



SAFETY DATA SHEET POLYGARD BRAKE & CLUTCH CLEANER

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

1.1. Product identifier

Product name	POLYGARD BRAKE & CLUTCH CLEANER
Product number	12200,12204,12215,12504
Internal identification	B12911
Container size	1 Litre Cans to 25 Litre Drums

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
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1.4. Emergency telephone number

Emergency telephone	T: +44 (0)1604 701111 (Miswa Office Hours Monday - Friday (0900Hrs - 1700Hrs))
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards	Flam. Liq. 2 - H225
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H336 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 2 - H411

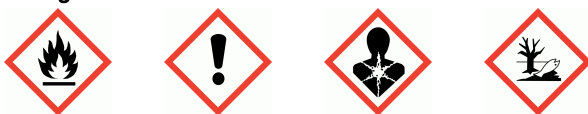
Classification (67/548/EEC or 1999/45/EC) Xn;R65. Xi;R36/38. F;R11. N;R51/53. R67.

Human health	Vapours and spray/mists in high concentrations are narcotic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Nausea, vomiting. Irritating to eyes. Repeated exposure may cause skin dryness or cracking.
Environmental	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Physicochemical	The product is highly flammable. Vapours may form explosive mixtures with air.

POLYGARD BRAKE & CLUTCH CLEANER

2.2. Label elements

Pictogram



Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour.
 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.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 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.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 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 CENTER/doctor if you feel unwell.
 P321 Specific treatment (see medical advice on this label).
 P331 Do NOT induce vomiting.
 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.
 P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
 P391 Collect spillage.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with national regulations.
 P102 Keep out of reach of children.

Contains

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

Detergent labelling

≥ 30% aliphatic hydrocarbons

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

POLYGARD BRAKE & CLUTCH CLEANER

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT		60-100%
CAS number: 64742-49-0	REACH registration number: 01-2119475514-35-XXXX	
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 2 - H225	Xn;R65. Xi;R38. F;R11. N;R51/53. R67.	
Skin Irrit. 2 - H315		
STOT SE 3 - H336		
Asp. Tox. 1 - H304		
Aquatic Chronic 2 - H411		
PROPAN-2-OL		10-30%
CAS number: 67-63-0	EC number: 200-661-7	REACH registration number: 01-2119457558-25-XXXX
Classification	Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 2 - H225	F;R11 Xi;R36 R67	
Eye Irrit. 2 - H319		
STOT SE 3 - H336		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Remove affected person from source of contamination. Keep affected person away from heat, sparks and flames. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. 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. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration.
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. Place unconscious person on their side in the recovery position and ensure breathing can take place. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

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

POLYGARD BRAKE & CLUTCH CLEANER

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: Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemicals, sand, dolomite etc.

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

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

Protective actions during firefighting Be aware of danger 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. Avoid the spillage or runoff entering drains, sewers or watercourses. If risk of water pollution occurs, notify appropriate authorities.

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

POLYGARD BRAKE & CLUTCH CLEANER

Environmental precautions Do not discharge into drains or watercourses or onto the ground. 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. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. 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.

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. Wash thoroughly after dealing with a spillage.

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

Usage precautions Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Use non sparking handtools and explosion-proof electric equipment. Avoid spilling. Do not wear contact lenses. Avoid inhalation of vapours and spray/mists. Keep away from heat, sparks and open flame. Static electricity and formation of sparks must be prevented. Eye wash facilities and emergency shower must be available when handling this product. During application and drying, solvent vapours will be emitted. 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. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Do not use in confined spaces without adequate ventilation and/or respirator. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep separate from food, feedstuffs, fertilisers and other sensitive material. Avoid contact with oxidising agents. Earth container and transfer equipment to eliminate sparks from static electricity. 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

POLYGARD BRAKE & CLUTCH CLEANER

8.1. Control parameters

Occupational exposure limits

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT

No exposure limit value known.

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

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/m ³
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PNEC	No PNEC available.
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PROPAN-2-OL (CAS: 67-63-0)

DNEL	Industry - Inhalation; Long term systemic effects: 500 mg/m ³ 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/m ³ Industry - Dermal; Long term systemic effects: 888 mg/kg/day
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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
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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.

POLYGARD BRAKE & CLUTCH CLEANER

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. Wash promptly if skin becomes contaminated. Promptly remove non-impervious clothing that becomes contaminated. Do not eat, drink or smoke when using this product.
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 the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2.
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	Clear liquid.
Colour	Colourless.
Odour	Characteristic. Organic solvents. Hydrocarbons.
Initial boiling point and range	65°C to 95°C @ 760 mm Hg
Flash point	Below minus 15°C CC (Closed cup).
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 1.0 % Upper flammable/explosive limit: 12.0 %
Vapour pressure	12.5 kPa @ 20°C
Relative density	0.687g/ml @ 20°C
Solubility(ies)	Practically insoluble in Water. Some of the Isopropanol may partition into water.
Auto-ignition temperature	400°C

POLYGARD BRAKE & CLUTCH CLEANER

Viscosity	0.5 cSt @ 20°C
Comments	Information given is applicable to the product as supplied.
9.2. Other information	
Refractive index	1.378
Volatility	Highly volatile.
Volatile organic compound	This product contains a maximum VOC content of 687 g/l.

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. Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

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.

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.

Ingestion Gastrointestinal symptoms, including upset stomach. Pneumonia may be the result if vomited material containing solvents reaches the lungs.

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

POLYGARD BRAKE & CLUTCH CLEANER

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

Toxicological information on ingredients.

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,840.0

Species Rat Rat

ATE oral (mg/kg) 5,841.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,920.0

Species Rat Rat

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 23.5

Species Rat

ATE inhalation (vapours mg/l) 23.5

Skin corrosion/irritation

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

POLYGARD BRAKE & CLUTCH CLEANER

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.

PROPAN-2-OL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,840.0

Species Rat Rat

Notes (oral LD₅₀)

ATE oral (mg/kg) 5,840.0

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.

POLYGARD BRAKE & CLUTCH CLEANER

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.

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.

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

POLYGARD BRAKE & CLUTCH CLEANER

Toxicity The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Ecological information on ingredients.

NAPHTHA (PETROLEUM), HYDROTREATED, LIGHT

Acute toxicity - fish	LL ₅₀ , 96 hours: 11.4 mg/l, Onchorhynchus 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 toxicity - fish early life stage	NOEC, 28 days, 28 days: 1.534 mg/l, Onchorhynchus mykiss (Rainbow trout)
Chronic toxicity - aquatic invertebrates	NOEC, 21 days, 21 days: 1 mg/l, Daphnia magna

PROPAN-2-OL

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
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours, 72 hours: > 1000 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	EC ₅₀ , : > 1000 mg/l, Activated sludge

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

PROPAN-2-OL

Persistence and degradability	The product is expected to be biodegradable.
Biodegradation	- Degradation (%) 95%: 21 days

12.3. Bioaccumulative potential

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

Ecological information on ingredients.

POLYGARD BRAKE & CLUTCH CLEANER

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.

PROPAN-2-OL

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: 0.05

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.

PROPAN-2-OL

Mobility The product is soluble in water.

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

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

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.

PROPAN-2-OL

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

12.6. Other adverse effects

Other adverse effects Not applicable.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

POLYGARD BRAKE & CLUTCH CLEANER

General information	Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Disposal methods	Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Containers should be thoroughly emptied before disposal because of the risk of an explosion.
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)	1993
UN No. (IMDG)	1993
UN No. (ICAO)	1993
UN No. (ADN)	1993

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	FLAMMABLE LIQUID, N.O.S. (NAPTHA (PETROLEUM), HYDROTREATED, LIGHT)
Proper shipping name (IMDG)	FLAMMABLE LIQUID, N.O.S. (NAPTHA (PETROLEUM), HYDROTREATED, LIGHT)
Proper shipping name (ICAO)	FLAMMABLE LIQUID, N.O.S. (NAPTHA (PETROLEUM), HYDROTREATED, LIGHT)
Proper shipping name (ADN)	FLAMMABLE LIQUID, N.O.S. (NAPTHA (PETROLEUM), HYDROTREATED, LIGHT)

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ADN packing group	II
ICAO packing group	II

14.5. Environmental hazards

POLYGARD BRAKE & CLUTCH CLEANER

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-E, S-E
ADR transport category	2
Emergency Action Code	•3YE
Hazard Identification Number (ADR/RID)	33
Tunnel restriction code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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.
EU legislation	Dangerous Substances Directive 67/548/EEC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	Approved Classification and Labelling Guide (Sixth edition) L131. CHIP for everyone HSG228. Introduction to Local Exhaust Ventilation HS(G)37. Workplace Exposure Limits EH40.

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	29/05/2015
Revision	4
Supersedes date	02/07/2014
SDS status	Approved.

POLYGARD BRAKE & CLUTCH CLEANER

Risk phrases in full

R11 Highly flammable.
R36 Irritating to eyes.
R36/38 Irritating to eyes and skin.
R38 Irritating to skin.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.

Hazard statements in full

H225 Highly flammable liquid and vapour.
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.