



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Issuing Date 26-Jun-2018

Revision number 7

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product code 50733 PBV000273

Product name Polar Clean

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

Recommended use Coffee/Espresso machine/equipment cleaner

1.3. Details of the supplier of the safety data sheet

Supplier name Cafetto

Supplier Address 12 Coglein Street, Brompton SA 5007 Australia
Parkstraat 83 2514JG Den Haag, The Netherlands;
9 Raffles Place, #27-00 Republic Plaza, Singapore 048619

Supplier phone number Australia: +61 8 8245 6901
New Zealand: 0800 772 227
USA: 206 462 5212
EU: +44 20 7193 7370
Singapore: 800 616 3122

Supplier email enquiry@cafetto.com

For further information, please contact.

1.4. Emergency telephone number

Emergency Telephone No information available

Emergency Telephone §45 - (EC)1272/2008

Europe	112
Australia	000

UNITED STATES	911
United Kingdom	999

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Serious eye damage/eye irritation	Category 1 - (H318)
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2.2. Label Elements



Signal Word

DANGER

hazard statements

H318 - Causes serious eye damage

Precautionary Statements - EU (§28, 1272/2008)

P101 - If medical advice is needed, have product container or label at hand

P102 - Keep out of reach of children

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

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

P501 - Dispose of contents/ container to an approved waste disposal plant

Additional Information

This product requires tactile warnings if supplied to the general public

2.3. Other Hazards

No information available

SECTION 3: Composition/information on ingredients

3.1 Substances

Not Applicable.

3.2 MIXTURES

Chemical Name	EC No	CAS No	weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg. No
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Sodium percarbonate	239-707-6	15630-89-4	10-30%	Ox. Sol. 2 (H272) Acute Tox. 4 (H302) Eye Dam. 1 (H318)	01-2119457268-30-0009
Citric Acid	201-069-1	77-92-9	10-30%	Eye Irrit. 2 (H319)	01-2119457026-42-0020
Sodium carbonate	207-838-8	497-19-8	1-10%	Eye Irrit. 2 (H319)	01-2119485498-19
Potassium carbonate	209-529-3	584-08-7	1-10%	Eye Irrit. 2 (H319) Skin Irrit. 2 (H315)	01-2119532646-36
Ethylene diamine tetraacetic acid, tetrasodium salt	200-573-9	64-02-8	1-10%	Acute Tox. 4 (H302) Eye Dam. 1 (H318)	no data available

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 4: First aid measures

4.1. Description of first aid measures

General Advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
INHALATION	Remove to fresh air. Get medical attention immediately if symptoms occur.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Eye Contact	Get immediate medical advice/attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
INGESTION	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
Self-Protection of the First Aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	Burning sensation.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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Large fire

CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable Extinguishing Media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous combustion products

Carbon oxides.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required. Avoid contact with eyes.

OTHER INFORMATION Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental Precautions Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

Section 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Exposure limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Chemical Name	Eu	United Kingdom	France	Spain	Germany
Citric Acid 77-92-9	-	-	-	-	TWA: 2 mg/m ³
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Citric Acid 77-92-9	-	STEL: 4 mg/m ³ TWA: 2 mg/m ³	-	-	-

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2. Exposure controls**Personal Protective Equipment**

Eye/Face Protection Tight sealing safety goggles.

Hand protection Wear suitable gloves.

Skin and Body Protection Wear suitable protective clothing.

Environmental Exposure Controls No information available.

Section 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical State Powder(s)
appearance white
Odor characteristic
color No information available
odor threshold Not Applicable

Property	VALUES	Remarks Method
pH	9.5 at 1% w/w	None known

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Melting / Freezing Point	no data available	None known
Boiling Point / Boiling Range	no data available	None known
flash point	no data available	None known
evaporation rate	no data available	None known
flammability (solid, gas)	no data available	None known
Flammability limit in air		None known
Upper Flammability Limit	no data available	
Lower Flammability Limit	no data available	
vapor pressure	no data available	None known
Vapor Density	no data available	None known
Relative Density	no data available	None known
Water solubility	Soluble in water	None known
solubility(ies)	no data available	None known
Partition coefficient: n-octanol/water	Not applicable	None known
Autoignition Temperature	no data available	None known
decomposition temperature	no data available	None known
Kinematic Viscosity	no data available	None known
viscosity	no data available	None known

9.2. Other information

Softening point	No information available
molecular weight	No information available
VOC content (%)	No information available
Liquid Density	No information available
Bulk density	No information available
particle size	No information available
particle size distribution	No information available

Section 10: Stability and reactivity

10.1. Reactivity

no data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None under normal processing.
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Hazardous polymerization	Hazardous polymerization does not occur.
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10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong acids, Strong bases, Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides.

Section 11: Toxicological information

11.1. Information on toxicological effects

Information on Likely Routes of Exposure

Product information

INHALATION	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye Contact	Specific test data for the substance or mixture is not available. Severely irritating to eyes. Causes serious eye damage. May cause burns. May cause irreversible damage to eyes.
Skin Contact	Specific test data for the substance or mixture is not available. May cause irritation. Causes mild skin irritation.
INGESTION	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. HARMFUL IF SWALLOWED. (based on components).

Information on Toxicological Effects

Symptoms Redness. Burning. MAY CAUSE BLINDNESS.

Numerical Measures of Toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	860.30 mg/kg
ATEmix	22.70 mg/l
(inhalation-dust/mist)	

Unknown Acute Toxicity

- 35.74348 % of the mixture consists of ingredient(s) of unknown toxicity
- 35.74348 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 35.74348 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 35.74348 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 35.74348 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 35.74348 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component information

Chemical Name	Oral LD50	dermal LD50	Inhalation LC50
Sodium percarbonate	= 1034 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Citric Acid	= 3000 mg/kg (Rat) = 3 g/kg (Rat)	> 2000 mg/kg (Rat)	-

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Sodium carbonate	= 4090 mg/kg (Rat)	-	= 2300 mg/m ³ (Rat) 2 h
Potassium carbonate	= 1870 mg/kg (Rat)	-	-
Ethylene diamine tetraacetic acid, tetrasodium salt	= 1658 mg/kg (Rat) = 10 g/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin Corrosion/Irritation MAY CAUSE SKIN IRRITATION.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

respiratory or skin sensitization No information available.

Germ Cell Mutagenicity No information available.

carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - Single Exposure No information available.

STOT - Repeated Exposure No information available.

Aspiration Hazard No information available.

Section 12: Ecological information

12.1. Toxicity

ecotoxicity Toxic to aquatic life with long lasting effects. .

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Daphnia Magna (Water Flea)
Sodium percarbonate	240h EC50: = 70 mg/L (Chlorella emersonii)	96h LC50: = 70.7 mg/L (Pimephales promelas)	-	48h EC50: = 4.9 mg/L
Citric Acid	-	96h LC50: = 1516 mg/L (Lepomis macrochirus)	-	72h EC50: = 120 mg/L
Sodium carbonate	120h EC50: = 242 mg/L (Nitzschia)	96h LC50: = 300 mg/L (Lepomis macrochirus) 96h LC50: 310 - 1220 mg/L (Pimephales promelas)	-	48h EC50: = 265 mg/L
Potassium carbonate	-	-	-	48h LC50: = 630 mg/L
Ethylene diamine tetraacetic acid,	72h EC50: = 1.01 mg/L (Desmodesmus)	96h LC50: = 59.8 mg/L (Pimephales promelas)	-	24h EC50: = 610 mg/L

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tetrasodium salt	subspicatus)	96h LC50: = 41 mg/L (Lepomis macrochirus)		
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12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation

Chemical Name	log Pow
Citric Acid	-1.72

12.4. Mobility in soil

Mobility in Soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical Name	PBT and vPvB assessment
Sodium percarbonate	The substance is not PBT / vPvB PBT assessment does not apply
Citric Acid	The substance is not PBT / vPvB
Sodium carbonate	The substance is not PBT / vPvB PBT assessment does not apply
Potassium carbonate	The substance is not PBT / vPvB
Ethylene diamine tetraacetic acid, tetrasodium salt	The substance is not PBT / vPvB

12.6. Other adverse effects

Other Adverse Effects No information available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Waste from Residues/Unused Products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated Packaging No information available.

Section 14: Transport information

IMDG/IMO

14.1 UN-No

NOT REGULATED

14.2 Proper shipping name

NOT REGULATED

14.3 Hazard class

NOT REGULATED

NOT REGULATED

14.4 Packing group	NOT REGULATED
14.5 Marine pollutant	Not Applicable
14.6 Special provisions	None
14.7 Transport in Bulk	No information available

According to Annex II of MARPOL and the IBC CODE

RID	NOT REGULATED
14.1 UN-No	NOT REGULATED
14.2 Proper shipping name	NOT REGULATED
14.3 Hazard class	NOT REGULATED
14.4 Packing group	NOT REGULATED
14.5 Environmental Hazard	Not Applicable
14.6 Special provisions	None

ADR	NOT REGULATED
14.1 UN-No	NOT REGULATED
14.2 Proper shipping name	NOT REGULATED
14.3 Hazard class	NOT REGULATED
14.4 Packing group	NOT REGULATED
14.5 Environmental Hazard	Not Applicable
14.6 Special provisions	None

IATA	NOT REGULATED
14.1 UN-No	NOT REGULATED
14.2 Proper shipping name	NOT REGULATED
14.3 Hazard class	NOT REGULATED
14.4 Packing group	NOT REGULATED
14.5 Environmental Hazard	Not Applicable
14.6 Special provisions	None

Section 15: Regulatory information

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

National Regulations

France

Occupational Illnesses (R-463-3, France)

Chemical Name	French RG number	Title
Potassium carbonate 584-08-7	RG 58, RG 67	-

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).



Persistent Organic Pollutants

Not Applicable.

Dangerous substance category per Seveso Directive (2012/18/EU)

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not Applicable.

15.2. Chemical safety assessment

No information available.

Additional Regulatory Information:

This SDS complies with legislative requirements in Australia, including Safe Work Australia guidelines, Australian Dangerous Goods Code and the criteria for the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals

Section 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under sections 2 and 3

H272 - May intensify fire; oxidizer

H302 - Harmful if swallowed

H315 - Causes skin irritation

H318 - Causes serious eye damage

H319 - Causes serious eye irritation

Legend

SVHC: Substances of Very High Concern for Authorization:

SECTION 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	-	Skin designation

Key literature references and sources for data

www.ChemADVISOR.com/

Issuing Date 26-Jun-2018

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006.

Disclaimer

The information provided in this Safety Data Sheet 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 a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

