Construction Supply Specialists

Chemwatch Hazard Alert Code: 3

Issue Date: **14/02/2017** Print Date: **14/02/2017** S.GHS.AUS.EN

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

Product Identifier

Product name	Crete-Off Concrete Dissolver
Synonyms	Cement Dissolver, Product Code: 1028
Other means of identification	Not Available

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

Relevant identified	Used to dissolve built-up cement on tools and equipment associated with the concrete ready-mix industry
uses	

Details of the supplier of the safety data sheet

Registered company name	Construction Supply Specialists	Construction Supply Specialists
Address	6 Broadfield Road Broadmeadows VIC 3047 Australia	PO Box 155 Campbellfield VIC 3061 Australia
Telephone	+61 3 9357 4228	Not Available
Fax	+61 3 9357 4229	Not Available
Website	Not Available	Not Available
Email	Not Available	Not Available

Emergency telephone number

Association / Organisation		
Emergency telephone numbers	03 9357 4228	Not Available
Other emergency telephone numbers	Not Available	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	Not Applicable	
Classification ^[1]	Skin Corrosion/Irritation Category 1A, Serious Eye Damage Category 1	
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI	

Label elements

GHS label elements	
SIGNAL WORD	DANGER

Hazard statement(s)

H314 Causes severe skin burns and eye damage.

Precautionary statement(s) Prevention

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement(s) Response

P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.	
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P310	Immediately call a POISON CENTER or doctor/physician.	
P363	Wash contaminated clothing before reuse.	
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.	

Precautionary statement(s) Storage

P405	Store locked up.

Precautionary statement(s) Disposal P501

Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
79-14-1	10-30	glycolic acid
Not Available	>60	Ingredients determined not to be hazardous

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Wash out immediately with fresh 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. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 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.
Inhalation	 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.
Ingestion	 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. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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.
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 Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. 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.
 Non combustible. Not considered to be a significant fire risk. Acids may react with metals to produce hydrogen, a highly flammable and explosive gas. Heating may cause expansion or decomposition leading to violent rupture of containers. May emit corrosive, poisonous fumes. May emit acrid smoke. Decomposes on heating and produces toxic fumes of: , carbon monoxide (CO) , carbon dioxide (CO2)
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 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	 Minor hazard. Clear area of personnel. Alert Fire Brigade and tell them location and nature of hazard. Control personal contact with the substance, by using protective equipment as required. Prevent spillage from entering drains or water ways. Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal. Wash area and prevent runoff into drains or waterways. If contamination of drains or waterways occurs, advise emergency services.

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

Precautions for safe handling

Safe handling	 Limit all unnecessary personal contact. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. When handling DO NOT eat, drink or smoke. Always wash hands with soap and water after handling. Avoid physical damage to containers. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. DO NOT allow clothing wet with material to stay in contact with skin
Other information	 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.

Conditions for safe storage, including any incompatibilities

Suitable container	 Lined metal can, lined metal pail/ can. Plastic pail. Polyliner drum. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	• Segregate from alkalies, oxidising agents and chemicals readily decomposed by acids, i.e. cyanides, sulfides, carbonates.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
glycolic acid	Glycolic acid; (Hydroxyacetic acid)	25 mg/m3	280 mg/m3	390 mg/m3
Ingredient	Original IDLH	Revised IDL	4	
glycolic acid	Not Available	Not Available		
Ingredients determined not to be hazardous	Not Available	Not Available		

Exposure controls

Appropriate engineering controls	Use in a well-ventilated area General exhaust is adequate under normal operating conditions.
Personal protection	
Eye and face protection	 Chemical goggles. Full face shield may be required for supplementary but never for primary protection of eyes. 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. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]
Skin protection	See Hand protection below

Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber 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 can not 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 obtained from the manufacture 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 moisturizer is recommended. Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: 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 2161.1.1 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. Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use. Contaminated gloves should be replaced. 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 material. Th
Body protection	Overalls
Other protection	► Eyewash unit.
Thermal hazards	Not Available

Respiratory protection

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Clear mildly acidic liquid; mixes with water.

Physical state	Liquid	Relative density (Water = 1)	1.07
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	2.0	Decomposition temperature	Not Available
Melting point / freezing point (°C)	-6	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	98-101	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available

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

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	The vapour is discomforting Inhalation of vapour may aggravate a pre-existing respiratory condition such as asthma, bronchitis, emphysema		
Ingestion	Ingestion may result in nausea, abdominal irritation, pain and vomiting Ingestion of low-molecular organic acid solutions may produce spontaneous haemorrhaging, production of blood clots, gastrointestinal damage and narrowing of the oesophagus and stomach entry.		
Skin Contact	The material can produce chemical burns following direct contact with the skin. The material may accentuate any pre-existing dermatitis condition 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	The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating. Solutions of low-molecular weight organic acids cause pain and injury to the eyes.		
Chronic	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.		
Crete-Off Concrete	TOXICITY	IRRITATION	
Dissolver	Not Available	Not Available	
	тохісіту	IRRITATION	
glycolic acid	Inhalation (rat) LC50: 7.1E-6 mg/L/4hr ^[2]	Not Available	
	Oral (rat) LD50: 1950 mg/kg ^[2]		
Legend:	 Value obtained from Europe ECHA Registered Substances - Unless otherwise specified data extracted from RTECS - Registered 	Acute toxicity 2.* Value obtained from manufacturer's SDS. ster of Toxic Effect of chemical Substances	

Crete-Off Concrete Dissolver	Not available.
GLYCOLIC ACID	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

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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.

No significant acute toxicological data identified in literature search.

for acid mists, aerosols, vapours

Data from assays for genotoxic activity in vitro suggest that eukaryotic cells are susceptible to genetic damage when the pH falls to about 6.5. Cells from the respiratory tract have not been examined in this respect. Mucous secretion may protect the cells of the airways from direct exposure to inhaled acidic mists, just as mucous plays an important role in protecting the gastric epithelium from its auto-secreted hydrochloric acid. In considering whether pH itself induces genotoxic events in vivo in the respiratory system, comparison should be made with the human stomach, in which gastric juice may be at pH 1-2 under fasting or nocturnal conditions, and with the human urinary bladder, in which the pH of urine can range from <5 to > 7 and normally averages 6.2. Furthermore, exposures to low pH in vivo differ from exposures *in vitro* in that, *in vivo*, only a portion of the cell surface is subjected to the adverse conditions, so that perturbation of intracellular homeostasis may be maintained more readily than in vitro.

For glycolic acid:

Acute toxicity: Glycolic acid (70% solution) is slightly toxic via the oral route, having an LD50 in rats of 193 8 mg/kg. It is moderately toxic via the inhalation route in male rats with a 4-hour LC50 of 3.6 mg/L. Glycolic acid is a skin and eye corrosive, but it is not a skin sensitiser in animals.

However, numerous studies in humans with cosmetic products containing lower percentages of glycolic acid have shown some skin irritation potential, but no corrosivity.

Repeat dose toxicity: Repeated exposures to glycolic acid via inhalation produced liver, spleen, thymus changes, and gastrointestinal tract alterations. Repeated administration of glycolic acid to rats by oral intubation caused decreases in body weight, body weight gain, food consumption, and food efficiency. In addition, toxicologically significant changes in haematologic measurements, clinical chemistry, and urinalysis parameters, as well as kidney lesions were

observed. **Developmental and reproductive toxicity:** Maternal and developmental toxicity of crystalline, 99.6% pure, glycolic acid in the rat was seen at 300 and 600 mg/kg/day. The maternal and developmental NOEL was 150 mg kg/day, thus glycolic acid is not considered a unique developmental hazard to the conceptus.

Glycolic acid did not affect reproductive performance in rats during a one-generation reproduction study following a 90-day feeding study.

Genotoxicity: The compound was negative in the *in vitro* bacterial reverse mutation assay (*Salmonella* and E. *coli*). Glycolic acid produced a positive response in the *in* vitro mouse lymphoma assay only at excessively high concentrations under activated conditions, but was negative in the *in vivo* mouse micronucleus assay.

The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

for simple alpha-hydroxy carboxylic acids and their salts:

The toxicology of simple alpha hydroxy carboxylic acids cluster is characterised by five compounds sharing the functional group defining the cluster name

Experimental data available for members of the simple alpha-hydroxy carboxylic acids indicate a low acute, repeated-dose, reproductive and developmental toxicity.

The simple alpha hydroxy carboxylic acids are eve and skin irritants but are not expected to be skin sensitisers. Genotoxicity test data for two cluster members and a cancer bioassay for the calcium salt of propanoic acid, 2-hydroxyyielded negative results and all other cluster members are considered to have little or no mutagenic or carcinogenic potential. Acute oral toxicity of propanoic acid, 2-hydroxy- (2S)- (79-33-4) and propanoic acid, 2-hydroxy- (50-21-5) are low. The repeated-dose and developmental toxicity of the three tested simple alpha -hydroxy carboxylic acids is low. In EPA's High Production Volume Program, reproductive toxicity testing for propanoic acid, 2-hydroxy- (50-21-5) was deemed unnecessary because it is a normal component of human intermediary metabolism. Reproductive toxicity of acetic acid, 2-hydroxy-(79-14-1) has been tested and was found to be low. Low reproductive toxicity of the associated potassium salts is also expected to be low. Alpha-hydroxy carboxylic acids are severe eye irritants. Acetic acid, 2-hydroxy- (79-14-1), propanoic acid, 2-hydroxy- (2S)- (79-33-4) and propanoic acid, 2-hydroxy- (50-21-5) all produced positive skin irritation in rabbits. The members of this cluster are not expected to be skin sensitisers based on negative results in guinea pigs for both acetic acid, 2-hydroxy- (79-14-1) and propanoic acid, 2-hydroxy- (2S)- (79-33-4). Genotoxicity data for acetic acid, 2-hydroxy-(79-14-1) and propanoic acid, 2-hydroxy- (50-21-5) are negative, indicating that none of the cluster members are expected to be genotoxic. A 2-year drinking water study of the calcium salt of propanoic acid, 2-hydroxy- (50-21-5) in rats showed no evidence of carcinogenicity. An expert judgment based on mechanism-based structure-activity relationship considerations indicate little or no carcinogenic potential for any of the cluster members due to expected rapid metabolism/excretion and lack of genotoxic structural alert. This judgment is supported by the negative cancer and mutagenicity data for propanoic acid, 2hydroxy- (50-21-5), which is considered a reasonable analogue to the rest of the cluster.

Acute Toxicity	0	Carcinogenicity	0
Skin Irritation/Corrosion	*	Reproductivity	0
Serious Eye Damage/Irritation	*	STOT - Single Exposure	\otimes

Respiratory or Skin sensitisation	\otimes	STOT - Repeated Exposure	0
Mutagenicity	\otimes	Aspiration Hazard	\otimes
		Legend: X − Data available but does not fill the criteria for classification ✓ − Data available to make classification	

S - Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
glycolic acid	LC50	96	Fish	1522.08702mg/L	3
glycolic acid	EC50	96	Algae or other aquatic plants	29.67093mg/L	3
glycolic acid	EC0	24	Algae or other aquatic plants	>1000mg/L	1
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

Biodegradable

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
glycolic acid	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
glycolic acid	LOW (LogKOW = -1.11)

Mobility in soil

Ingredient	Mobility
glycolic acid	HIGH (KOC = 1)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods		
Product / Packaging disposal	 Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Treat and neutralise at an effluent treatment plant. Use soda ash or slaked lime to neutralise. Recycle containers, otherwise dispose of in an authorised landfill. 	

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant NO
HAZCHEM Not

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

SECTION 15 REGULATORY INFORMATION

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

GLYCOLIC ACID(79-14-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists Australia Inventory of Chemical Substances (AICS)

National Inventory	Status
Australia - AICS	Υ
Canada - DSL	Υ
Canada - NDSL	N (glycolic acid)
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	Υ
Japan - ENCS	Υ
Korea - KECI	Υ
New Zealand - NZIoC	Υ
Philippines - PICCS	Υ
USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

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.

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