

Designer Concrete CRS 3000 Resurfacing Designer Neutral Part A

Safety Data Sheet according to WHS and ADG requirements:

Issue Date: 24 February 2017

SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier:

Product Name:	Designer Concrete CRS 3000 Resurfacing Designer Neutral Part A
Product Code:	None Allocated
Other means of identification:	Not available

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

Pre-mixed cementitious product Part A powder mixed with Designer Concrete CRS 3000 Cement Modifier Part B in accordance with the product's mix design specifications and applied to the surface of hard-state concrete flatwork paving by spray-on or trowel-on method of construction and primarily used as a base-material coating in conjunction with Designer Concrete CRS 3000 Concrete Resurfacing System.

Details of the supplier of the safety data sheet:

Registered Company Name:	Designer Concrete Coatings Pty Ltd
Address:	19 Liverpool Street, Ingleburn, NSW, 2565, Australia
Telephone:	+61 2 9829 3311
Fax:	+61 2 9829 3544
Website:	www.designerconcrete.com.au
Email:	sales@designerconcrete.com.au

Emergency telephone number:

Association / Organisation:	Not Available
Emergency telephone number:	+61 2 9829 3311 (Business Hours Mon-Fri).
Other emergency telephone numbers:	Emergency Transport: 000 Poisons Information Centre: 131 126

SECTION 2: HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia



Signal Word: **Warning**

Hazard Classification:

Skin Corrosion / Irritation – Category 2
Serious eye damage / irritation – Category 2A
Specific Target Organ Toxicity (Single Exposure) – Category 3
Specific Target Organ Toxicity (Repeated Exposure) – Category 2

Hazard Statement(s)

H315	Cause skin irritation
H319	Cause serious eye irritation
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure

Precautionary Statement(s) Prevention

P102	Keep out of reach of children
P103	Read label before use
P201	Obtain special instruction before use
P202	Do not handle until all safety precautions have been read and understood
P260	Do not breathe dust/fume, mist, vapour or spray
P264	Wash hands, face and all exposed skin thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P280	Wear protective clothing, gloves, eye / face protection and suitable respirator as required

Precautionary Statement(s) Response

P101	If medical advice is needed, have product container or label on hand
P301+310	If SWALLOWED: Immediately call Poison Centre or doctor/physician
P331	Do NOT induce vomiting
P302+352	If ON SKIN: Wash with soap and water
P303+361+353	If ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower
P304+340	If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P312 +314	Call POISON CENTRE or doctor / physician if you feel unwell
P305+351+338	If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P362	Wash contaminated clothing before re-use
P337+313	If eye irritation persists seek medical advice / attention

Precautionary Statement(s) Storage

P405	Store locked-up
P403+233	Store in well-ventilated place. Keep container tightly closed

Precautionary Statement(s) Disposal

Poisons Schedule:	Not Scheduled
P501	Dispose of contents / container in accordance with local, regional, national and international regulations

DANGEROUS GOODS CLASSIFICATION:

Not classified as a Dangerous Good by the criteria of the “Australian Code for the Transport of Dangerous Goods by Road & Rail; and, the New Zealand NZS5433: Transport of Dangerous Goods on Land”; and IMDG OR IATA

DG CLASS: None Allocated.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient:	CAS No.	EC Number	Content
Quartz (Crystalline Silica):	14808-60-7	238-878-4	<50%
Portland Cement:	65997-15-1	266-043-4	<50%
Hexavalent Chromium	18540-29-9	-	<0.002%

Non-Hazardous Additives:

Mixture of other proprietary ingredients determined not to be hazardous (All type III ingredients)

To 100%

Ingredient Notes: 1. Depending on the source material, may contain varying amounts of Respirable Quartz (Crystalline Silica).
2. Chromium VI is a trace impurity in Portland Cement (< 20ppm)

SECTION 4: FIRST AID MEASURES:

Description of First Aid Measures:**Inhalation:**

Inhalation of dust from this product may have an immediate or delayed effect to irritate, inflame or sensitise the nose, throat or lungs; and, exacerbate pre-existing conditions such as asthma or bronchitis. Immuno-compromised individuals may be at particular risk from these illnesses if exposed to this product.

If irritation occurs, the affected parties should be moved (or move themselves) away from the product or its dusts into a source of fresh air. Prostheses such as false teeth which may block the airways, should be removed where possible prior to initiating first aid procedures. Professional medical attention should be sought if symptoms persist.

Skin Contact:

Skin contact with this product and/or their dusts may lead to immediate or delayed skin irritations and in susceptible people skin sensitisation, dermatitis and/or skin infection.

The affected areas should be washed thoroughly with mild soap and lukewarm water as quickly as possible.

Eye Contact:

In the event that this material comes into contact with the eyes it may have an immediate or delayed irritating effect resulting in redness, watering and/or infection.

Eyes should be immediately and thoroughly flushed with lukewarm water for as long as necessary to alleviate the problem (or for at least 15-minutes). Ensure complete irrigation of the eye by keeping the eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Removal of contact lenses after an eye injury should only be conducted. Professional medical assistance should be sought if symptoms persist.

Ingestion:

Non-toxic however swallowing this product may cause immediate or delayed abdominal discomfort and potentially increase the risk of gastro-intestinal infections.

Mouth, lips and throat should be immediately and thoroughly flushed with water and medical attention should be sought if any abdominal symptoms occur. For advice, contact Poisons Information Centre on 131 126. Vomiting should not be induced, but if vomiting occurs, the patient should be leant forward or placed on their left-hand side to maintain an open airway.

First Aid Facilities:

Eye wash facilities and safety shower should be available.

PPE for First Aiders:

Wear overalls, safety glasses and impervious gloves. Use adequate ventilation. If inhalation risk exists wear a suitable respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Refer to Section 7.

Medical Attention:

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES:

Extinguishing Media:**Suitable Extinguishing Equipment:**

Use an extinguishing agent suitable for the surrounding fire and other materials present.

Specific Hazards:

Non-flammable. May evolve toxic gasses if strongly heated. The manufactured end-product is typically packaged in industry-recognised plastic-lined paper sacks (20kg) that potentially may ignite in extreme fire situations, however, when properly and typically stacked on pallets only the external exposed surfaces are at higher risk of ignition, limiting fire-spread risk.

Fire Fighting Further Advice:

Strong heat may evolve toxic gasses although no fire or explosion hazard exists with the product. Fire fighters should wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to fire from other products of combustion exists.

Special Protective Equipment and Precautions for Fire Fighters:

Wear breathing apparatus when fighting fire.

Hazchem Code: None Allocated

SECTION 6: ACCIDENTAL RELEASE MEASURES:

Emergency Procedures:

In the event of a spill or release of the product from a transport vehicle or storage area in a sensitive environment including near water bodies:

1. Advise applicable state-based roads authority.
2. Advise the applicable state-based environment body.

Methods and Materials for Containment and Clean-Up Procedures:

In the event of a spill or release of the product from a transport vehicle or storage facility when bunding does not exist in order to contain and clean up, wear appropriate PPE and secure the site by:

- Clear area of all unprotected personnel. Contact emergency services if necessary.
- Covering the material with a sheet / tarpaulin secured to the ground in order to protect against dust emissions and gravitational flows into waterways.
- Bunding the area and cover drainage points to protect against over-ground run-off into waterways, surrounding land and drainage systems.
- Clean up the spill immediately once the site is secured. Avoid generating dust.

- Collect the material (using a vacuum system if possible), load, transport and store all of the material release for use as planned or dispose of safely in a landfill or licensed recovery facility.
 - Check the surrounding area to ensure all material has been captured. Collect all material if possible or seek advice from the local state-based environment body.
 - Refer to Section 8 Exposure Controls/PPE and Section 13 Disposal Considerations for further advice.
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SECTION 7: HANDLING AND STORAGE:

Precaution(s) for Safe Handling:

This product generates dust emissions. When handling this material ensure that workers stay away from equipment that is moving and/or processing exposed material and avoid coming into contact with the product by wearing:

- A suitable respiratory protective device conforming to AS/NZS 1715:2009 – selection, use and maintenance or respiratory protective devices. A Class P1 Particulate Respirator is typically most appropriate.
- Suitable gloves conforming to AS/NZS 2161:2008 – Occupational Protective Gloves. Standard duty leather/pigskin, rubber or neoprene gloves are typically most appropriate.
- Full-length protective trousers and shirts (or overalls). Refer to AS/NZS 4501: Occupational Protective Clothing.
- Suitable boots for the site. Refer to AS/NZS 2210: Occupational Protective Footwear.
- Suitable eye protection conforming to AS/NZS 1336:1997 – Recommended Practices for Occupational Eye Protection. Low impact goggles with indirect ventilation (HT or CT with C, D optional) are typically most appropriate.

Additional Handling Procedures Should Include:

- Limit exposure to the product.
- Wash any areas of the body that the product may have come into contact after exposure.
- Regularly vacuum enclosed areas where the product is used or install a dust extraction system.
- When handling this material ensure the environment is protected from releases by not moving the material during adverse weather conditions such as wind and precipitation, bunding the handling area and providing wind breaks.
- As with all dust materials, ensure adequate ventilation against the relevant exposure standards (Section 8) and also to prevent dust explosions.
- Shower and change after completion of use of the product.
- Wash hands and face after handling the product – before eating, drinking or smoking or when going to the toilet.

Conditions for Safe Storage:

When storing this material:

- Store in a closed, cool and dry and well ventilated area to prevent dust exposure. Protect packaging from physical damage or damage from other sources; and, sealed when not in use. Storage facilities must be weatherproof and moisture-free so far as is practicable (moisture will dramatically affect shelf-life of the product). Isolate product away from incompatible substances and foodstuffs. The product is typically manufactured and packaged in industry-recognised plastic-lined paper sacks that should be stored above ground and properly stacked on pallets for safe storage.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION:

Control Parameters:

Exposure Standards:	TWA ¹		STEL ²	
	ppm	mg/m3	ppm	mg/m3
Portland Cement [Ref: SWA (AUST)]	-	10	-	-
Quartz [Ref: SWA (AUST)]	-	0.1	-	-
Chromium (VI) Compounds (as CR) [Ref: SWA (AUST)]	-	0.05	-	-

¹Time Weighted Average concentration

²Short-Term Exposure Limit.

These exposure guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentration of dusts. They are not a measure of relative toxicity. If the direction for use stated on the product label is followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers' routinely, potentially exposed during product manufacture.

Biological Limit Values:

As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Controls:

Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use with local exhaust ventilation or while wearing appropriate respirator. DO NOT enter confined spaces where dusts may have collected. Keep containers closed when not in use.

Exposure Controls:**Personal Protection Equipment (PPE).**

OVERALL; SAFETY SHOES; SAFETY GLASSES; GLOVES; RESPIRATOR.

PPE: Refer to Section 7: Handling and Storage.

Hygiene Measures:

Keep away from foodstuffs, drink and animal foodstuffs & feeding troughs. When using the material, do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid skin and eye contact and inhalation of dust, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location. Refer to Section 7: Handling and Storage.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES:

Property	Unit of Measurement	Typical Value
Appearance	Not Applicable	Grey Coloured Powder
Odour	Not Applicable	Slightly Sweet
Solubility (Water)	Not Applicable	Slightly Soluble
Vapour Pressure @ 25°C	kPa	Not Available
Boiling Point	°C	Not Available
% Volatile by Volume	%	Not Relevant
Melting Point / Range	°C	Not Available

Auto Ignition Temperature	°C	Not Available
Decomposition Point	°C	Not Available
Flash Point	°C	Not Relevant
Density	Kg/m ³	1700 to 1900
Flammability Limits	% (v/v)	Not Relevant
Volatile Content	% (w/w)	Not Relevant
Flammability		Non Flammable
pH		11 – 13
Decomposition Temperature		Not Available
Explosive Properties		Not Available
Oxidising Properties		Not Available
Partition Coefficient		Not Available

SECTION 10: STABILITY AND REACTIVITY

Reactivity:

Carefully review all information provided below:

Chemical Stability:

This material is stable when stored in accordance with recommended conditions of storage.

Conditions to Avoid:

Elevated temperature. Sources of heat and ignition. Open flames.

Incompatible Materials:

Incompatible with oxidising agents (e.g. hypochlorites), ethanol, acids (e.g. hydrofluoric acid) and interhalogens (e.g. chlorine trifluoride). Water contact may increase product temperature 2°C to 3°C.

Hazardous Decomposition Products:

May evolve toxic gasses if headed to decomposition.

Hazardous Reactions:

Hazardous polymerisation is not expected to occur.

SECTION 11: TOXICOLOGICAL INFORMATION:

No toxicity data is available for this product. No adverse health effects expected if the product is used and handled in accordance with this Safety Data Sheet and directions on the product label. Symptoms or health effects that may or will arise if the product is mishandled and overexposure occurs. The Classifications and Phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008 (2004)]

Acute Effects:**Ingestion:**

Ingestion is unlikely through normal use. However, swallowing any amount of this product may cause immediate or delayed abdominal discomfort. (Xi Irritant)

It is not recommended to repeatedly swallow this material.

Eye Contact:

In the event that any dose of this material or the dust comes into contact with the eyes it may have an immediate or delayed effect resulting in redness and watering or an infection. (Xi Irritant) (R36/37/38 Irritating to eyes, respiratory system and skin)

It is not recommended to repeatedly allow this material to come into contact with the eyes.

Skin Contact:

Any level of skin contact with this product and/or dusts may lead to immediate or delayed skin irritations and in susceptible people with sensitive skin, dermatitis or skin infection. Open cuts, abraded or irritated skin should not be exposed to this material. (Xi Irritant) (R36/37/38 Irritating to eyes, respiratory system and skin)

It is not recommended for people susceptible to skin irritations to repeatedly allow this material to come into contact with the skin.

Inhalation:

Inhalation of large amounts of dust from this product may have an immediate or delayed effect to irritate, inflame or sensitise the nose, throat and lungs; and, exacerbate pre-existing conditions such as asthma and bronchitis. (Xi Irritant: Xn Harmful) (R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation).

It is not recommended for people to repeatedly inhale this material.

Acute Toxicity:**Inhalation:**

Exposure to this material should be kept below the recommended 10 mg/m³ (TWA).

Skin Contact:

This material has been classified as a Category 2 Hazard.

Ingestion:

This material has been classified as non-hazardous.

Corrosion / Irritancy:

Eye: This material has been classified as a Category 2A Hazard.

Skin: This material has been classified as a Category 2 Hazard (irritant to skin).

Sensitisation:

Inhalation: This material has been classified as not a respiratory sensitiser.

Skin: This material has been classified as not a skin sensitiser.

Aspiration Hazard:

This material has been classified as non-hazardous.

Chronic Toxicity:

Mutagenicity:

Insufficient data available to classify as a mutagen.

Carcinogenicity:

This product contains crystalline silica and trace amounts of Hexavalent chromium compounds which are classified as carcinogenic to humans (IARC Group 1). However there is insufficient information to conclude that the relative risk of lung cancer from exposure to crystalline silica is increased in persons with silicosis. Therefore preventing the onset of silicosis will also reduce the cancer risk.

Reproductive Toxicity:

Insufficient data available to classify as a reproductive toxin.

Specific Target Organ Toxicity (Single Exposure):

This material has been classified as a Category 3 Hazard. Irritating to the respiratory system.

Specific Target Organ Toxicity (Repeated Exposure):

This material has been classified as a Category 2 Hazard. Repeated exposure to Respirable silica may result in pulmonary fibrosis (silicosis). Silicosis is a fibro nodular lung disease caused by deposition in the lungs of fine Respirable particles of crystalline particles of crystalline silica. Principal symptoms of silicosis are coughing and breathlessness. In the wet state, the likelihood of an inhalation hazard is reduced.

Aspiration:

This product is a solid and aspiration hazards are not expected.

SECTION 12: ECOLOGICAL INFORMATION:

Avoid contaminating waterways.

Acute Aquatic Hazard:

May be harmful to the aquatic environment due to the alkaline nature of the product. The product is non-toxic to aquatic organisms when present as a cured solid.

Long-Term Aquatic Hazard:

No information is available to complete an assessment.

Ecotoxicity:

No information is available to complete an assessment.

Persistence and Degradability:

The product is persistent and would have low degradability.

Bioaccumulation Potential:

No information is available.

Mobility in Soil:

A low mobility would be expected in a landfill situation.

Other Adverse Effects:

Avoid release into drains and waterways.

SECTION 13: DISPOSAL CONSIDERATIONS:

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate Personal Protection Equipment is used. Refer to Section 8. Exposure Controls and Personal Protection PPE. Dampening the waste product with mist-spray or damp soil is recommended to preclude dust generation and emissions.

Refer to Waste Management Authority. Dispose of waste material through a licensed waste contractor. Advise non-flammable nature.

If possible, waste material and container should be recycled. If waste material and container cannot be recycled, disposal must be in accordance with local, national and international regulations.

SECTION 14: TRANSPORT INFORMATION:**Road & Rail Transport:**

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA; and, the New Zealand NZS5433: Transport of Dangerous Goods on Land.

UN No:	None Allocated
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Proper Shipping Name:	None Allocated
DG Class:	None Allocated
Subsidiary Risk:	Not Applicable
Packaging Group:	None Allocated
Hazchem Code:	None Allocated
Initial Emergency Response Guide:	Not Applicable

Segregation Dangerous Goods: Not Available:

Marine Transport:

Not classified as a Dangerous Good by the criteria of IMDG

UN No:	None Allocated
Proper Shipping Name:	None Allocated
DG Class:	None Allocated
Packaging Group:	None Allocated

Air Transport:

Not classified as a Dangerous Good by the criteria of IATA

UN No:	None Allocated
Proper Shipping Name:	None Allocated
DG Class:	None Allocated
Packaging Group:	None Allocated

SECTION 15: REGULATORY INFORMATION:

This material is NOT subject to the following International Agreements:

Montreal Protocol (Ozone Depleting Substances)

The Stockholm Convention (Persist Organic Pollutants)

The Rotterdam Convention (Prior Informed Consent)

This material / constituent(s) are covered by the following requirements:

- **AICS:** All the constituents of this material are listed on the *Australian Inventory of Chemical Substances* (AICS).
- **Poisons Schedule:** A poison Schedule Number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).
- **Classifications:** Safe Work Australia Criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.
The Classifications and Phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)]
Hazard Codes: Xi Irritant: Xn Harmful
Risk Phrases: R36/37/38: Irritating to eyes, respiratory system and skin.
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Safety Phrases: S22: Do not breathe dust.
S24/25: Avoid contact with skin and eyes.
S36/37: Wear suitable PPE

SECTION 16: OTHER INFORMATION:

Revision Requirement: Information updates of all sections to comply with Code of Practice Safe Work Australia December 2011.

Abbreviations:

ADG: Australian Code for Transport of Dangerous Goods by Road and Rail.

CAS Number: Chemical Abstracts Number.

HMIS: Hazardous Materials Identification System.

TWA: Time - Weighted Average airborne concentration over an 8-hour working day, for 5-day working week over an entire working life.

STEL: Short-Term Exposure Limit; the average airborne concentration over a 15-minute period which should NOT be exceeded at any time during a normal 8-hour working day.

ACGIH: American Conference of Government Industrial Hygienists.

CNS: Central Nervous System.

EC No: European Community Number

EMS: Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods).

GHS: Global Harmonised System.

GTEPG: Group Text Emergency Procedure Guide.

IARC: International Agency for Research on Cancer.

LC50: Lethal Concentration, 50% / Median Lethal Concentration.

LD50: Lethal Dose, 50% / Median Lethal Dose.

Mg/m³: Milligrams per cubic metre.

OEL: Occupational Exposure Limit.

pH: Relates to hydrogen ion concentration using a scale of 0 (high acid) to 14 (highly alkaline).

ppm: Parts per million.

STOT-RE: Specific target organ toxicity (repeated exposure)

STOT-SE: Specific target organ toxicity (single exposure).

SUSMP: Standard for the Uniform Scheduling of Medicines and Poisons.

SWA: Safe Work Australia.

TLV: Threshold Limit Value.

Additional Information:

- **CEMENT CONTACT DERMATITIS:** Individuals using wet cement, mortar, grout or concrete could be at risk of developing cement dermatitis. Symptoms of exposure include itchy, tender, swollen, hot, cracked or blistering skin with the potential for sensitisation. The dermatitis is due to the presence of soluble (Hexavalent) chromium.
- **RESPIRATORS:** In general, the use of respirators should be limited to and engineering controls employed to avoid dust inhalation exposure. If respiratory equipment is the means used to avoid dust exposure in the workplace, ensure correct respirator selection and training is undertaken. Some respirators may be extremely uncomfortable when worn for long periods. The use of air-powered or air supplied respirators should be considered where prolonged or repeated use is necessary in a workplace/manufacturing situation.
- **PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:** The recommendations for PPE contained in this SDS are provided as a Standards Australia/New Zealand guide only. Factors such as method of product application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.
- **HEALTH EFFECTS FROM EXPOSURE:** It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of product use; quantity used; effectiveness of control measures; protective equipment used and method of product application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate in situ with the environment and work site conditions where the product is used.

Disclaimer:

This Safety Data Sheet (SDS) has been prepared to the best belief of the manufacturer as to its accuracy and reliability as at the date of issue. No warranty expressed or implied is made as to its full reliability or completeness but is considered the appropriate information required by the user in the context of how the product must be handled and used in the workplace and including in conjunction with other products or materials present. Since the manufacturer cannot anticipate or control the conditions under which this information may or will be used, it is the user's responsibility to determine the safety, risk and fitness-for-purpose of the product under the conditions and environment where the product is intended to be used; and, responsibility to ensure that the SDS issue date is current. This information given is a non-controlled document and Designer Concrete Coatings Pty Ltd shall not be liable for personal injury or property damage associated with use or misuse of the product.