

ARDEX X52

Chemwatch Material Safety Data Sheet
Issue Date: 20-Oct-2008
NC317ECP

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Version No:2.0
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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

ARDEX X52

SYNONYMS

"ceramic tile adhesive"

PRODUCT USE

Ceramic tile adhesive.

SUPPLIER

Company: Ardex Australia Pty Ltd

Address:

20 Powers Road

Seven Hills

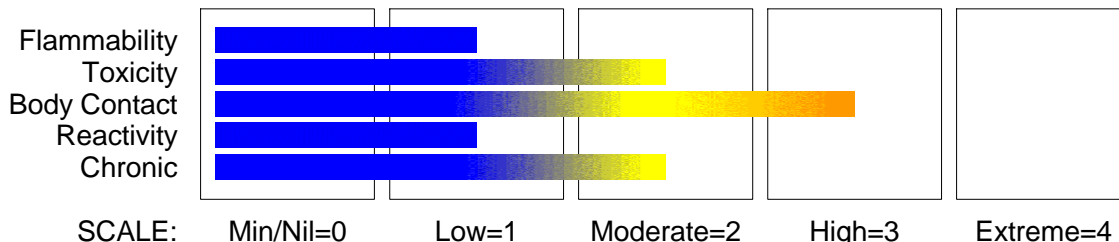
NSW, 2147

AUS

Telephone: 1800 224 070

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CHEMWATCH HAZARD RATINGS



Section 2 - HAZARDS IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

POISONS SCHEDULE

None

RISK

- » Irritating to skin.
- » Risk of serious damage to eyes.

SAFETY

- » Do not breathe dust.
- » Avoid contact with skin.
- » Use only in well ventilated areas.
- » Keep container in a well ventilated place.
- » To clean the floor and all objects contaminated by this material use water and detergent.
- » If swallowed IMMEDIATELY contact Doctor or Poisons Information Centre (show this container or label).

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Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
portland cement	65997-15-1	30-60
graded sand	14808-60-7.	10-30
rubber powder	Not avail.	10-30
additives		1-10

Section 4 - FIRST AID MEASURES

SWALLOWED

- » • Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

EYE

- » 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 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.

SKIN

- » 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.

INHALED

- » • 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.
- 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.
- If dust is inhaled, remove from contaminated area.
- Encourage patient to blow nose to ensure clear breathing passages.
- Ask patient to rinse mouth with water but to not drink water.
- Seek immediate medical attention.

NOTES TO PHYSICIAN

- » Treat symptomatically.

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

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Section 4 - FIRST AID MEASURES

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 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- » • There is no restriction on the type of extinguisher which may be used.

- Use extinguishing media suitable for surrounding area.

FIRE FIGHTING

- » • Alert Fire Brigade and tell them location and nature of hazard.

- Wear breathing apparatus plus protective gloves for fire only.

- 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

- » • Solid which exhibits difficult combustion or is difficult to ignite.

- Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited.

- Dry dust can also be charged electrostatically by turbulence, pneumatic transport, pouring, in exhaust ducts and during transport.

- Build-up of electrostatic charge may be prevented by bonding and grounding.

- Powder handling equipment such as dust collectors, dryers and mills may require additional protection measures such as explosion venting.

- All movable parts coming in contact with this material should have a speed of less than 1-metre/sec.

Combustion products include: carbon monoxide (CO), carbon dioxide (CO₂), aldehydes, metal oxides, pyrolysis products typical of burning organic material.

FIRE INCOMPATIBILITY

- » • Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

HAZCHEM: None

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Section 5 - FIRE FIGHTING MEASURES

Personal Protective Equipment

Gas tight chemical resistant suit.

Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS

- » • Remove all ignition sources.
- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Control personal contact by using protective equipment.
- Use dry clean up procedures and avoid generating dust.
- Place in a suitable labelled container for waste disposal.

MAJOR SPILLS

- » Moderate hazard.
- CAUTION: Advise personnel in area.
- Alert Emergency Services and tell them location and nature of hazard.
- Control personal contact by wearing protective clothing.
- Prevent, by any means available, spillage from entering drains or water courses.
- Recover product wherever possible.
- IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. IF WET: Vacuum/shovel up and place in labelled containers for disposal.
- ALWAYS: Wash area down with large amounts of water and prevent runoff into drains.
- If contamination of drains or waterways occurs, advise Emergency Services.

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

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR 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 storing and handling recommendations.
 - Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.
- Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.
- Do NOT cut, drill, grind or weld such containers
 - In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

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Section 7 - HANDLING AND STORAGE

SUITABLE CONTAINER

- » • Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

- » • Avoid strong acids.
- Avoid contact with copper, aluminium and their alloys.
- Avoid reaction with oxidising agents.

STORAGE REQUIREMENTS

- » • Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA mg/m ³
Australia Exposure Standards	portland cement (Portland cement (a))	10

The following materials had no OELs on our records

- graded sand: CAS:14808- 60- 7

EMERGENCY EXPOSURE LIMITS

Material	REVIDLHMG_	REVIDLHPPM
portland cement	5, 000	
graded sand	50	

MATERIAL DATA

» It is the goal of the ACGIH (and other Agencies) to recommend TLVs (or their equivalent) for all substances for which there is evidence of health effects at airborne concentrations encountered in the workplace. At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience). Airborne concentrations must be maintained as low as is practically possible and occupational exposure must be kept to a minimum. NOTE: The ACGIH occupational exposure standard for Particles Not Otherwise Specified (P.N.O.S) does NOT apply.

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach, typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-category system based on intensive odour, local irritation, and elimination half-life. However this system is being replaced to be consistent with the European Union (EU)

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA.

OSHA (USA) concluded that exposure to sensory irritants can:

- cause inflammation
- cause increased susceptibility to other irritants and infectious agents
- lead to permanent injury or dysfunction
- permit greater absorption of hazardous substances and
- acclimate the worker to the irritant warning properties of these substances thus increasing the risk of overexposure.

The concentration of dust, for application of respirable dust limits, is to be determined from the fraction that penetrates a separator whose size collection efficiency is described by a cumulative log-normal function with a median aerodynamic diameter of 4.0 μm (+-) 0.3 μm and with a geometric standard deviation of 1.5 μm (+-) 0.1 μm , i.e. generally less than 5 μm .

None assigned. Refer to individual constituents.

INGREDIENT DATA

PORTLAND CEMENT:

» Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach, typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-category system based on intensive odour, local irritation, and elimination half-life. However this system is being replaced to be consistent with the European Union (EU) Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA.

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- lead to permanent injury or dysfunction
- permit greater absorption of hazardous substances and
- acclimate the worker to the irritant warning properties of these substances thus

increasing the risk of overexposure.

Portland cement is considered to be a nuisance dust that does not cause fibrosis and has little potential to induce adverse effects on the lung.

GRADED SAND:

NOTE: This product contains negligible amount of respirable dust.

RUBBER POWDER:

» TLV TWA: 0.001 mg/m³ (as total proteins) Inhalable fraction skin sensitiser

as rubber processing fume:

MEL-TWA: 0.6 mg/m³ as cyclohexane solubles [HSE, UK]

BRMA-TWA: 0.25 mg/m³ as cyclohexane solubles [BRMA Code of Practice]

Rubber fume is a complex and indeterminate mixture of substances and is defined as "fume evolved in the mixing, milling and blending of natural rubber and synthetic polymers combined with chemicals, and in the processes which convert the resultant blend into finished products or parts thereof, and including any inspection procedures where fume continues to be evolved". "Fume" generally describes solid particles generated by

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

chemical reactions, or by condensation from the gaseous state, usually after volatilisation from melted substances, and often accompanied by a chemical reaction such as oxidation or thermal breakdown. Several chemical agents may occur in rubber fume which are experimental or animal carcinogens, however, given the number of chemicals used or formed during rubber making, difficulties arise in attributing a particular effect to a given exposure. Stomach cancer has been associated with work in jobs early in the production line; lung and lower oesophagus cancer with all work processes; and lymphomas with jobs where co-exposure to solvents occurs. Other cancers have also been reported with liver tumours appearing as a secondary phenomenon. No no-effect levels have been determined. Two studies showed no excess of bladder cancer in workers entering the industry after 1950: the excess risk before that date is thought to result from exposure to residual beta-naphthylamines previously used as anti-oxidants.

as rubber process dust:

MEL-TWA: 6 mg/m³ [HSE, UK]

Rubber process dust is a complex, variable mixture of particulates defined as "dust arising in the stages of rubber manufacture where ingredients are handled, weighed, added to or mixed with natural or synthetic elastomers. It does not include dusts arising from the abrasion of cured rubber but occurs during the preparation of compounds of either synthetic or natural rubber. There is some evidence that occupational exposure to rubber dusts produces an excess incidence of stomach cancer. HSE data concluded that there was a small but significant excess of stomach cancer associated with the initial processes in rubber manufacture. Stomach cancer shows a marked social class gradient, which may lead to an over-estimation of the risk. One report from the USA stated that exposure in rubber processing areas produces pulmonary disease but this has not been supported by UK epidemiology nor reports from the industry. No no-effect level has been determined. The MEL was considered appropriate because it was felt reasonably practical for industry to comply with this value.

PERSONAL PROTECTION

EYE

- » • Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens 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 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].

HANDS/FEET

» 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.
- Suitability and durability of glove type is dependent on usage. Factors such as:
- frequency and duration of contact,
 - chemical resistance of glove material,
 - glove thickness and
 - dexterity,

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

are important in the selection of gloves.

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- polychloroprene
- nitrile rubber
- butyl rubber
- fluorocautchouc
- polyvinyl chloride

Gloves should be examined for wear and/ or degradation constantly.

OTHER

» • Overalls.

• P.V.C. apron.

• Barrier cream.

• Skin cleansing cream.

• Eye wash unit.

» • 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 . 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.

RESPIRATOR

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

* - Negative pressure demand ** - Continuous flow.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required. For further information consult site specific CHEMWATCH data (if available), or your Occupational Health and Safety Advisor.

ENGINEERING CONTROLS

» Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection.

An approved self contained breathing apparatus (SCBA) may be required in some situations.

Provide adequate ventilation in warehouse or closed storage area.

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Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Powder; insoluble in water.

PHYSICAL PROPERTIES

Does not mix with water.

Alkaline.

Molecular Weight: Not Applicable

Melting Range (°C): Not Available

Solubility in water (g/L): Immiscible

pH (1% solution): Not Applicable

Volatile Component (%vol): Not Applicable

Relative Vapour Density (air=1): Not

Applicable

Lower Explosive Limit (%): Not Applicable

Autoignition Temp (°C): Not Applicable

State: Divided Solid

Boiling Range (°C): Not Applicable

Specific Gravity (water= 1): Not Available

pH (as supplied): Not Applicable

Vapour Pressure (kPa): Not Applicable

Evaporation Rate: Not Applicable

Flash Point (°C): Not Applicable

Upper Explosive Limit (%): Not Applicable

Decomposition Temp (°C): Not Available

Viscosity: Not Applicable

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

» • Presence of incompatible materials.

• Product is considered stable.

• Hazardous polymerisation will not occur.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

» The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (eg. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

EYE

» If applied to the eyes, this material causes severe eye damage.

SKIN

» This material can cause inflammation of the skin on contact in some persons.

The material may accentuate any pre-existing dermatitis condition.

Handling wet cement can cause dermatitis. Cement when wet is quite alkaline and this alkali action on the skin contributes strongly to cement contact dermatitis since it may cause drying and defatting of the skin which is followed by hardening, cracking, lesions developing, possible infections of lesions and penetration by soluble salts.

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Section 11 - TOXICOLOGICAL INFORMATION

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.

INHALED

» Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual.

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.

Effects on lungs are significantly enhanced in the presence of respirable particles.

CHRONIC HEALTH EFFECTS

» Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

There is some evidence that inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population.

There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population.

Repeated exposures, in an occupational setting, 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 (1/50,000 inch), are present. Lung shadows are seen in the X-ray. Symptoms of pneumoconiosis may include a progressive dry cough, shortness of breath on exertion, increased chest expansion, weakness and weight loss. As the disease progresses the cough produces a stringy mucous, vital capacity decreases further and shortness of breath becomes more severe.

Pneumoconiosis is the accumulation of dusts in the lungs and the tissue reaction in its presence.

It is further classified as being of noncollagenous or collagenous types. Noncollagenous pneumoconiosis, the benign form, is identified by minimal stromal reaction, consists mainly of reticulin fibres, an intact alveolar architecture and is potentially reversible.

Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Gastrointestinal disturbances may also occur. Chronic exposures may result in dermatitis and/or conjunctivitis.

TOXICITY AND IRRITATION

» unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

» Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production.

PORTLAND CEMENT:

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GRADED SAND:

» unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

» No data of toxicological significance identified in literature search.

RUBBER POWDER:

» Not available. Refer to individual constituents.

CARCINOGEN

graded sand	International Agency for Research on Cancer (IARC) Carcinogens	Group	1
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Section 12 - ECOLOGICAL INFORMATION

» DO NOT discharge into sewer or waterways.

Refer to data for ingredients, which follows:

PORTLAND CEMENT:

Section 13 - DISPOSAL CONSIDERATIONS

» Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction,
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

- 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.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: Burial in a licenced land-fill or Incineration in a licenced apparatus (after admixture with suitable combustible material)

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Section 13 - DISPOSAL CONSIDERATIONS

- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

Section 14 - TRANSPORTATION INFORMATION

HAZCHEM: None (ADG7)

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

POISONS SCHEDULE: None

REGULATIONS

Ardex X52 (CAS: None):

No regulations applicable

portland cement (CAS: 65997-15-1) is found on the following regulatory lists;

Australia Exposure Standards

Australia High Volume Industrial Chemical List (HVICL)

Australia Inventory of Chemical Substances (AICS)

OECD Representative List of High Production Volume (HPV) Chemicals

graded sand (CAS: 14808-60-7) is found on the following regulatory lists;

Australia - New South Wales Hazardous Substances Prohibited for Specific Uses

Australia - New South Wales Hazardous Substances Requiring Health Surveillance

Australia - South Australia Hazardous Substances Requiring Health Surveillance

Australia - Tasmania Hazardous Substances Prohibited for Specified Uses

Australia - Tasmania Hazardous Substances Requiring Health Surveillance

Australia - Western Australia Hazardous Substances Requiring Health Surveillance

Australia Exposure Standards

Australia Hazardous Substances

Australia Hazardous Substances Requiring Health Surveillance

Australia High Volume Industrial Chemical List (HVICL)

Australia Inventory of Chemical Substances (AICS)

Australia Occupational Health and Safety (Commonwealth Employment) (National Standards) Regulations

1994 - Hazardous Substances Requiring Health Surveillance

Australia Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) - Schedule 6

International Agency for Research on Cancer (IARC) Carcinogens

OECD Representative List of High Production Volume (HPV) Chemicals

No data available for rubber powder as CAS: Not avail.

Section 16 - 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.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references.

» The (M)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.

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