



Blade Powergreen Multi Purpose Cleaner

Safety Data Sheet

according to SANS 10234:2019 and SANS 11014:2010
Issue date: 2/9/2022 Revision date: 2/9/2024 Version: 1.1

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Trade name : Blade Powergreen Multi Purpose Cleaner
Type of product : Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)
Product code : SH306, SH246, SH247, SH267, SH351
Product group : Trade product

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

Use of the substance/mixture :

1.3. Supplier's details

Manufacturer

Shield Chemicals (Pty) Ltd
9 London Rd Apex
P.O. Box 1939
1501 Benoni – Gauteng
South Africa
T (011) 421 7111
Contact: Jayson Clark

1.4. Emergency telephone number

Emergency number : (011) 421 7111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Flammable liquids Not classified
Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2A H319
Hazardous to the aquatic environment — Acute Hazard, Category 3 H402
Full text of H-statements: see section 16

2.2. Label elements

Labelling according to the United Nations GHS

Hazard pictograms (GHS ZA) :



Signal word (GHS-ZA) : Warning
Hazardous ingredients : 2-Butoxyethanol, 2-propanol, ethanol, phosphoric acid, conc=85%
Hazard statements (GHS ZA) : H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H402 - Harmful to aquatic life
Precautionary statements (GHS ZA) : P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective clothing, eye protection, face protection.
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.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical attention.

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P337+P313 - If eye irritation persists: Get medical attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents to an approved waste disposal plant.

2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Causes skin irritation,Causes serious eye irritation,Harmful to aquatic life

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
2-Butoxyethanol	-	1 - 5	Flam. Liq. Not classified Acute Tox. 4 (Oral), H302 Acute Tox. Not classified (Dermal) Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Aquatic Acute Not classified
2-propanol	CAS-No.: 67-63-0	1 - 5	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) STOT SE 3, H336 Asp. Tox. 2, H305 Aquatic Acute Not classified
phosphoric acid, conc=85%	CAS-No.: 7664-38-2	1 - 5	Skin Corr. 1B, H314 Aquatic Acute Not classified
ethanol	CAS-No.: 64-17-5	0.1 - 1	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Asp. Tox. 2, H305 Aquatic Acute Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : Irritation.
Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-propanol (67-63-0)	
South Africa - Occupational Exposure Limits (Recommended Limits)	
Local name	Propan-2-ol (Isopropyl alcohol)
OEL TWA	960 mg/m ³ Isopropyl alcohol 980 mg/m ³ Propan-2-ol
OEL TWA [ppm]	400 ppm

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2-propanol (67-63-0)	
OEL STEL	1225 mg/m ³
OEL STEL [ppm]	500 ppm
Remark	Sk
Regulatory reference	Government Notice. R: 1179
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Isopropyl alcohol (Propan-2-ol)
OEL TWA	980 mg/m ³
OEL TWA [ppm]	400 ppm
OEL STEL	1225 mg/m ³
OEL STEL [ppm]	500 ppm
Regulatory reference	Government Notice No. R 904
ethanol (64-17-5)	
South Africa - Occupational Exposure Limits (Recommended Limits)	
Local name	Ethanol (Ethyl alcohol)
OEL TWA	1900 mg/m ³
OEL TWA [ppm]	1000 ppm
Regulatory reference	Government Notice. R: 1179
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Ethanol (Ethyl alcohol)
OEL TWA	1900 mg/m ³
OEL TWA [ppm]	1000 ppm
Regulatory reference	Government Notice No. R 904
phosphoric acid, conc=85% (7664-38-2)	
South Africa - Occupational Exposure Limits (Recommended Limits)	
Local name	Orthophosphoric acid
OEL TWA	1 mg/m ³
OEL STEL	3 mg/m ³
Regulatory reference	Government Notice. R: 1179
South Africa - Occupational Exposure Limits (Airborne Pollutants)	
Local name	Phosphoric acid (Orthophosphoric acid)
OEL TWA	1 mg/m ³
OEL STEL	3 mg/m ³
Regulatory reference	Government Notice No. R 904

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves
Eye protection : Safety glasses
Skin and body protection : Wear suitable protective clothing

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

Personal protective equipment symbol(s):



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Colour	: Green.
Odour	: Characteristic odour.
Odour threshold	: No data available
pH	: 4.5 – 6
pH solution	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Relative density of saturated gas/air mixture	: No data available
Density	: No data available
Relative gas density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available
Lower explosive limit (LEL)	: No data available
Upper explosive limit (UEL)	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

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10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

2-Butoxyethanol

LD50 oral rat	≈ 470 mg/kg
LD50 dermal rabbit	≈ 220 mg/kg

2-propanol (67-63-0)

LD50 oral rat	5840 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	16400 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat [ppm]	> 10000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))

ethanol (64-17-5)

LD50 oral rat	10740 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	> 16000 mg/kg (Rabbit, Literature study, Dermal)
LC50 Inhalation - Rat	117 – 125 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation)

Skin corrosion/irritation : Causes skin irritation.
pH: 4.5 – 6

Serious eye damage/irritation : Causes serious eye irritation.
pH: 4.5 – 6

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

2-propanol (67-63-0)

STOT-single exposure	May cause drowsiness or dizziness.
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STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Harmful to aquatic life.
Hazardous to the aquatic environment, short-term (acute)	: Harmful to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

2-Butoxyethanol	
LC50 - Fish [1]	≈ 2000 g/l

2-propanol (67-63-0)	
LC50 - Fish [1]	9640 – 10000 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

ethanol (64-17-5)	
LC50 - Fish [1]	14200 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 72h - Algae [1]	275 mg/l (Equivalent or similar to OECD 201, Chlorella vulgaris, Static system, Fresh water, Experimental value, Growth rate)
BCF - Fish [1]	1 (Other, 72 h, Cyprinus carpio, Static system, Fresh water, Read-across)
Partition coefficient n-octanol/water (Log Pow)	-0.31 (Experimental value)

phosphoric acid, conc=85% (7664-38-2)	
LC50 - Fish [1]	138 mg/l (Pisces, Pure substance)

12.2. Persistence and degradability

Blade Powergreen Multi Purpose Cleaner	
Persistence and degradability	No additional information available

2-propanol (67-63-0)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.19 g O ₂ /g substance
Chemical oxygen demand (COD)	2.23 g O ₂ /g substance
ThOD	2.4 g O ₂ /g substance

ethanol (64-17-5)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.8 – 0.967 g O ₂ /g substance
Chemical oxygen demand (COD)	1.7 g O ₂ /g substance
ThOD	2.1 g O ₂ /g substance
BOD (% of ThOD)	0.43

phosphoric acid, conc=85% (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable

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phosphoric acid, conc=85% (7664-38-2)	
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

Blade Powergreen Multi Purpose Cleaner	
Bioaccumulative potential	No additional information available

2-propanol (67-63-0)	
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

ethanol (64-17-5)	
BCF - Fish [1]	1 (Other, 72 h, Cyprinus carpio, Static system, Fresh water, Read-across)
Partition coefficient n-octanol/water (Log Pow)	-0.31 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.

phosphoric acid, conc=85% (7664-38-2)	
Bioaccumulative potential	Does not contain bioaccumulative component(s).

12.4. Mobility in soil

Blade Powergreen Multi Purpose Cleaner	
Mobility in soil	No additional information available

2-propanol (67-63-0)	
Surface tension	0.021 N/m (25 °C)
Partition coefficient n-octanol/water (Log Pow)	0.05 (Weight of evidence approach, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.185 – 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

ethanol (64-17-5)	
Surface tension	0.022 N/m (20 °C)
Partition coefficient n-octanol/water (Log Pow)	-0.31 (Experimental value)
Ecology - soil	Highly mobile in soil.

phosphoric acid, conc=85% (7664-38-2)	
Ecology - soil	No (test)data on mobility of the components available.

12.5. Other adverse effects

Ozone	: Not classified
Other adverse effects	: No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
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SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

SANS	IMDG	IATA
14.1. UN number		
Not regulated for transport		
14.2. Proper Shipping Name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

14.6. Special precautions for user

SANS

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health, and environmental national regulations specific for the product

No additional information available

SECTION 16: Other information

Issue date : 09/02/2022
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Full text of H-statements	
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H303	May be harmful if swallowed
H305	May be harmful if swallowed and enters airways
H311	Toxic in contact with skin.

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Full text of H-statements	
H313	May be harmful in contact with skin
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects.

Safety Data Sheet (SDS), South Africa

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.