

MSDS ATTACHMENT

PLEASE ATTACH THIS COMPLETED SHEET TO THE MSDS FOR :

PRODUCT :

BONDERITE C-AK 44

DATE :

(MSDS date)

19.05.2022

1. Manufacturer/Supplier :

PPS Industries Limited
86 Hugo Johnston Drive, Auckland
New Zealand
P.O.Box 12823, Penrose, Auckland 1642
Phone : 64 9 579-1001
Facsimile : 64 9 579-9497
Emergency Phone : 0800 657-894
Website: www.ppsindustries.co.nz

Emergency Information :

National Poison Centre 0800 764-766
Chemcall 24/7 Emergency Response Service : 0800 243-622

13. Disposal Considerations :

Product

Recommendation - Consult local or national regulations to ensure proper disposal.

Packaging

Disposal must be made according to official regulations.

16. Other Information :

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.



Safety Data Sheet

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BONDERITE C-AK 44 ALKALINE CLEANER known as P3
Galvaclean 44 25Kg

SDS No. : 429722

V001.3

Revision: 19.05.2022

printing date: 13.09.2023

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: BONDERITE C-AK 44 ALKALINE CLEANER known as P3 Galvaclean 44 25Kg

Intended use: Cleaner

Supplier:
Henkel New Zealand Ltd
2 Allens Rd
Auckland, 2013
New Zealand
Phone: +64 (9) 272-6710

Emergency information: 24 HOUR EMERGENCY CONTACT NUMBER 0800 243 622

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classified as hazardous under the New Zealand Hazardous Substances and New Organisms Act (HSNO).

Classified as Dangerous Goods under the Land Transport Rule: Dangerous Goods 2005.

GHS Classification:

<u>Hazard Class</u>	<u>Hazard Category</u>	<u>Target organ</u>
Corrosive to metals	Category 1	
Skin corrosion	Category 1	
Serious eye damage/eye irritation	Category 1	
Target Organ Systemic Toxicant - Single exposure	Category 3	respiratory tract irritation
Acute hazards to the aquatic environment	Category 3	

Hazard pictogram:



Signal word:

Danger

Hazard statement(s):	H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H402 Harmful to aquatic life.
Precautionary Statement(s):	
Prevention:	P234 Keep only in original packaging. P260 Do not breathe dust or fumes. P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment.
Response:	P280 Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P304+P340+P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. P305+P351+P338+P315 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Get immediate medical advice/attention. P363 Wash contaminated clothing before reuse. P390 Absorb spillage to prevent material damage.
Storage:	P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.
Disposal:	P406 Store in corrosive resistant container with a resistant inner liner. P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

General chemical description: Mixture

Identity of ingredients:

Chemical ingredients	CAS-No.	Proportion
sodium carbonate	497-19-8	30- < 50 %
Sodium metasilicate 5H ₂ O	10213-79-3	10- < 20 %
Trisodium orthophosphate	7601-54-9	10- < 20 %
Tetrasodium pyrophosphate	7722-88-5	10- < 20 %
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts	68411-30-3	3- < 10 %
Nonylphenol, 12EO	9016-45-9	3- < 10 %

SECTION 4 FIRST AID MEASURES

Ingestion:	Rinse mouth, do not induce vomiting, consult a doctor.
Skin:	In case of contact, immediately remove contaminated clothing and flush skin with copious amounts of water. Seek medical attention from a specialist.
Eyes:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention immediately.

Inhalation:	Move to fresh air. Keep warm and in a quiet place. Seek medical attention from a specialist.
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 spray (fog), foam, dry chemical or carbon dioxide.
Improper extinguishing media:	Water spray jet
Decomposition products in case of fire:	Thermal decomposition can lead to release of irritating gases and vapors. carbon monoxide Carbon dioxide. Oxides of nitrogen.
Particular danger in case of fire:	May react with metals to form flammable hydrogen gas.
Special protective equipment for fire-fighters:	Wear full protective clothing. Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
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:	2X

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Ensure adequate ventilation. Keep unprotected persons away. Avoid skin and eye contact. Adequate personal protective equipment should be worn by all personnel involved in the clean-up work.
Environmental precautions:	Do not discharge into surface water/ground water.
Clean-up methods:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up or gather material and place in appropriate container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling: Ensure that workrooms are adequately ventilated.
Keep container tightly sealed.
Avoid skin and eye contact.
Wear suitable protective clothing, gloves and eye/face protection.
Use good hygiene practices when handling this material, including changing and laundering work clothes after use. Discard contaminated shoes and leather goods.

Conditions for safe storage: Store only in the original container.
Keep container tightly sealed.
Store in a cool, well-ventilated place.
Isolate from incompatible substances.
Keep away from heat and direct sunlight.
Must be stored in the facility for the dangerous goods

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Workplace exposure standards:

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m ³)	Ceiling	STEL (ppm)	STEL (mg/m ³)
TETRASODIUM PYROPHOSPHATE 7722-88-5			5			

Biological Exposure Indices:
None

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

Eye protection: For eye protection, use tightly fitted safety goggles and a face-shield

Skin protection: Use of an impervious apron is recommended.
Impervious gloves should be used at all times when handling this product.
Protective clothing that covers arms and legs.
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: Off white
granular
Odor: mild
pH:(Concentration: 1 %) 11.5 - 12.5

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of temperature and pressure.

Conditions to avoid: Extremes of temperature.
Excessive heat.

Incompatible materials: Incompatible with oxidising agents.
Reacts with metals: Heat generated and hydrogen released.
Acids.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapors.
Carbon dioxide.
Carbon monoxide.
Oxides of nitrogen.

SECTION 11 TOXICOLOGICAL INFORMATION

Health Effects:

Ingestion: May cause burns to the mouth, throat, and stomach.
This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

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

Eyes: Causes serious eye damage.
Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Inhalation: Mists or vapors may be irritating to the respiratory tract.
Can cause severe irritation and burns to the respiratory tract.

Acute toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
sodium carbonate 497-19-8	LD50 LD50	2,800 mg/kg > 2,000 mg/kg	oral dermal		rat rabbit	not specified EPA 16 CFR 1500.40 (Method of testing toxic substances)
Sodium metasilicate 5H ₂ O 10213-79-3	LD50	> 5,000 mg/kg	dermal		rat	not specified
Trisodium orthophosphate 7601-54-9	LD50 LD50	> 2,000 mg/kg > 2,000 mg/kg	oral dermal		rat rat	OECD Guideline 420 (Acute Oral Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)
Tetrasodium pyrophosphate 7722-88-5	LD50 LD50	1,624 mg/kg > 2,000 mg/kg	oral dermal		rat rabbit	OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure) other guideline:
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	LD50 LD50	1,080 mg/kg > 2,000 mg/kg	oral dermal		rat rat	OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
sodium carbonate 497-19-8	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Sodium metasilicate 5H ₂ O 10213-79-3	corrosive			not specified
Tetrasodium pyrophosphate 7722-88-5	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	Category 2 (irritant)	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
sodium carbonate 497-19-8	irritating		rabbit	not specified
Sodium metasilicate 5H ₂ O 10213-79-3	corrosive			not specified
Tetrasodium pyrophosphate 7722-88-5	Category 1 (irreversible effects on the eye)	4 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	Category 1 (irreversible effects on the eye)	30 s	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Respiratory or skin sensitization:

Hazardous components CAS-No.	Result	Test type	Species	Method
Sodium metasilicate 5H ₂ O 10213-79-3	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	not specified
Tetrasodium pyrophosphate 7722-88-5	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	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
sodium carbonate 497-19-8	negative	bacterial reverse mutation assay (e.g Ames test)	with		Ames Test
Sodium metasilicate 5H ₂ O 10213-79-3	negative	not specified			not specified
Sodium metasilicate 5H ₂ O 10213-79-3					not specified
Tetrasodium pyrophosphate 7722-88-5	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	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 without with and without		EU Method B.13/14 (Mutagenicity) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	negative	oral: gavage		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
Sodium metasilicate 5H ₂ O 10213-79-3	NOAEL=227 mg/kg			rat	not specified
Tetrasodium pyrophosphate 7722-88-5	NOAEL=500 mg/kg	oral: gavage	90 daysOnce a day, 5 days a week	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	NOAEL=125 mg/kg	oral: gavage	28 ddaily	rat	not specified

SECTION 12. ECOLOGICAL INFORMATION

General ecological information: Do not empty into drains / surface water / ground water.**Ecotoxicity:** Harmful to aquatic life.**Toxicity:**

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
sodium carbonate 497-19-8	LC50	300 mg/l	Fish	96 h	Lepomis macrochirus	OECD Guideline 203 (Fish, Acute Toxicity Test)
sodium carbonate 497-19-8	EC50	> 200 - 227 mg/l	Daphnia	48 h	Ceriodaphnia sp.	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
sodium carbonate 497-19-8	EC50	137 mg/l	Algae	5 d	Nitzschia sp.	OECD Guideline 201 (Alga, Growth Inhibition Test)
Sodium metasilicate 5H2O 10213-79-3	LC50	210 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	
Sodium metasilicate 5H2O 10213-79-3	NOEC	> 86.7 mg/l	Fish	30 d	Pimephales promelas	OECD Guideline 210 (fish early life stage toxicity test) not specified
Sodium metasilicate 5H2O 10213-79-3	EC50	1,700 mg/l	Daphnia	48 h	Daphnia magna	
Sodium metasilicate 5H2O 10213-79-3	EC50	213 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	DIN 38412-09
Sodium metasilicate 5H2O 10213-79-3	EC0	36 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	DIN 38412-09
Sodium metasilicate 5H2O 10213-79-3	EC0	1,000 mg/l	Bacteria	30 min		not specified
Trisodium orthophosphate 7601-54-9	LC50	1,650 mg/l	Fish		Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Trisodium orthophosphate 7601-54-9	EC50	190 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) not specified
Trisodium orthophosphate 7601-54-9	EC0	1,650 mg/l	Bacteria	30 min		not specified
Tetrasodium pyrophosphate 7722-88-5	LC50	> 100 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)
Tetrasodium pyrophosphate 7722-88-5	EC50	> 100 mg/l	Daphnia	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)
Tetrasodium pyrophosphate 7722-88-5	EC50	> 100 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Tetrasodium pyrophosphate 7722-88-5	NOEC	> 100 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
Tetrasodium pyrophosphate 7722-88-5	EC50	> 1,000 mg/l	Bacteria	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Benzenesulfonic acid, C10- 13-alkyl derivs., sodium salts 68411-30-3	NOEC	> 0.43 - 0.89 mg/l	Fish	28 d	Salmo gairdneri (new name: Oncorhynchus mykiss)	OECD Guideline 210 (fish early life stage toxicity test)
Benzenesulfonic acid, C10- 13-alkyl derivs., sodium salts 68411-30-3	LC50	1.67 mg/l	Fish	96 h	Lepomis macrochirus	OECD Guideline 203 (Fish, Acute Toxicity Test)
Benzenesulfonic acid, C10-13- alkyl derivs., sodium salts 68411-30-3	EC50	2.9 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	EC50	127.9 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	Immobilisation Test) OECD Guideline 201 (Alga, Growth Inhibition Test)
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	NOEC	2.4 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	EC0	26 mg/l	Bacteria	16 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshe mm-Test)
Nonylphenol, 12EO 9016-45-9	LC50	16 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	not specified
Nonylphenol, 12EO 9016-45-9	EC0	1,000 mg/l	Bacteria	30 min		not specified

Persistence and degradability:

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	readily biodegradable	aerobic	85 %	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
Nonylphenol, 12EO 9016-45-9	not readily biodegradable.	aerobic	0 %	EU Method C.4-E (Determination of the "Ready" Biodegradability Closed Bottle Test)

Bioaccumulative potential / Mobility in soil:

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts 68411-30-3	3.32					not specified

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal of product: In consultation with the responsible local authority, must be subjected to special treatment: Neutralisation

Disposal for uncleaned package: Use packages for recycling only when totally empty.
Dispose of in accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION**Dangerous Goods information:****Land Transport:**

Classified as Dangerous Goods under the Land Transport Rule: Dangerous Goods 2005.

Land Transport:

UN no.: 3253
Proper shipping name: DISODIUM TRIOXOSILICATE (mixture)
Class or division: 8
Packing group: III
Hazchem code: 2X

Marine transport IMDG:

UN no.: 3253
Proper shipping name: DISODIUM TRIOXOSILICATE (mixture)

Class or division: 8
Packing group: III
EmS: F-A ,S-B
Seawater pollutant: -

Air transport IATA:

UN no.: 3253
Proper shipping name: Disodium trioxosilicate (mixture)
Class or division: 8
Packing group: III
Packing instructions (passenger) 860
Packing instructions (cargo) 864

SECTION 15. REGULATORY INFORMATION

New Zealand regulatory information:

Classified as hazardous under the New Zealand Hazardous Substances and New Organisms Act (HSNO).

HSNO Approval Number: HSR002609

Site and Storage: Refer to the site and storage requirements for this Group Standard.
Refer to the HSNO controls for approved hazardous substances.

NZIoC: Compliant for NZIOC

SECTION 16. OTHER INFORMATION

Abbreviations/acronyms: STEL - Short term exposure limit
TWA - Time weighted average
IMDG: International Maritime Dangerous Goods code
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
HSNO - Hazardous Substances and New Organisms
GHS: Globally Harmonized System
CAS: Chemical Abstracts Service
LD 50: Lethal Dose 50%
LC 50: Lethal Concentration 50%

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

Date of previous issue: 31.05.2017

Disclaimer:

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