

Section 1 - Identification of Chemical Product And Company

CDK STONE NZ Ltd 2/40 Canaveral Drive Rosedale Auckland NEW ZEALAND	Emergency Phone: NZ Emergency Services:	0800 764766 111
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Substance:

Trade Name: **Superior E1010 Part B 1:1 Knife Grade**

Product Use:

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as:

HAZARDOUS SUBSTANCE: according to the criteria of HSNO.
REGULATED under NZS5433:2007 Transport of Dangerous Goods on Land

HSNO Signal Word: **DANGER**

Emergency Overview

Physical Description & colour: Light yellow paste

Odour: Amine

Hazard Classification:

Acute Oral Toxicity	Category 4	6.1D
Acute Dermal Toxicity	Category 4	6.1D
Acute Inhalation Toxicity	Category 4	6.1D
Skin Effects	Category 1B	8.2B
Eye Effects	Category 1	8.3A
Skin Sensitisation	Category 1	6.5B
Reproductive Toxicity	Category 2	6.8B
STOT – SE RTI	Category 3	6.9
Acute Aquatic Hazard	Category 1	9.1A
Chronic Aquatic Hazard	Category 1	9.1A
Soil Hazard	Category 3	9.2C
Vertebrate Hazard	Category 3	9.3C

Signal Word: **DANGER**

Hazard Statements:

H302	Harmful if swallowed
H332	Harmful if inhaled
H314	Causes sever skin burns and serious eye damage
H318	Causes serious eye damage
H317	May cause an allergic skin reaction
H361	Suspected of damaging fertility or the unborn child
H335	May cause respiratory irritation
H400	Very toxic to aquatic life



- H411 Toxic to aquatic life with long lasting effects
 H423 Harmful to the soil environment
 H433 Harmful to terrestrial vertebrates

Precautionary Statements

Prevention

- P271 Use only outdoors or in a well-ventilated area
 P261 Avoid breathing fumes/ vapours
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
 P272 Contaminated work clothing should not be allowed out of the workplace
 P270 Do not eat, drink or smoke when using this product
 P273 Avoid release to the environment

Response

- P301+330+312 IF SWALLOWED: Rinse mouth. Call a POISON CENTRE/ doctor/ physician/ first aider if you feel unwell
 P303+361+352 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Wash with plenty of water and soap.
 P332+313 If skin irritation occurs. Get medical attention
 P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
 P337+313 If eye irritation persists. Get medical attention
 P304+340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 P308+311 If exposed or concerned. Call a POISON CENTRE/ doctor/ physician/ first aider

Storage

- P391 Collect spillage
 P405 Store locked up
 P403+233 Store in a well-ventilated place. Keep container tightly closed

Disposal

- P501 Dispose of content/ container to an authorised hazardous or special waste collection point in accordance with local regulation

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc. %
N-Aminoethylpiperazine	140-31-8	> 40
Nonylphenol	84852-15-3	30 - 40
Fumed silica	67762-90-7	1 – 10

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764766 from anywhere in New Zealand (13 1126 in Australia) and is available at all times. Have this SDS or product label with you when you call.

Eye Contact:

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

Skin Contact:	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. Immediately flush body and clothes with large amounts of water, using safety shower if available. 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.
Inhalation:	Remove from contaminated area. Lay patient down. Keep warm and rested. Prosthesis 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, without delay. Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema. Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs). As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested. Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered. This must definitely be left to a doctor or person authorised by him/her.
Ingestion:	For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. 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. 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. Transport to hospital or doctor without delay.
Note to Physician:	Treat symptomatically

Section 5 - Fire Fighting Measures

Extinguishing Media:	Preferred extinguishing media are water spray or fog, dry chemical, BCF or foam
Fire and Explosion Hazards:	Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). May emit acrid smoke. Mists containing combustible materials may be explosive.
Fire Fighting:	Alert Fire & Emergency New Zealand and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Fight fire from a safe distance, with adequate cover. If safe, switch off electrical equipment until vapour fire hazard removed. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Equipment should be thoroughly decontaminated after use
Fire Decomposition:	Carbon monoxide (CO), Carbon dioxide (CO ₂) Nitrogen Oxides (NO _x); Silicon dioxide (SiO ₂) and other pyrolysis products typical of burning organic material.

Section 6 - Accidental Release Measures

Minor Spills:	Environmental hazard - contain spillage. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Contain and absorb spill with sand, earth, inert material or vermiculite. Wipe up. Place in a suitable, labelled container for waste disposal.
Major Spills:	Environmental hazard - contain spillage. Clear area of personnel and move upwind. Alert Fire & Emergency New Zealand and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves. Prevent, by any means available, spillage from entering drains or water course. Stop leak if safe to do so. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralise/decontaminate residue (see Section 13 for specific agent). 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.

Section 7 - Handling and Storage

Handling:	Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with moisture. 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.
Storage:	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 storage and handling recommendations contained within this SDS. DO NOT store near acids, or oxidising agents No smoking, naked lights, heat or ignition sources.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

Exposure limits

CAS no.	Substance or ingredient	WES-TWA	WES-STEL
67762-90-7	Fumed silica	10 mg/m ³	

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5-day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Engineering 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: 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. For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh

Personal Protective Equipment

Eye Protection:



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 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 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

Skin Protection:



Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber Overalls. PVC Apron. PVC protective suit may be required if exposure severe.

Protective Material Types:

We suggest that protective clothing be made from the following materials:

PE/EVAL/PE

PVA

Teflon

Respirator:



Type A-P filter of sufficient capacity

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Light yellow paste
Odour:	Amine
pH:	>7
Vapour Pressure:	<1 mm Hg
Relative Vapour Density:	not available
Viscosity	no data
Boiling Point:	>200 °C
Volatiles:	negligible
Water Solubility:	immiscible
Freezing/Melting Point:	no data
Specific Gravity:	1.07 g/ml
Flashpoint	130 °C
Auto ignition temp:	no data °C
Evaporation Rate:	not available
Coeff Octanol/water distribution	no data

Section 10 - Stability and Reactivity

Stability	Product is considered stable
Conditions to Avoid:	Avoid contact with moisture. Reacts with mild steel, galvanized steel / zinc producing hydrogen gas which may form an explosive mixture with air. Contact with alkaline materials liberates heat.
Incompatibilities:	Segregate from alkalis, oxidising agents and chemicals readily decomposed by acids ie cyanides, sulfides, carbonates. Avoid reaction with oxidizing agents, ie nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result
Polymerisation:	This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Inhaled:

The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of amine vapours may cause irritation of the mucous membrane of the nose and throat, and lung irritation with respiratory distress and cough. Swelling and inflammation of the respiratory tract is seen in serious cases, with headache, nausea, faintness and anxiety. Inhalation of epoxy resin amine hardeners (including polyamines and amine adducts) may produce bronchospasm and coughing episodes lasting several days after cessation of the exposure. Even faint traces of these vapours may trigger an intense reaction in individuals showing "amine asthma". Inhalation hazard is increased at higher temperatures.

Ingestion

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Ingestion of amine epoxy-curing agents (hardeners) may cause severe abdominal pain, nausea, vomiting or diarrhoea. The vomitus may contain blood and mucous. Amines without benzene rings when swallowed are absorbed throughout the gut. Corrosive action may cause damage throughout the gastrointestinal tract. Some phenol derivatives can cause damage to the digestive system. If absorbed, profuse sweating, thirst, nausea, vomiting, diarrhoea, cyanosis, restlessness, stupor, low blood pressure, gasping, abdominal pain, anaemia, convulsions, coma and lung swelling can happen followed by pneumonia.

Skin Contact

Skin contact is not thought to produce harmful health effects (as classified under EC Directives using animal models). Systemic harm, however, has been identified following exposure of animals by at least one other route and the material may still produce health damage following entry through wounds, lesions or abrasions. Volatile amine vapours produce irritation and inflammation of the skin. Direct contact can cause burns. Amine epoxy-curing agents (hardeners) may produce primary skin irritation and sensitisation dermatitis in predisposed individuals. Cutaneous reactions include erythema, intolerable itching and severe facial swelling. Phenol and its derivatives can cause severe skin irritation if contact is maintained and can be absorbed to the skin affecting the cardiovascular and central nervous system. Effects include sweating, intense thirst, nausea and vomiting, diarrhoea, cyanosis, restlessness, stupor, low blood pressure, hyperventilation, abdominal pain, anaemia, convulsions, coma, lung swelling followed by pneumonia. Open cuts abraded or irritated skin should not be exposed to this material. Entry into the bloodstream, 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. The material can produce chemical burns following direct contact with the skin.

Eye Contact

If applied to the eyes, this material causes severe eye damage. Vapours of volatile amines irritate the eyes, causing excessive secretion of tears, inflammation of the conjunctiva and slight swelling of the cornea, resulting in "halos" around lights. This effect is temporary, lasting only for a few hours. However, this condition can reduce the efficiency of undertaking skilled tasks, such as driving a car. Direct eye contact with liquid volatile amines may produce eye damage, permanent for the lighter species. Irritation of the eyes may produce a heavy secretion of tears (lachrymation). Some phenol derivatives may produce mild to severe eye irritation with redness, pain and blurred vision. Permanent eye injury may occur; recovery may also be complete or partial. The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.

Chronic Health Effects

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. Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility. Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Exposure to alkyl phenolics is associated with reduced sperm count and fertility in males. Prolonged or repeated skin contact may cause degreasing, followed by drying, cracking and skin inflammation. Long-term exposure to phenol derivatives can cause skin inflammation, loss of appetite and weight, weakness, muscle aches and pain, liver damage, dark urine, loss of nails, skin eruptions, diarrhoea, nervous disorders with headache, salivation, fainting, discolouration of the skin and eyes, vertigo and mental disorders, and damage to the liver and kidneys. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Amorphous silicas generally are less hazardous than crystalline silicas, but the former can be converted to the latter on heating and subsequent cooling. Inhalation of dusts containing crystalline silicas may lead to silicosis, a disabling lung disease that may take years to develop. Repeated or prolonged exposure to acids may result in the erosion of teeth, swelling and/or ulceration of mouth lining. Irritation of airways to lung, with cough, and inflammation of lung tissue often occurs.

TOXICITY AND IRRITATION

Ingredient	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
N-aminoethylpiperzine	2140 mg/kg		
Nonylphenol	1000 -2500 mg/kg		
Fumed silica	3160 mg/kg	>5000 mg/kg	>0.139 mg/l/4h

Section 12 - Ecological Information

Very toxic to aquatic life with long lasting effects. Harmful to the soil environment; harmful to terrestrial vertebrates
This material and its container must be disposed of as hazardous waste.
Avoid release to the environment.

Ingredient	Fish	Crustacea	Algae
N-aminoethylpiperazine	LC ₅₀ 96hr 2-190 mg/L NOEC 96hr 1-30 mg/L	EC ₅₀ 48hr 32 mg/L EC ₁₀₀ 48hr 100 mg/L	EC ₅₀ 72hr >1 mg/L
Nonylphenol	LC ₅₀ 96hr 0.017mg/L	EC ₅₀ 48hr 0.0844 mg/L NOEC 168hr 0.001 mg/L	EC ₅₀ 96hr 0.027 mg/L EC ₁₀ 48hr 0.08 mg/L
Fumed silica	LC ₅₀ 96hr 1-33.02 mg/L	NOEC 720hr 34.223 mg/L	EC ₅₀ 96hr 440 mg/L

	Persistence H ₂ O/ Soil	Persistence Air	Bioaccumulation	Mobility
N-aminoethylpiperazine	HIGH	HIGH	LOW	HIGH
Nonylphenol	HIGH	HIGH	LOW	LOW
Fumed Silica	LOW	LOW	LOW	LOW

Section 13 - Disposal Considerations

Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible. Otherwise: If container cannot be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill. Where possible retain label warnings and SDS and observe all notices pertaining to the product. 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 Land Waste Authority for disposal. Bury or incinerate residue at an approved site. Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled. The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous. Only dispose to the environment if a tolerable exposure limit has been set for the substance. Only deposit the hazardous substance into or onto a landfill or sewage facility or incinerator, where the hazardous substance can be handled and treated appropriately.

Section 14 - Transport Information



HAZCHEM 2X

Land Transport UNDG

Class or division 8
Subsidiary Risk None
UN Number 3259
UN Packing Group II
Special Provisions 274
Limited Quantity 1 Kg
Shipping Name AMINES, SOLID, CORROSIVE, N.O.S.

Air Transport IATA

ICAO/IATA Class 8
ICAO/IATA Subrisk None

UN/ID Number	3259
ERG Code	8L
Packing Group	II
Special provision	A3 A803
Cargo only	
Packing instructions	863
Maximum Qty/pack	50 Kg
Passenger and Cargo	
Packing instructions	859
Maximum Qty/pack	15 Kg
Passenger & Cargo Limited Quantity	
Packing instructions	Y844
Maximum Qty/pack	5Kg
Shipping Name	AMINES, SOLID, CORROSIVE, N.O.S.

Marine Transport IMDG

IMDG Class	8
IMDG Subrisk	None
UN Number	3259
UN Packing Group	II
EmS Number	F-A S-B
Special provisions	274
Limited quantities	1 Kg
Marine pollutant	Yes
Shipping Name	AMINES, SOLID, CORROSIVE, N.O.S.

Section 15 - Regulatory Information

HSNO Approval: **HSR002670 Surface Coatings & Colourants (Subsidiary Hazard)**

Group Standard conditions and other regulations:

Condition	Requirement
SDS	Safety data sheet must be available to a person handling the substance within 10 minutes.
Emergency plan	Required when quantities exceed 100 Lt
Certified handler	Not required
Tracking	Not applicable
Bunding and secondary containment	Required dependent upon packsize and total volume
Signage	Required when quantities exceed 100 Lt
Location Compliance Certificate	Required when quantities exceed 100 Lt
Hazardous Area	Not required
Fire extinguisher	Not required

National Inventories

Australia	AICS	Y
Canada	DSL	Y
Canada	NDSL	N
China	IECSC	Y
Europe	EINEC/ELINCS/NLP	Y
Japan	ENCS	Y
Korea	KECI	Y
New Zealand	NZIOC	Y
Philippines	PICCS	Y
USA	TSCA	Y
Taiwan	TCSI	Y
Mexico	INSQ	Y
Vietnam	NCI	Y
Russia	ARIPS	Y

Section 16 - Other Information

Revision History

August 2020

Initial Preparation

Acronyms:

CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters
HSNO	Hazardous Substances & New Organisms Act
IARC	International Agency for Research on Cancer
ICAO Technical Instruction	International Civil Aviation Organization Technical Instructions
IMDG Code	International Maritime Dangerous Goods Code controlled by the International Maritime Organisation (IMO)
LC₅₀	Lethal concentration 50% - concentration fatal to 50% of a population
LD₅₀	Lethal dose 50% - concentration fatal to 50% of a population
NZS 5433	New Zealand Standard 5433 (Standard for the Transport of Dangerous Goods on Land)
SDS	Safety Datasheet
STEL	Short Term Exposure Limit
TWA	Time Weighted Average (typically measured as 8-hours)
UN Number	United Nations Number
WES	Workplace Exposure standard

References

Chemical properties and HSNO classifications derived from the New Zealand chemical classification information database (CCID).
www.epa.govt.nz.

Workplace exposure limits derived from Workplace Exposure Standards and Biological Exposure Indices 11th Edition (November 2019).

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material in combination with any other material or in any process, unless specified in the text.

This SDS was prepared by Collievale Enterprises Ltd in accord with the Hazardous Substances (Safety Data Sheets) Notice 2017
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End of SDS