Safety Data Sheet

BONDERITE C-IC 624 ACID CLEANER known as DEOXIDINE 624 20LT

SDS No. : 319353
V001.5
Date of issue: 22.01.2016

Section 1. Identification of the substance/preparation and of the company/undertaking

Product name: BONDERITE C-IC 624 ACID CLEANER known as DEOXIDINE 624 20LT

Intended use: Rust remover

Supplier:
Henkel Australia Pty Ltd
135-141 Canterbury Road
Kilsyth, Victoria, 3137
Australia

Phone: +61 (3) 9724 6444

Emergency information: 24 HOUR EMERGENCY CONTACT NUMBER: 1800 032 379

Section 2. Hazards identification

Classification of the substance or mixture
Hazardous according to the criteria of Safe Work Australia.

GHS Classification:

Hazard Class	Hazard Category
Corrosive to metals	Category 1
Skin irritation	Category 2
Serious eye irritation	Category 2A
Acute hazards to the aquatic environment	Category 3

Hazard pictogram:

Signal word: Warning

Hazard statement(s):
H290 May be corrosive to metals.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H402 Harmful to aquatic life.

Precautionary Statement(s):

Prevention:
P234 Keep only in original container.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing.
P390 Absorb spillage to prevent material damage.

Storage:
P406 Store in corrosive resistant container with a resistant inner liner.

Disposal:
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

Classification of material Xi - Irritant

Risk phrases:
R36/38 Irritating to eyes and skin.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of water and soap.
S36/37 Wear suitable protective clothing and gloves.
S60 This material and its container must be disposed of as hazardous waste.

Dangerous Goods information:
Classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

Signal word:
HAZARDOUS

Section 3. Composition / information on ingredients

General chemical description: Mixture
Aqueous preparation of:
Phosphoric acid

Type of preparation: Acid

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
Orthophosphoric acid	7664-38-2	10- 30 %
2-Butoxyethanol	111-76-2	< 10 %
Remainder not hazardous including water~		60- 100 %

Section 4. First aid measures

Ingestion:	Do not induce vomiting. Have victim rinse mouth thoroughly with water. Seek medical advice.
Skin:	Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.
Eyes:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical advice.
Inhalation:	If inhaled, immediately remove the affected person to fresh air. Seek medical advice.
First Aid facilities:	Eye wash and safety shower Normal washroom facilities
Medical attention and special treatment:	Treat symptomatically.

Section 5. Fire fighting measures

Suitable extinguishing media:	Water Fog
Improper extinguishing media:	Water spray jet
Combustion behaviour:	Non-flammable (aqueous solution).
Decomposition products in case of fire::	Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide. Carbon dioxide. Oxides of phosphorus.
Particular danger in case of fire::	May react with metals to form flammable hydrogen gas.
Special protective equipment for fire-fighters:	Wear protective equipment. Wear self-contained breathing apparatus.
Additional fire fighting advice:	In case of fire, keep containers cool with water spray. Collect contaminated fire fighting water separately. It must not enter drains.
Hazchem code:	2R

Section 6. Accidental release measures

Personal precautions:	Ensure adequate ventilation. Avoid contact with skin and eyes. Wear protective equipment. Keep unprotected persons away. See advice in section 8
Environmental precautions:	Do not allow to enter in surface / ground water.
Clean-up methods:	Absorb spill with inert material. Shovel material into appropriate container for disposal.

Section 7. Handling and storage

Precautions for safe handling: Vapours should be extracted to avoid inhalation.
Avoid skin and eye contact.
Gloves and safety glasses should be worn
See advice in section 8
Avoid naked flames, sparking and sources of ignition.

Conditions for safe storage: Store in a cool, well-ventilated place.
Store in sealed original container.
Temperatures between + 5 °C and + 35 °C

Section 8. Exposure controls / personal protection

National exposure standards:

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m3)	Peak Limit. (ppm)	Peak Limit. (mg/m3)	STEL (ppm)	STEL (mg/m3)
PHOSPHORIC ACID 7664-38-2			1	-	-	-	-
PHOSPHORIC ACID 7664-38-2		-	-	-	-		3
2-BUTOXYETHANOL 111-76-2		20	96.9	-	-	-	-
2-BUTOXYETHANOL 111-76-2		-	-	-	-	50	242

Engineering controls: Ensure good ventilation/suction at the workplace.

Eye protection: Wear protective glasses.

Skin protection: Use of protective coveralls and long sleeves is recommended.
Use protective gloves made of neoprene, nitrile, polyethylene or PVC, butyl rubber, rubber (natural, latex), PTFE

Please note that in practice the working life of chemical resistant gloves may be considerably reduced as a result of many influencing factors (e.g. temperature). Suitable risk assessment should be carried out by the end user. If signs of wear and tear are noticed then the gloves should be replaced.

Respiratory protection: If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.

Section 9. Physical and chemical properties

Appearance: colourless
clear
Odor: mild
pH: < 2
Boiling point: > 100 °C (> 212 °F)
Density: 1.10 - 1.15 g/cm3
Solubility in water: Completely soluble

Section 10. Stability and reactivity

Stability: Stable under normal conditions of temperature and pressure.

Conditions to avoid: Heat, flames, sparks and other sources of ignition.

Incompatible materials: Oxidizing agents.
Alkalis.
Explosive HYDROGEN GAS may be released if aqueous solutions of this material come into contact with reactive metals (IRON, ZINC, ALUMINUM).

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapors.

Carbon monoxide.
Carbon dioxide.
Oxides of phosphorus.

Section 11. Toxicological information

Health Effects:

Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Skin: Irritating to skin.
Symptoms may include redness, burning, drying, cracking and skin burns.

Eyes: Contact with eyes will cause irritation.
Symptoms include itching, burning, redness and tearing.

Inhalation: May cause moderate respiratory tract irritation.

Chronic effects: Repeated excessive dermal exposure may cause marked skin irritation and may increase the possibility of allergic reactions.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Orthophosphoric acid 7664-38-2	LD50 Acute toxicity estimate (ATE)	2,600 mg/kg 5.1 mg/l	oral inhalation		rat	OECD Guideline 423 (Acute Oral toxicity) Expert judgement
2-Butoxyethanol 111-76-2	LD50 LD50	1,746 mg/kg 2,000 mg/kg	oral dermal		rat rabbit	OECD Guideline 401 (Acute Oral Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Orthophosphoric acid 7664-38-2	corrosive	24 h	rabbit	
2-Butoxyethanol 111-76-2	irritating	4 h	rabbit	EU Method B.4 (Acute Toxicity: Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
2-Butoxyethanol 111-76-2	irritating	24 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Orthophosphoric acid 7664-38-2	not sensitising	no data	human	
2-Butoxyethanol 111-76-2	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity:

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Orthophosphoric acid 7664-38-2	negative negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test mammalian cell gene mutation assay	with and without with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
2-Butoxyethanol 111-76-2	negative negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test mammalian cell gene mutation assay	with and without with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
2-Butoxyethanol 111-76-2	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Repeated dose toxicity:

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Orthophosphoric acid 7664-38-2	NOAEL=250 mg/kg	oral: gavage	6 wdaily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
2-Butoxyethanol 111-76-2	NOAEL=0.121 mg/l	inhalation	42 or 90 days6 hours/day, 5 days/week	rat	
2-Butoxyethanol 111-76-2	NOAEL=< 69 mg/kg	oral: drinking water	91 dcontinous	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Section 12. Ecological information

General ecological information: Do not empty into drains / surface water / ground water., Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Ecotoxicity: Harmful to aquatic life with long lasting effects.

Toxicity:

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Orthophosphoric acid 7664-38-2	LC50	> 100 mg/l	Fish			OECD Guideline 203 (Fish, Acute Toxicity Test)
Orthophosphoric acid 7664-38-2	EC50	> 100 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Orthophosphoric acid 7664-38-2	EC50	> 100 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Orthophosphoric acid 7664-38-2	NOEC	100 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Orthophosphoric acid 7664-38-2	EC 50	270 mg/l	Bacteria			OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
2-Butoxyethanol 111-76-2	LC50	1,474 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
2-Butoxyethanol 111-76-2	NOEC	> 100 mg/l	Fish	21 d	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 204 (Fish, Prolonged Toxicity Test: 14-day Study)
2-Butoxyethanol 111-76-2	EC50	1,550 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
2-Butoxyethanol 111-76-2	EC50	1,840 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-Butoxyethanol 111-76-2	NOEC	286 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-Butoxyethanol 111-76-2	EC0	1,000 mg/l	Bacteria	30 min		

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
2-Butoxyethanol 111-76-2	readily biodegradable	aerobic	73 %	EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
2-Butoxyethanol 111-76-2	0.81				25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

Section 13. Disposal considerations

Waste disposal of product: Dispose of as hazardous waste in compliance with local and national regulations. Do not allow product to enter sewer or waterways.

Recommended cleanser: Clean the packaging with water.

Disposal for uncleaned package: Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

Section 14. Transport information

Road and Rail Transport:

Dangerous Goods information:	Classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).
UN no.:	1805
Proper shipping name:	PHOSPHORIC ACID SOLUTION
Class or division:	8
Packing group:	III
Hazchem code:	2R
Emergency information:	Refer to the Dangerous Goods - Initial Emergency Response Guide HB 76.

Marine transport IMDG:

UN no.:	1805
Proper shipping name:	PHOSPHORIC ACID SOLUTION
Class or division:	8
Packing group:	III
EmS:	F-A ,S-B
Seawater pollutant:	-

Air transport IATA:

UN no.:	1805
Proper shipping name:	Phosphoric acid, solution
Class or division:	8
Packing group:	III
Packing instructions (passenger)	852
Packing instructions (cargo)	856

Section 15. Regulatory information

SUSMP Poisons Schedule 6

Section 16. Other information

Abbreviations/acronyms:

ADGC - Australian Dangerous Goods Code
IMDG: International Maritime Dangerous Goods code
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
STEL - Short term exposure limit
TWA - Time weighted average

Reason for issue:

Reviewed SDS. Reissued with new date. involved chapters: 1 - 16

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Disclaimer:

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