



Miswa Chemicals Ltd.



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)
Product number 12212, 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
Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Hazard pictograms



Signal word

Danger

Hazard 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.



Miswa Chemicals Ltd.



POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

PROPAN-2-OL	10-30%
CAS 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.
Inhalation	Vapours may cause headache, fatigue, dizziness and nausea.
Ingestion	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.
Skin contact	Skin irritation.
Eye contact	May cause temporary eye irritation.

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.
----------------------	---

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 (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.



Miswa Chemicals Ltd.



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



Miswa Chemicals Ltd.



POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

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)



Miswa Chemicals Ltd.



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.



Miswa Chemicals Ltd.



POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

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

9.2. Other information

Refractive index	1.378
Volatility	100% Highly volatile.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
------------	---

10.2. Chemical stability

Stability	No particular stability concerns. Stable at normal ambient temperatures and when used as recommended.
-----------	---

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.
------------------------------------	--

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.
---------------------	---



Miswa Chemicals Ltd.



POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

10.6. Hazardous decomposition products

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

Other health effects There is 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 5,841.0
mg/kg)

Species Rat

ATE oral (mg/kg) 5,841.0

Acute toxicity - dermal

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

Species Rat

ATE dermal (mg/kg) 2,921.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ 23.5
vapours mg/l)

Species Rat

ATE inhalation (vapours mg/l) 23.5

Skin corrosion/irritation



Miswa Chemicals Ltd.



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



Miswa Chemicals Ltd.



POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

ATE inhalation (vapours mg/l)	658.0
Skin corrosion/irritation	
Animal data	Not irritating.
Serious eye damage/irritation	
Serious eye damage/irritation	Not irritating.
Respiratory sensitisation	
Respiratory sensitisation	No known effects from this product.
Skin sensitisation	
Skin sensitisation	No known effects from this product.
Germ cell mutagenicity	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	Negative.
Carcinogenicity	
Carcinogenicity	No information available.
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	Based on available data the classification criteria are not met.
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	Based on available data the classification criteria are not met.
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.

PROPAN-2-OL

Acute toxicity - oral	
Acute toxicity oral (LD ₅₀ mg/kg)	5,840.0
Species	Rat Rat
Notes (oral LD ₅₀)	
ATE oral (mg/kg)	5,840.0



Miswa Chemicals Ltd.



POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 16.4

Species Rabbit Rabbit

ATE dermal (mg/kg) 12,874.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 25.5

Species Rat

ATE inhalation (vapours mg/l) 25.5

Skin corrosion/irritation

Animal data Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Rabbit eyes: Severe eye irritation.

Respiratory sensitisation

Respiratory sensitisation Not available.

Skin sensitisation

Skin sensitisation Not considered to be a skin sensitizer

Germ cell mutagenicity

Genotoxicity - in vitro Negative.

Genotoxicity - in vivo Negative.

Reproductive toxicity

Reproductive toxicity - fertility Does not interfere with fertility.

Reproductive toxicity - development No evidence of reproductive toxicity in animal studies.

Specific target organ toxicity - 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.

Ingestion No specific health hazards known.



Miswa Chemicals Ltd.



POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

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	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	
Carcinogenicity	This substance has no evidence of carcinogenic properties.
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	No information available.
Specific target organ toxicity - repeated exposure	



Miswa Chemicals Ltd.



POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

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 coordination 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 (LC₅₀ gases ppmV) 800,000.0

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



Miswa Chemicals Ltd.



POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

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.

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.

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

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)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 24 hours: 9714 mg/l, Daphnia magna



Miswa Chemicals Ltd.



POLYGARD BRAKE & CLUTCH CLEANER (AEROSOL)

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



Miswa Chemicals Ltd.



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.



Miswa Chemicals Ltd.



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.



Miswa Chemicals Ltd.



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)
Proper shipping name (IMDG)	AEROSOLS (CONTAINS NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT)
Proper shipping name (ICAO)	AEROSOLS (CONTAINS NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT)
Proper shipping name (ADN)	AEROSOLS (CONTAINS NAPHTHA (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



Miswa Chemicals Ltd.



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.
Issued by	HS&E Manager.
Revision date	22/09/2023
Revision	6
Supersedes date	05/11/2018
SDS status	Approved.



Miswa Chemicals Ltd.



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.