Applicable
Initial boiling point and boiling range (°C)	Not Applicable	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available

Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	13 (10%)
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 Stability and reactivity

See section 7
 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
See section 7
See section 7
See section 7
See section 5

SECTION 11 Toxicological information

Information on toxicological effects

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Inhaled	The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual. Levels above 10 micrograms per cubic metre of suspended inorganic sulfates in the air may cause an excess risk of asthmatic attacks in susceptible people. Inhalation may result in ulcers or sores of the lining of the nose (nasal mucosa), and lung damage. Persons 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. 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.
	Accidental ingestion of the material may be damaging to the health of the individual.
Ingestion	Chromate salts are corrosive and produce cellular damage to tissue. Ingestion may produce inflammation of the digestive tract, nausea, vomiting and abdominal pain. Not normally a hazard due to the physical form of product. The material is a physical irritant to the gastro-intestinal tract
	This material can cause inflammation of the skin on contact in some persons.
	The material may accentuate any pre-existing dermatitis condition
	Though considered non-harmful, slight irritation may result from contact because of the abrasive nature of the aluminium oxide particles. Thus it may cause itching and skin reaction and inflammation.
Skin Contact	Four students received severe hand burns whilst making moulds of their hands with dental plaster substituted for Plaster of Paris. The dental plaster known as "Stone" was a special form of calcium sulfate hemihydrate containing alpha-hemihydrate crystals that provide high compression strength to the moulds. Beta-hemihydrate (normal Plaster of Paris) does not cause skin burns in similar circumstances. Skin contact may result in severe irritation particularly to broken skin. Ulceration known as "chrome ulcers" may develop. Chrome ulcers and skin
	cancer are significantly related.
	Open cuts, abraded or irritated skin should not be exposed to this material
	Entry into the blood-stream, through, 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.
Eye	If applied to the eyes, this material causes severe eye damage.
Chronic	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 persons compared to the general population. There is ample evidence that this material can be regarded as being able to cause cancer in humans based on experiments and other information. This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Animal testing shows long term exposure to aluminium oxides may cause lung disease and cancer, depending on the size of the particle. The smaller the size, the greater the tendencies of causing harm. Red blood cells and rabbit alveolar macrophages exposed to calcium silicate insulation materials in vitro showed haemolysis in one study but not in another. Both studies showed the substance to be more cytotoxic than titanium dioxide but less toxic than asbestos. In a small cohort mortality study of workers in a wollastonite quarry, the observed number of deaths from all cancers combined and lung cancer were lower than expected. Wollastonite is a calcium inosilicate mineral (CaSiO3). In some cases, small amounts of iron (Fe), and manganese (Mn), and lesser amounts of magnesium (Mg) substitute for calcium (Ca) in the number of fibres with lengths exceeding 5 um and a diameter of less than 3 um was relatively low. Four grades of wollastonite of different fibre size were tested for carcinogenicity in one experiment in rats by intrapleural implantation. There was no information on the purity of the four samples used. A slight increase in the incidence of pleural sarcomas was observed with three grades, all of which contained fibres greater than 4 um in length and less than 0.5 um in diameter. In two studies by intraperito
	various forms of asbestos. A two-year inhalation study in rats at one dose showed no significant inflammation or fibrosis Cement contact dermatitis (CCD) may occur when contact shows an allergic response, which may progress to sensitisation. Sensitisation is due
	Continu

	Sensitisation to chromium may be the leading cause of nic cement dermatoses [ILO]. Repeated, prolonged severe inhalation exposure may cau dust-induced bronchitis with chronic bronchitis reported in Respiratory symptoms and ventilatory function were studie plants, with at least 5 years of exposure (1). This group ha 1 s (FEV1) and forced expiratory flows after exhalation of occupational exposure to Portland cement dust may lead to capacity. Chun-Yuh et al; Journal of Toxicology and Environmental H Crystalline silicas activate the inflammatory response of wi silicas reduces lung capacity and predisposes to chest infections. a condition known as pneumoconiosis, which is the lodger when a significant number of particles less than 0.5 micror pneumoconiosis may include a progressive dry cough, sho As the disease progresses, the cough produces stringy ph	nite blood cells after they injure the lung epithelium. Chronic exposure to crystalline
	Removing workers from the possibility of further exposure for worker exposure, examinations at regular period with e Inhaling dust over an extended number of years may caus tissue reaction. This may or may not be reversible. Chronic excessive intake of iron have been associated wit over iron are at an increased risk.	e pneumoconiosis, which is the accumulation of dusts in the lungs and the subsequent h damage to the liver and pancreas. People with a genetic disposition to poor control sure to chromium (III) irritates the airways, malnourishes the liver and kidneys, causes and also increases the risk of developing lung cancer. exposure through inhalation.
ACS Floor Pro Self Levelling	Removing workers from the possibility of further exposure for worker exposure, examinations at regular period with e Inhaling dust over an extended number of years may caus tissue reaction. This may or may not be reversible. Chronic excessive intake of iron have been associated wit over iron are at an increased risk. Chromium (III) is an essential trace mineral. Chronic expos fluid in the lungs, and adverse effects on white blood cells, Harmful: danger of serious damage to health by prolonged	mphasis on lung function should be performed. e pneumoconiosis, which is the accumulation of dusts in the lungs and the subsequent h damage to the liver and pancreas. People with a genetic disposition to poor control sure to chromium (III) irritates the airways, malnourishes the liver and kidneys, causes and also increases the risk of developing lung cancer. L exposure through inhalation.
ACS Floor Pro Self Levelling Compound	Removing workers from the possibility of further exposure for worker exposure, examinations at regular period with e Inhaling dust over an extended number of years may caus tissue reaction. This may or may not be reversible. Chronic excessive intake of iron have been associated wit over iron are at an increased risk. Chromium (III) is an essential trace mineral. Chronic expos fluid in the lungs, and adverse effects on white blood cells, Harmful: danger of serious damage to health by prolonged Prolonged or repeated skin contact may cause drying with	mphasis on lung function should be performed. e pneumoconiosis, which is the accumulation of dusts in the lungs and the subsequent h damage to the liver and pancreas. People with a genetic disposition to poor control sure to chromium (III) irritates the airways, malnourishes the liver and kidneys, causes and also increases the risk of developing lung cancer. I exposure through inhalation. cracking, irritation and possible dermatitis following.
Compound	Removing workers from the possibility of further exposure for worker exposure, examinations at regular period with e Inhaling dust over an extended number of years may caus tissue reaction. This may or may not be reversible. Chronic excessive intake of iron have been associated wit over iron are at an increased risk. Chromium (III) is an essential trace mineral. Chronic expos fluid in the lungs, and adverse effects on white blood cells, Harmful: danger of serious damage to health by prolonged Prolonged or repeated skin contact may cause drying with TOXICITY	mphasis on lung function should be performed. e pneumoconiosis, which is the accumulation of dusts in the lungs and the subsequent h damage to the liver and pancreas. People with a genetic disposition to poor control sure to chromium (III) irritates the airways, malnourishes the liver and kidneys, causes and also increases the risk of developing lung cancer. lexposure through inhalation. cracking, irritation and possible dermatitis following. IRRITATION
-	Removing workers from the possibility of further exposure for worker exposure, examinations at regular period with e Inhaling dust over an extended number of years may caus tissue reaction. This may or may not be reversible. Chronic excessive intake of iron have been associated wit over iron are at an increased risk. Chromium (III) is an essential trace mineral. Chronic expos fluid in the lungs, and adverse effects on white blood cells, Harmful: danger of serious damage to health by prolonged Prolonged or repeated skin contact may cause drying with TOXICITY Not Available	mphasis on lung function should be performed. e pneumoconiosis, which is the accumulation of dusts in the lungs and the subsequent h damage to the liver and pancreas. People with a genetic disposition to poor control sure to chromium (III) irritates the airways, malnourishes the liver and kidneys, causes and also increases the risk of developing lung cancer. lexposure through inhalation. cracking, irritation and possible dermatitis following. IRRITATION Not Available
Compound	Removing workers from the possibility of further exposure for worker exposure, examinations at regular period with e Inhaling dust over an extended number of years may caus tissue reaction. This may or may not be reversible. Chronic excessive intake of iron have been associated wit over iron are at an increased risk. Chromium (III) is an essential trace mineral. Chronic expos fluid in the lungs, and adverse effects on white blood cells, Harmful: danger of serious damage to health by prolonged Prolonged or repeated skin contact may cause drying with TOXICITY Not Available TOXICITY	mphasis on lung function should be performed. e pneumoconiosis, which is the accumulation of dusts in the lungs and the subsequent h damage to the liver and pancreas. People with a genetic disposition to poor control sure to chromium (III) irritates the airways, malnourishes the liver and kidneys, causes and also increases the risk of developing lung cancer. exposure through inhalation. cracking, irritation and possible dermatitis following. IRRITATION Not Available IRRITATION

	TOXICITY	IRRITATION
calcium sulfate	Inhalation(Rat) LC50; >3.26 mg/l4h ^[1]	Not Available
	Oral(Rat) LD50; >1581 mg/kg ^[1]	
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute to>	kicity 2.* Value obtained from manufacturer's SDS. Unless otherwise

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

WARNING: For inhalation exposure ONLY: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS The International Agency for Research on Cancer (IARC) has classified occupational exposures to respirable (<5 um) crystalline silica as being carcinogenic to humans. This classification is based on what IARC considered sufficient evidence from epidemiological studies of humans for the carcinogenicity of inhaled silica in the forms of quartz and cristobalite. Crystalline silica is also known to cause silicosis, a non-cancerous lung SILICA CRYSTALLINE disease QUARTZ Intermittent exposure produces; focal fibrosis, (pneumoconiosis), cough, dyspnoea, liver tumours. * Millions of particles per cubic foot (based on impinger samples counted by light field techniques). NOTE : the physical nature of quartz in the product determines whether it is likely to present a chronic health problem. To be a hazard the material must enter the breathing zone as respirable particles. The following information refers to contact allergens as a group and may not be specific to this product. 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. The significance of the contact allergen is not simply determined by its sensitisation potential: the PORTLAND CEMENT distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested. No significant acute toxicological data identified in literature search. Gypsum (calcium sulfate dehydrate) irritates the skin, eye, mucous membranes, and airways. A series of studies involving Gypsum industry workers in Poland reported chronic, non-specific airways diseases. Repeat dose toxicity: Examination of workers at a gypsum manufacturing plant found restrictive defects on long-function tests in those who were chronically exposed to gypsum dust. Synergistic/antagonistic effects: Gypsum appears to be protective on quartz toxicity in animal testing. On the other hand, it tended to aggravate CALCIUM SULFATE tuberculosis in animals. Cytotoxicity: Tests results regarding cytotoxicity have been negative. Cancer-causing potential: Tests involving animals produced mixed results; no causal relationship between gypsum and tumour formation was found. Genetic toxicity: Test on bacterial cells have shown negative results.

	Developmental toxicity: In animal testing, developmental toxicity was not seen.				
PORTLAND CEMENT & CALCIUM SULFATE	Asthma-like symptoms may continue for months or ev known as reactive airways dysfunction syndrome (RAI criteria for diagnosing RADS include the absence of p asthma-like symptoms within minutes to hours of a do airflow pattern on lung function tests, moderate to sew lymphocytic inflammation, without eosinophilia. RADS the concentration of and duration of exposure to the in result of exposure due to high concentrations of irritati disorder is characterized by difficulty breathing, cough	DS) which can occur after exposure to revious airways disease in a non-atop cumented exposure to the irritant. Oft ere bronchial hyperreactivity on metha (or asthma) following an irritating inhar- itating substance. On the other hand, ng substance (often particles) and is of	b high levels of highly irritating compound. Main bic individual, with sudden onset of persistent her criteria for diagnosis of RADS include a reversible acholine challenge testing, and the lack of minimal alation is an infrequent disorder with rates related to , industrial bronchitis is a disorder that occurs as a		
Acute Toxicity	×	Carcinogenicity	✓		
Skin Irritation/Corrosion	✓	Reproductivity	×		
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×		
Respiratory or Skin sensitisation	STOT - Single Exposure STOT - Repeated Exposure				
Mutagenicity	×	Aspiration Hazard X			
		Legend: 🗙 – Data either n	not available or does not fill the criteria for classification		

a:	×	-

Data available to make classification

SECTION 12 Ecological information

Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
ACS Floor Pro Self Levelling Compound	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
silica crystalline - quartz	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
portland cement	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	NOEC(ECx)	0.25h	Fish	75mg/l	4
calcium sulfate	EC50	72h	Algae or other aquatic plants	>79mg/l	2
	LC50	96h	Fish	>79mg/l	2
Legend:	V3.12 (QSAR)	1. IUCLID Toxicity Data 2. Europe ECHA Registe - Aquatic Toxicity Data (Estimated) 4. US EPA, Ec (apan) - Bioconcentration Data 7. METI (Japan) -	otox database - Aquatic Toxicity Data 5. ECE		

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
calcium sulfate	HIGH	HIGH
Bioaccumulative potential		

Ingredient	Bioaccumulation
calcium sulfate	LOW (LogKOW = -2.2002)

Mobility in soil

Ingredient	Mobility
calcium sulfate	LOW (KOC = 6.124)

SECTION 13 Disposal considerations

Waste treatment methods	
Product / Packaging disposal	 DO NOT allow wash water from cleaning or process equipment to enter drains. 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 manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 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

Product name	Group
silica crystalline - quartz	Not Available
portland cement	Not Available
calcium sulfate	Not Available

Transport in bulk in accordance with the ICG Code

Product name	Ship Type
silica crystalline - quartz	Not Available
portland cement	Not Available
calcium sulfate	Not Available

SECTION 15 Regulatory information

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

silica crystalline - quartz is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals		
Australian Inventory of Industrial Chemicals (AIIC)		
Chemical Footprint Project - Chemicals of High Concern List		

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans

portland cement is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

calcium sulfate is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

National Inventory Status

National Inventory	Status	
Australia - AIIC / Australia Non-Industrial Use	Yes	
Canada - DSL	Yes	
Canada - NDSL	No (silica crystalline - quartz; portland cement; calcium sulfate)	
China - IECSC	Yes	
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)	

SECTION 16 Other information

Revision Date	29/04/2021
Initial Date	15/03/2021

Version	Date of Update	Sections Updated
3.1.1.1	16/03/2021	Name
3.1.2.1	26/04/2021	Regulation Change
4.1.2.1	29/04/2021	Name

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit。 IDLH: Immediately Dangerous to Life or Health Concentrations ES: Exposure Standard OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value **BCF: BioConcentration Factors BEI: Biological Exposure Index** AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances This document is copyright.

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