

Section 1 - Identification

Product Identifier	ARMOR PLATE DEEP SCRUB RECOATING CLEANER
Recommended use	Detergent.
Recommended restrictions	For commercial and industrial use only.
Manufacturer / Importer / Supplier / Distributor Information	
Company Name	Chemeco (Aust)
Emergency Phone	(03) 9408 8699

Section 2 - Hazard(s) Identification

SDS Hazards and Warnings are based on the undiluted product. Refer to diluted SDS for Ready-To-Use Hazards and Warnings.

	Classification Not	Category
Physical Hazards	Classified	
Health Hazards	Sensitization, skin	1
	Serious eye damage/eye irritation	2A
OSHA defined hazards	Not Classified.	
Label Elements		



Hazard Symbol	
Signal Word	Warning
Hazard statement	May cause an allergic skin reaction. Causes serious eye irritation.
Precautionary statement	
Prevention	Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. Wear eye/face protection.
Response	If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see this label). If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

Section 3 - Composition/Information on ingredients

Mixture

Hazardous Components

Ingredient Name	CAS #	%
2-Butoxyethanol	111-76-2	1 - 5
Nonylphenol, ethoxylated	9016-45-9	1 - 5
Alcohols, C12-13 Ethoxylated	66455-14-9	0.1 - 1
Orange Oil	8008-57-9	0.1 - 1

Section 4 - First-aid Measures

Inhalation	Move to fresh air. Get medical attention if irritation persists.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Get medical attention if irritation persists.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.
Ingestion	Get medical attention if irritation persists.



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Most Important symptoms /effects, acute and delayed

Rash. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis.

Indication of immediate medical attention and special treatment

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General Information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

Section 5 - Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment /instruction

Move containers from fire area if you can do it without risk. Use water spray to keep fire-exposed containers cool.

General fire hazards

No unusual fire or explosion hazards noted.

Specific Methods

Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6 - Accidental release measures

Personal precautions, protective equipment and emergency procedures.

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

This product is miscible in water.
SMALL SPILLAGE: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
LARGE SPILLS: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.
 Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

Section 7 - Handling and storage

Precautions for safe handling

Do not get in eyes, on skin, or on clothing. Avoid breathing mist or vapor. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

Section 8 - Exposure control/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	240 mg/m ³ , 50 ppm

US. ACGIH Threshold Limit Values

Component	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
2-Butoxyethanol (CAS 111-76-2)	TWA	24 mg/m ³ , 5 ppm



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US. ACGIH. BEIs. Biological Exposure Indices

Component	Value	Determinate	Specimen	Sampling
2-Butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

* - For sampling details, please see the source document.

US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

Components	Exposure
2-Butoxyethanol (CAS 111-76-2)	Can be absorbed though the skin.

US.Minnesota Hazardous Substances List (Minn. Rules 5206.0400).

Components	Exposure
2-Butoxyethanol (CAS 111-76-2)	Skin designation applies.

US.NIOSH: Pocket Guide to Chemical Hazards

Component	Exposure
2-Butoxyethanol (CAS 111-76-2)	Can be absorbed though the skin.

US.OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.100)

Components	Exposure
2-Butoxyethanol (CAS 111-76-2)	Can be absorbed though the skin.

US.OSHA Table Z-1-A (29 CFR 1910.100)

Components	Exposure
2-Butoxyethanol (CAS 111-76-2)	Can be absorbed though the skin.

US.Tennessee. OELs Occupational Exposure Limits, Table Z1A

Components	Exposure
2-Butoxyethanol (CAS 111-76-2)	Can be absorbed though the skin.

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Face shield is recommended. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Contaminated work clothing should not be allowed out of the workplace.

Section 9 - Physical and chemical properties

Appearance	Pink turbid liquid.
Physical state	Liquid.
Form	Thin Liquid.
Color	Pink.
Odor	Orange.
Odor threshold	Not available.
pH	9.9
Melting point/freezing point	Not available.
Initial boiling point and boiling range	212 °F (100 °C)
Flash point	> 212.0 °F (> 100.0 °C) Tag Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.



Explosive limit - upper (%)	Not available.
Vapor pressure	Similar to water.
Vapor density	Similar to water.
Relative density	1.01 ± 0.01
Relative density temperature	75 °F (23.89 °C)
Solubilities	100 % Soluble.
Partition Coefficient n-octanol/water	Not available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
Viscosity	<10 cSt
Viscosity Temperature	75 °F (23.89 °C)

Section 10 - Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reaction	No dangerous reaction known under conditions of normal use.
Conditions to Avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous Decomposition Pro	No hazardous decomposition products are known.

Section 11 - Toxicological information

Information on likely routes of exposure

Ingestion	Expected to be a low ingestion hazard.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Rash. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis.

Information on toxicological effects.

Acute toxicity	May cause an allergic skin reaction.					
Components	Level	Type	Code	Species	Results	
2-Butoxyethanol (CAS 111-76-2)	Acute	Dermal	LD50	Rabbit	400 mg/kg	
	Acute	Inhalation	LC50	Rat	450 mg/l, 4 hrs	
	Acute	Oral	LD50	Rat	560 mg/kg	
Nonylphenol, ethoxylated (CAS 9016-45-9)	Acute	Oral	LD50	Mouse	4290 mg/kg, bw	
Alcohols, C12-13 Ethoxylated (CAS 66455-14-9)	Acute	Dermal	LD50	Rat	> 2000 mg/kg, 24 Hours	
	Acute	Dermal	LD50	Rabbit	3300 mg/kg, 24 Hours	
	Acute	Inhalation	LC50	Rat	> 100 mg/m ³ , 6 Hours > 1.6 mg/l, 4 Hours	

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/ eye irritation	Causes serious eye irritation.
Respiratory sensitization	This product is not expected to cause respiratory sensitization.
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
IARC Monographs. Overall Evaluation of Carcinogenicity	





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Component	Result	Comment
2-Butoxyethanol (CAS 111-76-2)	3	Not classifiable as to carcinogenicity to humans.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not classified.	
Chronic effects	May be harmful if absorbed through skin. Prolonged inhalation may be harmful. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.	

Section 12 - Ecological Information

Ecotoxicity	The product contains a substance which is very toxic to aquatic organisms.			
Components	Alcohols, C12-13 Ethoxylated, 66455-14-9			
Aquatic				
Acute	Crustacea	EC50	Water flea (Daphnia magna)	0.39 -0.56 mg/l, 48 hours
	Fish	LC50	Flathead minnow (Pimephales promelas)	0.72 -2.7 mg/l, 96 hours
	Nonylphenol, ethoxylated, 9016-45-9			
Aquatic				
Acute	Crustacea	EC50	Daphnia magna	65 mg/l, 48 hours
	Crustacea	EC50	Water flea (Daphnia magna)	12.2 mg/l, 48 hours
	Fish	LC50	Bluegill (Lepomis macrochirus)	1 - 1.8 mg/l 96 hours
Persistence and degradability	No data is available on the degradability of this product.			
Bioaccumulative potential	No data available.			
	Partition coefficient n-octanol / water log (Kow)			
	Components			Results
	2-Butoxyethanol (CAS 111-76-2)			0.83
Mobility in soil	No data available.			
Mobility in general	No data available.			
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.			

Section 13 - Disposal considerations

Disposal instructions	Dispose in accordance with applicable federal, state, and local regulations.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	Waste codes should be assigned by the user based on the application for which the product was used.
Waste from residues / unused products	Dispose in accordance with all applicable regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Section 14 - Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
Transportation in bulk according to Annex II of MARPOL 73/78 and IBC Code	This substance/mixture is not intended to be transported in bulk

Section 15 - Regulatory Information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard
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TSCA Section 12(b) Export Notification (40 CFR707, Subpt. D)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-CERCLA Hazardous Substance List (40 CFR 302.4)

Communication Standard, 29 CFR 1910.1200.
 All components are on the U.S. EPA TSCA Inventory List.
 Not regulated.

Not listed.

Components	Result
2-Butoxyethanol (CAS 111-76-2)	LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard	Immediate Hazard	Yes
Categories	Delayed Hazard	No
	Fire Hazard	No
	Pressure Hazard	No
	Reactivity Hazard	No

SARA 302 Extremely hazardous substance Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Chemical name	CAS #	% by wt.
2-Butoxyethanol	111-76-2	1 - 5

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Food and Drug Administration (FDA) Not regulated.

US state regulations

US.Massachusetts RTK - Substance List Components
2-Butoxyethanol (CAS 111-76-2)

US.New Jersey Worker and Community Right-to-Know Act Components
2-Butoxyethanol (CAS 111-76-2)

US.Pennsylvania RTK - Hazardous Substances Components
2-Butoxyethanol (CAS 111-76-2)

US.Rhode Island RTK Components
2-Butoxyethanol (CAS 111-76-2)

US - California Proposition 65 This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

International Inventories

Country(s) or region	Inventory Name	On Inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes



