

Purasolve Brake Cleaner

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)
Issue date: 7/17/2023 Version: 1.0



SECTION 1: Identification

1.1. Product identifier

Product name : Purasolve Brake Cleaner
Product code : ENVIR012

1.2. Recommended use and restrictions on use

Recommended use : Low corrosive cleaning agent for brakes and components. Slow evaporating general purpose degreaser for longer contact time. Replacement for dangerous aerosols. High flash point (44 oC), low vapour pressure solvent with no overpowering toxic fumes. Highly purified safety that is free of light aromatics.

Restrictions on use : Not to be used for any purpose other than the one the product was designed for

1.3. Supplier

Envirofluid Inc.
1629 K Street N.W., Suite 300
Washington DC
USA

1.4. Emergency telephone number

+1 (202) 869 8240

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Flammable liquids, Category 3	H226	Flammable liquid and vapour.
Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
Aspiration hazard, Category 1	H304	May be fatal if swallowed and enters airways.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

Hazard pictograms (GHS CA) :



Signal word (GHS CA) : Danger

Hazard statements (GHS CA) : H226 - Flammable liquid and vapour.
H304 - May be fatal if swallowed and enters airways.
H317 - May cause an allergic skin reaction.

Precautionary statements (GHS CA) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P242 - Use only non-sparking tools.

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P243 - Take action to prevent static discharges.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or 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 .
P321 - Specific treatment (see supplemental first aid instruction on this label).
P331 - Do NOT induce vomiting.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Naphtha (petroleum), hydrotreated heavy	Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C6 through C13 and boiling in the range of approximately 65°C to 230°C (149°F to 446°F).]	CAS-No.: 64742-48-9	70	Flam. Liq. 3, H226 Asp. Tox. 1, H304
(R)-p-mentha-1,8-diene; d-limonene	(R)-p-mentha-1,8-diene; d-limonene	CAS-No.: 5989-27-5	5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. In case of skin burns: Immediately flood the burnt area with plenty of water, but do not pick off anything stuck to the skin. Chemical burns must be treated promptly by a physician. Chemical burns must be treated promptly by a physician. Take off contaminated clothing. Take off immediately all contaminated clothing and wash it before reuse. Take off contaminated clothing and wash it before reuse. Wash skin with plenty of water.
- First-aid measures after eye contact : Rinse eyes with water as a precaution. Rinse immediately with plenty of water. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

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First-aid measures after ingestion : Call a physician immediately. Do not induce vomiting. Rinse mouth. Do not induce vomiting because of corrosive effects.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Unsuitable extinguishing media are not known. Do not use a heavy water stream.

5.3. Specific hazards arising from the hazardous product

Hazardous decomposition products in case of fire : Toxic fumes may be released. Thermal decomposition can lead to the release of irritating gases and vapours. Water vapours are released.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Keep upwind. Fight fire from safe distance and protected location.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : No action shall be taken without appropriate training or involving any personal risk. Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. Minimise generation of dust.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Dust may form flammable and explosive mixture with air.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment. Does not require any specific or particular technical measures.

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Storage conditions	: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Storage area	: Keep out of direct sunlight.
Information on mixed storage	: Store away from incompatible materials and products. Refer to the detailed list of incompatible materials in section 10 Stability/Reactivity.
Special rules on packaging	: Position containers so that any labelling information is visible. Keep packaging closed when not in use. Check containers and packaging regularly for leaks and damage.
Packaging materials	: Keep only in original packaging.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Use spark-/explosionproof appliances and lighting system. Use grounded electrical/mechanical equipment.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Personal protective equipment (PPE) must be suited to the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves: Antistatic gloves

Eye protection:

Wear eye protection: Chemical goggles or safety glasses. Safety glasses

Skin and body protection:

Wear foot protection: antistatic boots. Wear protective clothing: Antistatic clothing, Flame retardant protective clothing

Respiratory protection:

Wear appropriate mask: Combined gas/dust mask with filter type

Personal protective equipment symbol(s):



Other information:

PPE compliant with the recommended standards should be selected.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: No data available
Colour	: Colourless
Odour	: Mild citrus characteristic
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 171 °C
Flash point	: 44 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20°C	: > 4
Relative density	: 0.77
Solubility	: Miscible with water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: < 10 mm ² /s
Explosive properties	: Dust may form explosive mixture in air.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity	: No additional information available
Chemical stability	: No additional information available
Possibility of hazardous reactions	: No additional information available
Conditions to avoid	: No additional information available
Incompatible materials	: Strong acids. Strong bases. Strong oxidizers.
Hazardous decomposition products	: No additional information available
Hardening time:	: No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)

LD50 oral rat	5000 mg/kg Source: National Library of Medicine/Hazardous Substances Data Bank
LD50 dermal rabbit	> 5000 mg/kg Source: National Library of Medicine
ATE CA (oral)	5000 mg/kg bodyweight

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Naphtha (petroleum), hydrotreated heavy (64742-48-9)

LD50 oral rat > 15000 mg/kg Source: IUCLID

LD50 dermal rabbit > 3160 mg/kg Source: IUCLID

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)

IARC group 3 - Not classifiable

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : May be fatal if swallowed and enters airways.

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Viscosity, kinematic < 10 mm²/s

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)

Viscosity, kinematic < 10 mm²/s

Animal studies and expert judgment for classification False

Naphtha (petroleum), hydrotreated heavy (64742-48-9)

Viscosity, kinematic < 1 mm²/s Temp.: 'other:' Parameter: 'kinematic viscosity (in mm²/s)'

Animal studies and expert judgment for classification False

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)

LC50 - Fish [1] 0.7 mg/l Source: The ECOTOXicology database

LC50 - Fish [2] 702 µg/l Test organisms (species): Pimephales promelas

EC50 - Crustacea [1] 0.307 mg/l Source: ECHA Registered substances

EC50 - Daphnia [2] 0.51 mg/l Test organisms (species): Daphnia magna

EC50 72h - Algae [1] 0.32 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

EC50 72h - Algae [2] 0.214 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

Naphtha (petroleum), hydrotreated heavy (64742-48-9)

LC50 - Fish [1] 2200 mg/l Source: IUCLID

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Naphtha (petroleum), hydrotreated heavy (64742-48-9)

LC50 - Other aquatic organisms [1]	2.6 mg/l Source: IUCLID
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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)

Partition coefficient n-octanol/water (Log Pow)	4.38 Source: ECHA Registered substances
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Naphtha (petroleum), hydrotreated heavy (64742-48-9)

Partition coefficient n-octanol/water (Log Pow)	2.1 – 6 Source: IUCLID
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12.4. Mobility in soil

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)

Naphtha (petroleum), hydrotreated heavy (64742-48-9)

12.5. Other adverse effects

Ozone : Not classified

SECTION 13: Disposal considerations

13.1. Disposal methods

No additional information available

SECTION 14: Transport information

In accordance with TDG / DOT / IMDG / IATA

14.1. UN number

UN-No. (TDG)	: UN1993
DOT NA No	: NA1993
UN-No. (IMDG)	: 1993
UN-No. (IATA)	: 1993

14.2. UN proper shipping name

Proper Shipping Name (TDG)	: FLAMMABLE LIQUID, N.O.S.
Proper Shipping Name (DOT)	: Combustible liquid, n.o.s.
Proper Shipping Name (IMDG)	: FLAMMABLE LIQUID, N.O.S.
Proper Shipping Name (IATA)	: Flammable liquid, n.o.s.

14.3. Transport hazard class(es)

TDG

Transport hazard class(es) (TDG)	: 3
Hazard labels (TDG)	: 3

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DOT

Transport hazard class(es) (DOT) : Combustible liquid
:

IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3
:



IATA

Transport hazard class(es) (IATA) : 3
Danger labels (IATA) : 3
:



14.4. Packing group

Packing group (TDG) : III
Packing group (DOT) : III
Packing group (IMDG) : III
Packing group (IATA) : III

14.5. Environmental hazards

Marine pollutant : Yes (IMDG only)



Other information : No supplementary information available.

14.6. Special precautions for user

TDG

UN-No. (TDG) : UN1993

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TDG Special Provisions	: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the hazard or hazards posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A) of Part 3 (Documentation). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4 (Dangerous Goods Safety Marks). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS, 150 - An approved ERAP is required for the dangerous goods referred to in paragraph 7.2(1)(f) of Part 7 (Emergency Response Assistance Plan). SOR-2019-101
Explosive Limit and Limited Quantity Index	: 5 L
Excepted quantities (TDG)	: E1
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 60 L
DOT	
UN-No.(DOT)	: NA1993
DOT Special Provisions (49 CFR 172.102)	: 148 - Except for transportation by aircraft, when transported as a limited quantity or a consumer commodity, the maximum net capacity specified in §173.150(b)(2) of this subchapter for inner packagings may be increased to 5 L (1.3 gallons). IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
IMDG	
Special provisions (IMDG)	: 223, 274, 955
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4

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Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER
Stowage category (IMDG)	: A

IATA

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y344
PCA limited quantity max net quantity (IATA)	: 10L
PCA packing instructions (IATA)	: 355
PCA max net quantity (IATA)	: 60L
CAO packing instructions (IATA)	: 366
CAO max net quantity (IATA)	: 220L
Special provisions (IATA)	: A3
ERG code (IATA)	: 3L

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

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Naphtha (petroleum), hydrotreated heavy (64742-48-9)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Naphtha (petroleum), hydrotreated heavy (64742-48-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

SECTION 16: Other information

Issue date : 07/17/2023

Full text of H-statements:

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

Safety Data Sheet (SDS), Canada

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