



Made by Miswa

Safety Data Sheet (SDS)

MISWA CHEMICALS - POLYGARD - BRAKE CLEANER

SAFETY DATA SHEET POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1.

Product identifier

Product name POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL) 12212,

Product number 12210, 12223

Internal identification B12911

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

Identified uses Car maintenance product. Cleaning agent.

Uses advised against This product is not recommended for any industrial, professional or consumer use other than the identified uses stated above.

1.3. Details of the supplier of the safety data sheet

Supplier Miswa Chemicals Ltd
Caswell Road
Brackmills
Northampton
England
NN4 7PW
T: +44 (0)1604 701111 F:
+44 (0)1604 701120
SDSAdmin@miswa.com

1.4. Emergency telephone number Emergency

telephone Tel.: +44 (0)1604 701111 (Miswa Office Hours Monday - Friday (0900Hrs - 1700Hrs))

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Aerosol 1 - H222, H229

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic

Environmental hazards Chronic 2 - H411

2.2. Label elements

Hazard pictograms



Signal word Hazard

Danger

statements

H222 Extremely flammable aerosol.
H229 Pressurised container: may burst if heated. H315
Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.



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Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P261 Avoid breathing vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTRE/doctor if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501 Dispose of contents/ container in accordance with national regulations.
P102 Keep out of reach of children.

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT, PROPAN-2-OL

Contains

≥ 30% aliphatic hydrocarbons

Detergent labelling

2.3. Other hazards

The product is highly flammable.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT CAS		30-60%
number: 64742-49-0		
Classification Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411		
BUTANE		10-30%
CAS number: 106-97-8		EC number: 203-448-7
Classification Flam. Gas 1A - H220 Press. Gas (Liq.) - H280		



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PROPAN-2-OL CAS	10-30%
number: 67-63-0	EC number: 200-661-7
Classification Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Keep affected person away from heat, sparks and flames. Move affected person to fresh air at once. Get medical attention if any discomfort continues. Never give anything by mouth to an unconscious person.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Keep affected person under observation. Get medical attention. Show this Safety Data Sheet to the medical personnel. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place. If breathing stops, provide artificial respiration. Get medical attention.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Keep affected person under observation. Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Vapours may cause headache, fatigue, dizziness and nausea.
Inhalation	Aspiration hazard if swallowed. The fluid can enter the lungs and cause damage (chemical pneumonitis, possibly fatal). Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract. Nausea, vomiting.
Ingestion	Skin irritation.
Skin contact	May cause temporary eye irritation.
Eye contact	

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

Notes for the doctor	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
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SECTION 5: Firefighting measures 5.1.

Extinguishing media	
Suitable extinguishing media	Extinguish with the following media: Dry chemicals, sand, dolomite etc. Alcohol-resistant foam. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

MISWA CHEMICALS - POLYGARD - BRAKE CLEANER**POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)****5.2. Special hazards arising from the substance or mixture****Specific hazards**

Vapours may be ignited by a spark, a hot surface or an ember. Vapours may form explosive mixtures with air. Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂). Containers can burst violently or explode when heated, due to excessive pressure build-up. Vapours may form explosive mixtures with air. Containers can burst violently or explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters**Protective actions during firefighting**

Risk of re-ignition after fire has been extinguished. Risk of explosion. Move containers from fire area if it can be done without risk. Containers close to fire should be removed or cooled with water. Do not allow water to contact any leaked material. Do not use water jet as an extinguisher, as this will spread the fire. Contain and collect extinguishing water. If risk of water pollution occurs, notify appropriate authorities. Avoid the spillage or runoff entering drains, sewers or watercourses.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****Personal precautions**

Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

6.2. Environmental precautions**Environmental precautions**

Avoid from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Contain spillage with sand, earth or other suitable non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible.

6.3. Methods and material for containment and cleaning up**Methods for cleaning up**

Stop leak if possible without risk. Ventilate well, stop flow of gas or liquid if possible. Remove ignition sources. Do not allow chemical to enter confined spaces such as sewers due to explosion risk. Sewers designed to preclude formation of explosive concentrations of vapour may be permitted. Use non sparking handtools and explosion-proof electric equipment. Absorb in vermiculite, dry sand or earth and place into containers. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. For waste disposal, see Section 13.

6.4. Reference to other sections**Reference to other sections**

For personal protection, see Section 8. For waste disposal, see Section 13. The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See Section 12 for additional information on ecological hazards.

SECTION 7: Handling and storage 7.1.**Precautions for safe handling**



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Usage precautions Keep away from heat, sparks and open flame. Avoid spilling. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Do not wear contact lenses. Static electricity and formation of sparks must be prevented. During application and drying, solvent vapours will be emitted. Use non sparking handtools and explosion-proof electric equipment. Eye wash facilities and emergency shower must be available when handling this product. Vapours may accumulate on the floor and in low-lying areas. Contaminated rags and cloths must be put in fireproof containers for disposal. Avoid eating, drinking and smoking when using the product. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Avoid contact with oxidising agents. Keep only in the original container.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT

Long-term exposure limit (8-hour TWA): WEL 1000 mg/m³

BUTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m³

Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m³

Carc

The carcinogenic classification only applies if Butane contains more than 0.1% of buta-1,3-diene.

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

WEL = Workplace Exposure Limit.

Carc = Capable of causing cancer and/or heritable genetic damage.

Ingredient comments WEL = Workplace Exposure Limits

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT (CAS: 64742-49-0)

DNEL Industry - Dermal; Long term systemic effects: >300 mg/kg/day Industry
- Inhalation; Long term systemic effects: >2035 mg/kg/day Consumer -
Dermal; Long term systemic effects: >699 mg/kg/day Consumer - Oral;
Long term systemic effects: >699 mg/kg/day Consumer - Inhalation;
Long term systemic effects: >608 mg/m³

PNEC No PNEC available.

BUTANE (CAS: 106-97-8)

DNEL No DNEL available.

PNEC No PNEC available.

PROPAN-2-OL (CAS: 67-63-0)

POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

DNEL

Industry - Inhalation; Long term systemic effects: 500 mg/m³
 Consumer - Dermal; Long term systemic effects: 319 mg/kg/day
 Consumer - Oral; Long term systemic effects: 26 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 89 mg/m³
 Industry - Dermal; Long term systemic effects: 888 mg/kg/day

PNEC

- Fresh water; 140.9 mg/l
- marine water; 140.9 mg/l
- Intermittent release; 140.9 mg/l
- Sediment (Freshwater); 552 mg/kg
- Sediment (Marinewater); 552 mg/kg
- STP; 2251 mg/l
- Soil; 28 mg/kg

ISOBUTANE (CAS: 75-28-5)

DNEL No DNEL available.

PNEC No PNEC available.

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients. Use explosion-proof general and local exhaust ventilation.

Eye/face protection

Contact lenses should not be worn when working with this chemical. Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. If hands are cut or scratched, use gloves chemically resistant to this material even for brief exposures. Use gloves with insulation for thermal protection (EN 407), when needed. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 6 (breakthrough time greater than 480 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 2 or higher (breakthrough time greater than 30 minutes according to EN 374) is recommended. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other skin and body protection

Use engineering controls to reduce air contamination to permissible exposure level. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station and safety shower.

Hygiene measures

Provide eyewash station. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly if skin becomes contaminated. Do not eat, drink or smoke when using this product.



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Respiratory protection	Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. Use CE approved air-purifying respirator with combination filter type A1P2 minimum.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Colour Odour	Aerosol.
Initial boiling point and range	Colourless.
Flash point	Characteristic. Organic solvents. Hydrocarbons. BOILING
Upper/lower flammability or explosive limits	POINT RANGE 65°C TO 95°C @ 760 mm Hg Below minus 15°C
Vapour pressure	Closed cup.
Relative density	Lower flammable/explosive limit: 1.0 %
Solubility(ies)	12.5 kPa @ 20°C
Auto-ignition temperature	0.687 @ 20°C
Viscosity	Practically insoluble in Water. Some of the Isopropanol may partition into water.
Comments	400°C
9.2. Other information	0.5 cSt @ 20°C
Refractive index	Information given concerns the concentrated solution.
Volatility	1.378
	100% Highly volatile.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	No particular stability concerns. Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Will not polymerise.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Strong oxidising agents. Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
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10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects This product has low toxicity. Only large quantities are likely to have adverse effects on human health. There is

Other health effects no evidence that the product can cause cancer.

General information To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing. Vapours have a narcotic effect. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting. Prolonged inhalation of high concentrations may damage respiratory system.

Skin contact Product has a defatting effect on skin. May cause skin irritation/eczema. Repeated exposure may cause skin dryness or cracking.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain.

Route of exposure

Inhalation

Toxicological information on ingredients.

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,841.0

Species Rat

ATE oral (mg/kg) 5,841.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,921.0

Species Rat

ATE dermal (mg/kg) 2,921.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 23.5

Species Rat

ATE inhalation (vapours mg/l) 23.5

Skin corrosion/irritation 23.5



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POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

Animal data	Irritating.
Serious eye damage/irritation	
Serious eye damage/irritation	Not classified. May cause slight transient irritation.
Skin sensitisation	
Skin sensitisation	Not considered to be a skin sensitizer
Germ cell mutagenicity	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	Negative.
Carcinogenicity	
Carcinogenicity	The current toxicological knowledge allows to not classify the product as a carcinogen.
Reproductive toxicity	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies. No
Reproductive toxicity - development	evidence of reproductive toxicity in animal studies.
Specific target organ toxicity - single exposure	
STOT - single exposure	No information available.
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	No known effects based on information supplied.
Target organs	Central nervous system
Aspiration hazard	
Aspiration hazard	The fluid can enter the lungs and cause damage (chemical pneumonitis, possibly fatal).
Inhalation	Vapours may cause drowsiness and dizziness.
Ingestion	Avoid vomiting and stomach flushing because of the risk of aspiration. Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.
Skin contact	Irritating to skin.
Eye contact	May cause temporary eye irritation.

BUTANE

Acute toxicity - oral	
Notes (oral LD ₅₀)	No information available.
Acute toxicity - dermal	
Notes (dermal LD ₅₀)	No information available.
Acute toxicity - inhalation	Acute toxicity
inhalation (LC ₅₀ vapours mg/l)	658.0
Species	Rat



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POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

Animal data	Irritating.
Serious eye damage/irritation	
Serious eye damage/irritation	Not classified. May cause slight transient irritation.
Skin sensitisation	
Skin sensitisation	Not considered to be a skin sensitizer
Germ cell mutagenicity	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	Negative.
Carcinogenicity	
Carcinogenicity	The current toxicological knowledge allows to not classify the product as a carcinogen.
Reproductive toxicity	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.
Reproductive toxicity - development	No evidence of reproductive toxicity in animal studies.
Specific target organ toxicity - single exposure	
STOT - single exposure	No information available.
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	No known effects based on information supplied.
Target organs	Central nervous system
Aspiration hazard	
Aspiration hazard	The fluid can enter the lungs and cause damage (chemical pneumonitis, possibly fatal).
Inhalation	Vapours may cause drowsiness and dizziness.
Ingestion	Avoid vomiting and stomach flushing because of the risk of aspiration. Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.
Skin contact	Irritating to skin.
Eye contact	May cause temporary eye irritation.

BUTANE

Acute toxicity - oral	
Notes (oral LD ₅₀)	No information available.
Acute toxicity - dermal	
Notes (dermal LD ₅₀)	No information available.
Acute toxicity - inhalation	
Acute toxicity inhalation (LC ₅₀ vapours mg/l)	658.0
Species	Rat



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POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg)
Species

16.4
Rabbit Rabbit

ATE dermal (mg/kg)

12,874.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l)
Species

25.5

ATE inhalation (vapours mg/l)

Rat

Skin corrosion/irritation

25.5

Animal data

Serious eye damage/irritation

Not irritating.

Serious eye damage/irritation

Respiratory sensitisation

Rabbit eyes: Severe eye irritation.

Respiratory sensitisation

Skin sensitisation

Not available.

Skin sensitisation

Germ cell mutagenicity

Not considered to be a skin sensitizer

Genotoxicity - in vitro

Genotoxicity - in vivo

Negative.

Reproductive toxicity

Negative.

Reproductive toxicity - fertility

Reproductive toxicity - development

Does not interfere with fertility.

Specific target organ toxicity -

No evidence of reproductive toxicity in animal studies.

single exposure

STOT - single exposure

Inhalation: May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

Oral and inhalation repeated exposure studies demonstrated target organ effects in male rats (kidney) and male/female mice (thyroid) by mechanisms of action that are not relevant to humans. Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard

Aspiration hazard if swallowed. The fluid can enter the lungs and cause damage (chemical pneumonitis, possibly fatal).

Inhalation

Drowsiness, dizziness, disorientation, vertigo. No

Ingestion

specific health hazards known.



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Skin contact	No specific health hazards known.
Eye contact	Irritating to eyes. Splashes in eyes may cause strong pain. Vapour acts as irritant.
Acute and chronic health hazards	Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

ISOBUTANE

Acute toxicity - oral	
Notes (oral LD ₅₀)	No information available.
Acute toxicity - dermal	
Notes (dermal LD ₅₀)	No information available.
Acute toxicity - inhalation	Acute
toxicity inhalation (LC ₅₀ vapours mg/l)	31.0
Species	Rat
ATE inhalation (vapours mg/l)	31.0
Skin corrosion/irritation	
Animal data	
Serious eye damage/irritation	Not irritating.
Serious eye damage/irritation	
Respiratory sensitisation	Not irritating.
Respiratory sensitisation	
Skin sensitisation	Not expected to be a sensitizer.
Skin sensitisation	
Germ cell mutagenicity	Not considered to be a skin sensitizer
Genotoxicity - in vitro	
Genotoxicity - in vivo	Negative.
Carcinogenicity	Negative.
Carcinogenicity	
IARC carcinogenicity	This substance has no evidence of carcinogenic properties.
	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
Reproductive toxicity	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.
Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction.
Specific target organ toxicity - single exposure	
STOT - single exposure	No information available.
Specific target organ toxicity - repeated exposure	



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STOT - repeated exposure	No information available.
Aspiration hazard	
Aspiration hazard	No data available.
Inhalation	In low concentrations may cause narcotic effects, dizziness, headache, nausea, loss of co-ordination and irregular cardiac activity. In high concentrations may cause loss of mobility/consciousness and it may cause asphyxiation.

PROPANE

Acute toxicity - inhalation	Acute
toxicity inhalation (LC ₅₀)	800,000.0
gases ppmV)	
Species	Rat
ATE inhalation (gases ppm)	800,000.0
Skin corrosion/irritation	
Animal data	Not irritating.
Serious eye damage/irritation	
Serious eye damage/irritation	Not irritating.
Respiratory sensitisation	
Respiratory sensitisation	Not expected to be a sensitizer.
Skin sensitisation	
Skin sensitisation	Not considered to be a skin sensitizer
Germ cell mutagenicity	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	Negative.
Carcinogenicity	
IARC carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
Reproductive toxicity	
Reproductive toxicity - fertility	No evidence of reproductive toxicity in animal studies.
Reproductive toxicity - development	This substance has no evidence of toxicity to reproduction.
Specific target organ toxicity - single exposure	
STOT - single exposure	High concentrations may cause central nervous system depression resulting in headache, dizziness, and nausea. Continued inhalation may result in unconsciousness and/or death.
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	No known effects based on information supplied.
Aspiration hazard	



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Aspiration hazard	No data available.
General information	RTECS Number: TX2275000.
Inhalation	High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea. Continued inhalation may result in unconsciousness and/or death.

SECTION 12: Ecological information

Ecotoxicity	The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.
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Ecological information on ingredients.

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT

Ecotoxicity	The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.
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12.1. Toxicity

Ecological information on ingredients.

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT

Acute aquatic toxicity	
Acute toxicity - fish	LL ₅₀ , 96 hours: 11.4 mg/l, Oncorhynchus mykiss (Rainbow trout) LC ₅₀ , 48 hours: 3 mg/l, Daphnia magna
Acute toxicity - aquatic invertebrates	EC ₅₀ , 72 hours: 10 mg/l, Freshwater algae
Acute toxicity - aquatic plants	
Chronic aquatic toxicity	NOEC, 28 days: 1.534 mg/l, Oncorhynchus mykiss (Rainbow trout)
Chronic toxicity - fish early life stage	NOEC, 21 days: 1 mg/l, Daphnia magna
Chronic toxicity - aquatic invertebrates	

BUTANE

Acute aquatic toxicity	
Acute toxicity - fish	LC ₅₀ , 96 hours: 24.11 mg/l, Fish
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hours: 14.22 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: 7.71 mg/l, Freshwater algae

PROPAN-2-OL

Acute aquatic toxicity	
Acute toxicity - fish	LC ₅₀ , 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow) EC ₅₀ , 24 hours: 9714 mg/l, Daphnia magna
Acute toxicity - aquatic invertebrates	

MISWA CHEMICALS - POLYGARD - BRAKE CLEANER**POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)**

Acute toxicity - aquatic plants EC₅₀, 72 hours: > 1000 mg/l, *Scenedesmus subspicatus* EC₅₀,

Acute toxicity - microorganisms : > 1000 mg/l, Activated sludge

ISOBUTANE

Toxicity No known ecological damage caused by this product.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 27.98 mg/l, Fish

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 16.33 mg/l, *Daphnia magna*

Acute toxicity - aquatic plants EC₅₀, 96 hours: 8.57 mg/l, Algae

PROPANE

Toxicity No known ecological damage caused by this product.

Acute aquatic toxicity

Acute toxicity - fish Physical properties indicate that petroleum gasses will rapidly volatilise from the aquatic environment and that acute and chronic effects would not be observed in practice.

Acute toxicity - aquatic invertebrates Physical properties indicate that petroleum gasses will rapidly volatilise from the aquatic environment and that acute and chronic effects would not be observed in practice.

Acute toxicity - aquatic plants Physical properties indicate that petroleum gasses will rapidly volatilise from the aquatic environment and that acute and chronic effects would not be observed in practice.

12.2. Persistence and degradability

Persistence and degradability The product is degraded completely by photochemical oxidation. Volatile substances are degraded in the atmosphere within a few days.

Ecological information on ingredients.

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT

Persistence and degradability The substance is readily biodegradable. -

Biodegradation Degradation (%) 98: 28 days

BUTANE

Biodegradation The substance is readily biodegradable.

PROPAN-2-OL

Persistence and degradability The product is expected to be biodegradable.

Biodegradation Water - Degradation (%) 95%: 21 days

ISOBUTANE

Persistence and degradability No data available.



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MISWA CHEMICALS - POLYGARD - BRAKE CLEANER

POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

PROPANE

Persistence and degradability The product is readily biodegradable. The product is degraded completely by photochemical oxidation.

12.3. Bioaccumulative potential

Bioaccumulative potential The product contains potentially bioaccumulating substances. Accumulates in soil and sediment.

Ecological information on ingredients.

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT

Bioaccumulative potential Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

BUTANE

Bioaccumulative potential The product is not bioaccumulating.

PROPAN-2-OL

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: 0.05

ISOBUTANE

Bioaccumulative potential The product is not bioaccumulating.

PROPANE

Bioaccumulative potential The product is not bioaccumulating.

12.4. Mobility in soil

Mobility The product contains substances which are insoluble in water and which may spread on water surfaces. The product contains environmentally hazardous substances which are bound to particulate matter and are retained in sediments.

Ecological information on ingredients.

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT

Mobility Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

BUTANE

Mobility No data available.

PROPAN-2-OL

Mobility The product is soluble in water.



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MISWA CHEMICALS - POLYGARD - BRAKE CLEANER

POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

Adsorption/desorption coefficient Water - Koc: ~ 1.1 @ °C

Henry's law constant 0.00000338 atm m³/mol @ 25°C

ISOBUTANE

Mobility No data available.

PROPANE

Mobility Not relevant, due to the form of the product.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

BUTANE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

PROPAN-2-OL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

ISOBUTANE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

PROPANE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

12.6. Other adverse effects

Other adverse effects Not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.



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MISWA CHEMICALS - POLYGARD - BRAKE CLEANER

POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

Disposal methods	Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor.
Waste class	Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number	
UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950
UN No. (ADN)	1950
14.2. UN proper shipping name	
Proper shipping name (ADR/RID)	AEROSOLS (CONTAINS NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT) AEROSOLS
Proper shipping name (IMDG)	(CONTAINS NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT) AEROSOLS (CONTAINS
Proper shipping name (ICAO)	NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT) AEROSOLS (CONTAINS NAPHTHA
Proper shipping name (ADN)	(PETROLEUM), HYDROTREATED, LIGHT)
14.3. Transport hazard class(es)	
ADR/RID class	2.1
ADR/RID classification code	5F
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1
ICAO subsidiary risk	N/A
ADN class	2.1
Transport labels	
	
14.4. Packing group ADR/RID	
packing group	None
IMDG packing group	None
ICAO packing group	None
ADN packing group	None
14.5. Environmental hazards	



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MISWA CHEMICALS - POLYGARD - BRAKE CLEANER

POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-D, S-U

ADR transport category 2

Emergency Action Code N/A

Tunnel restriction code (D)

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

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 regulations/legislation specific for the substance or mixture

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EH40/2005 Workplace exposure limits.
The Aerosol Dispensers Regulations 2009 (SI 2009 No. 2824).

Guidance Workplace Exposure Limits EH40.
Introduction to Local Exhaust Ventilation HS(G)37.
CHIP for everyone HSG228.
Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision. HS&E

Issued by Manager.

Revision date 22/09/2023

Revision Supersedes 6

date SDS status 05/11/2018

Approved.



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Safety Data Sheet (SDS)

MISWA CHEMICALS - POLYGARD - BRAKE CLEANER

POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

Hazard statements in full

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: may burst if heated.
H280 Contains gas under pressure; may explode if heated. H304
May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

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