

PRODUCT NAME: ABRO Brake and Brake Parts Cleaner Non-Chlorinated
PRODUCT NUMBER/SIZE: BC-750

Rev Date: 2/19/2015

SECTION 1
Identification of the Substance and of the Company/Undertaking

MANUFACTURER'S NAME: ABRO INDUSTRIES, INC.
ADDRESS: 3580 Blackthorn Court
South Bend, IN 46628
USA
PRODUCT DESCRIPTION: Automatic Transmission Conditioner
COMPANY PHONE: 574-232-8289
EMERGENCY 24-HR TELEPHONE: Chemtrec: US/Canada 1-800-424-9300
International +1-703-527-3887

SECTION 2
Hazards Identification

Classification:
Flammable Aerosol 2
Acute Toxicity 3 (Oral)
Acute Toxicity 3 (Dermal)
Skin Irritation 2
Eye Damage 1
Reproductive Toxicity 1B
STOT SE 3
STOT SE 1
STOT RE 2

Label Pictogram(s):



Signal Word: Danger

Hazard Phrases: Flammable aerosol. Toxic if swallowed or in contact with skin. Causes skin irritation. Causes serious eye damage. May cause drowsiness or dizziness. May damage fertility or the unborn child. Causes damage to organs. May cause damage to organs through prolonged or repeated exposure.

Precautionary Phrases: Obtain special instructions. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized

container: Do not pierce or burn, even after use. Do not breathe dust, fumes, gas, mist, vapor spray. Avoid breathing dust, fume, gas, mist, vapor spray. Wash affected areas thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves, protective clothing, eye protection, face protection.

Response: If swallowed: Immediately call a poison control center, doctor, or physician. If on skin: Wash with plenty of soap and water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed: Call a poison center/doctor. If exposed or concerned: Get medical advice/attention. Call a POISON CONTROL CENTER, doctor, if you feel unwell. Specific treatment: See section 4.1 on this label. Rinse mouth. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage / Disposal: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Other: Keep out of reach of children.

SECTION 3 Composition/Information on Ingredients

COMPONENTS	CAS Number	Percent by weight
Methanol	67-56-1	30 - 50
Acetone	67-64-1	10 - 30
Heptane, branched cyclic	426260-76-6	16.4256 - 17.11
Heptane	142-82-5	4.2775 - 7.6995
Carbon Dioxide, liquefied, under pressure	124-38-9	5 - 10
Toluene	108-88-3	1 - 5

SECTION 4 First Aid Measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention. Call a POISON CENTER or doctor/physician.

First-aid measures after inhalation: Cough. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

First-aid measures after skin contact: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Direct contact with the eyes is likely to be irritating. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries: May damage fertility or the unborn child. Causes damage to organs.

Symptoms/injuries after inhalation: Shortness of breath. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin. Causes skin irritation.

Symptoms/injuries after eye contact: Causes serious eye damage.

Symptoms/injuries after ingestion: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

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

No additional information available

SECTION 5 Fire Fighting Measures

5.1. Extinguishing media

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

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

5.2. Special hazards arising from the substance or mixture

Fire hazard: Extremely flammable aerosol. Highly flammable liquid and vapor. Flammable aerosol.

Explosion hazard: May form flammable/explosive vapor-air mixture. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. DO NOT fight fire when fire reaches explosives. Evacuate area.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Other information: Aerosol Level 2.

SECTION 6 Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: No naked lights. No smoking. Isolate from fire, if possible, without unnecessary risk. Remove ignition sources. Use special care to avoid static electric charges.

6.1.1. For non-emergency personnel

Protective equipment: Gloves. Safety glasses.

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection. Avoid breathing dust, fume, gas, mist, vapor spray.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment: Dam up the liquid spill.

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7 **Handling and Storage**

7.1. Precautions for safe handling

Additional hazards when processed: Handle empty containers with care because residual vapors are flammable. Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn, even after use.

Precautions for safe handling: No naked lights. No smoking. Use only non-sparking tools. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not spray on an open flame or other ignition source. Do not handle until all safety precautions have been read and understood. Obtain special instructions. Avoid breathing dust, fume, gas, mist, vapor spray. Use only outdoors or in a well-ventilated area. Do not breathe dust, fumes, gas, mist, vapor spray.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating, lighting equipment. Proper grounding procedures to avoid static electricity should be followed. Storage conditions: Keep only in the original container in a cool, well ventilated place away from: Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place. Keep container tightly closed.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight. Heat sources.

Heat-ignition: KEEP SUBSTANCE AWAY FROM: Heat sources. Ignition sources.

Storage area: Keep out of direct sunlight.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8 **Exposure Controls/Personal Protection**

8.1. Control parameters

Benzene (71-43-2)

USA ACGIH ACGIH TWA (ppm) 1 ppm
USA ACGIH ACGIH STEL (ppm) 5 ppm
USA ACGIH ACGIH Ceiling (ppm) 25 ppm
USA OSHA OSHA PEL (TWA) (ppm) 1 ppm
USA OSHA OSHA PEL (Ceiling) (ppm) 5 ppm
Carbon Dioxide, liquefied, under pressure (124-38-9)

USA ACGIH ACGIH TWA (mg/m³) 9000 mg/m³
USA ACGIH ACGIH TWA (ppm) 5000 ppm
USA ACGIH ACGIH STEL (mg/m³) 54000
USA ACGIH ACGIH STEL (ppm) 30000 ppm
USA OSHA OSHA PEL (TWA) (mg/m³) 9000 mg/m³
USA OSHA OSHA PEL (TWA) (ppm) 5000 ppm

Toluene (108-88-3)

USA ACGIH ACGIH TWA (mg/m³) 37 mg/m³
USA ACGIH ACGIH TWA (ppm) 10 ppm
USA ACGIH ACGIH STEL (mg/m³) 560
USA ACGIH ACGIH STEL (ppm) 150 ppm
USA ACGIH ACGIH Ceiling (ppm) 500 ppm
USA OSHA OSHA PEL (TWA) (ppm) 200 ppm
USA OSHA OSHA PEL (Ceiling) (ppm) 300 ppm

Heptane (142-82-5)

USA ACGIH ACGIH TWA (ppm) 400 ppm
USA ACGIH ACGIH STEL (ppm) 400 ppm

Heptane, branched cyclic (426260-76-6)

USA ACGIH ACGIH TWA (ppm) 400 ppm
USA ACGIH ACGIH STEL (ppm) 500 ppm
USA OSHA OSHA PEL (TWA) (ppm) 500 ppm

Acetone (67-64-1)

USA ACGIH ACGIH TWA (ppm) 500 ppm
USA ACGIH ACGIH STEL (ppm) 500 ppm
USA ACGIH ACGIH TWA (mg/m³) 1200 mg/m³
USA ACGIH ACGIH TWA (ppm) 500 ppm
USA ACGIH ACGIH STEL (mg/m³) 1780 mg/m³
USA ACGIH ACGIH STEL (ppm) 750 ppm
USA ACGIH ACGIH Ceiling (mg/m³) 0 mg/m³
USA ACGIH ACGIH Ceiling (ppm) 3000 ppm
USA OSHA OSHA PEL (TWA) (mg/m³) 2400 mg/m³
USA OSHA OSHA PEL (TWA) (ppm) 1000 ppm

Methanol (67-56-1)

USA ACGIH ACGIH TWA (mg/m³) 260 mg/m³
USA ACGIH ACGIH TWA (ppm) 200 ppm
USA ACGIH ACGIH STEL (mg/m³) 325 mg/m³
USA ACGIH ACGIH STEL (ppm) 250 ppm
USA ACGIH ACGIH Ceiling (ppm) 1000 ppm
USA OSHA OSHA PEL (TWA) (mg/m³) 260 mg/m³
USA OSHA OSHA PEL (TWA) (ppm) 200 ppm

8.2. Exposure controls

Appropriate engineering controls: Local exhaust ventilation, vent hoods.
Personal protective equipment: Gloves. Safety glasses. Avoid all unnecessary exposure.

Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Other information: Do not eat, drink or smoke during use.

SECTION 9 Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical state:	Gas
Appearance:	Colorless to pale yellow liquid.
Color:	Colourless to light yellow.
Odor:	Solvent-like odour.
Odor threshold:	No data available
pH:	7
Relative evaporation rate (butyl acetate=1):	No data available
Melting point:	No data available
Freezing point:	No data available
Boiling point:	56 °C (Lowest Component)
Flash point:	-18 °C (Lowest Component)
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Flammability (solid, gas):	No data available
Vapor pressure:	No data available
Relative vapor density at 20 °C:	No data available
Relative density:	0.82
Solubility:	Poorly soluble in water.
Log Pow:	No data available
Log Kow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available
Explosive limits:	No data available

9.2. Other information

VOC content: 68.8 %

SECTION 10 Stability and Reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Extremely flammable aerosol. Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture. Flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

May release flammable gases. Toxic fume. . Carbon monoxide. Carbon dioxide.

SECTION 11 Toxicological Information

11.1. Information on toxicological effects

Acute toxicity: Toxic if swallowed. Toxic in contact with skin.

Benzene (71-43-2)

LD50 oral rat > 930 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; > 2000 mg/kg bodyweight; Rat; Experimental value)

LD50 dermal rabbit > 8240 mg/kg (Rabbit; Experimental value; 21 CFR 191.10; > 9.4; Rabbit)

LC50 inhalation rat (mg/l) 43.767 mg/l/4h (Rat; Experimental value)

LC50 inhalation rat (ppm) 13700 ppm/4h (Rat; Experimental value)

Toluene (108-88-3)

LD50 oral rat 5580 mg/kg body weight

LD50 dermal rabbit > 5000 mg/kg body weight LD50 quoted as 14.1 mL/kg (12267 mg/kg using density of 0.87)

LC50 inhalation rat (mg/l) > 28.1 mg/l/4h (Rat; Air, Literature study)

Acetone (67-64-1)

LD50 oral rat 5800 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value)

LD50 dermal rabbit 20000 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402)

LC50 inhalation rat (mg/l) 71 mg/l/4h (Rat; Experimental value; 76 mg/l/4h; Rat; Experimental value)

LC50 inhalation rat (ppm) 30000 ppm/4h (Rat; Experimental value)

Heptane (142-82-5)

LD50 oral rat > 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)

LD50 dermal rabbit > 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across)

LC50 inhalation rat (mg/l) 103 mg/l/4h (Rat; Literature study)

LC50 inhalation rat (ppm) 25000 ppm/4h (Rat; Literature study)

Heptane, branched cyclic (426260-76-6)

LD50 oral rat > 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)

LD50 dermal rabbit > 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across)

LC50 inhalation rat (mg/l) 103 mg/l/4h (Rat; Literature study)

LC50 inhalation rat (ppm) 25000 ppm/4h (Rat; Literature study)

Methanol (67-56-1)

LD50 oral rat >= 2528 mg/kg body weight application as 50% aqueous solution

LD50 dermal rabbit 17100 mg/kg corresponding to 20 ml/kg bw according to the authors

LC50 inhalation rat (mg/l) 128.2 mg/l/4h Air

Skin corrosion/irritation: Causes skin irritation. pH: 7
Serious eye damage/irritation: Causes serious eye damage. pH: 7
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified. Based on available data, the classification criteria are not met
Carcinogenicity: Not classified

Benzene (71-43-2)

IARC group 1

Toluene (108-88-3)

IARC group 3

Reproductive toxicity: May damage fertility or the unborn child. Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure): May cause drowsiness or dizziness. Causes damage to organs.

Specific target organ toxicity (repeated exposure): May cause damage to organs through prolonged or repeated exposure. Based on available data, the classification criteria are not met May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Not classified. Based on available data, the classification criteria are not met

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met. Toxic if swallowed. Toxic in contact with skin.

Symptoms/injuries after inhalation: Shortness of breath. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin. Causes skin irritation.

Symptoms/injuries after eye contact: Causes serious eye damage.

Symptoms/injuries after ingestion: Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12 Ecological Information

12.1. Toxicity

Benzene (71-43-2)

LC50 fish 1 5.3 mg/l 96 h; *Salmo gairdneri* (*Oncorhynchus mykiss*)
EC50 *Daphnia* 1 18 mg/l (24 h; *Daphnia magna*)
EC50 other aquatic organisms 1 29 mg/l (72 h; *Selenastrum capricornutum*)
LC50 fish 2 15.1 mg/l (96 h; *Pimephales promelas*)
EC50 *Daphnia* 2 10 mg/l (48 h; *Daphnia magna*)
TLM fish 1 22.5 mg/l (96 h; *Lepomis macrochirus*; Soft water)
TLM fish 2 32 mg/l (96 h; *Pimephales promelas*; Hard water)
TLM other aquatic organisms 1 10 - 100, 96 h
Threshold limit algae 2 50 mg/l (24 h; *Phaeodactylum*; Photosynthesis)

Carbon dioxide, liquefied, under pressure (124-38-9)

LC50 fish 1 35 mg/l (96 h; *Salmo gairdneri* (*Oncorhynchus mykiss*); Lethal)

LC50 fish 2 60 - 240 mg/l (12 h; *Salmo gairdneri* (*Oncorhynchus mykiss*); Lethal)

Toluene (108-88-3)

LC50 fish 1 24 mg/l 96 h; *Salmo gairdneri* (*Oncorhynchus mykiss*)

EC50 *Daphnia* 1 84 mg/l (24 h; *Daphnia magna*; Locomotor effect)

LC50 fish 2 13 mg/l (96 h; *Lepomis macrochirus*)

EC50 *Daphnia* 2 11.5 - 19.6 mg/l (48 h; *Daphnia magna*)

Threshold limit algae 1 > 400 mg/l (168 h; *Scenedesmus quadricauda*; Toxicity test)

Threshold limit algae 2 105 mg/l (192 h; *Microcystis aeruginosa*)

Acetone (67-64-1)

LC50 fish 1 6210 mg/l (96 h; *Pimephales promelas*; Nominal concentration)

EC50 *Daphnia* 1 8800 mg/l (48 h; *Daphnia pulex*)

LC50 fish 2 5540 mg/l 96 h; *Salmo gairdneri* (*Oncorhynchus mykiss*)

TLM fish 1 13000 ppm (96 h; *Gambusia affinis*; turbulent water)

TLM fish 2 > 1000 ppm (96 h; Pisces)

Threshold limit other aquatic organisms 1 3000 mg/l (Plankton)

Threshold limit other aquatic organisms 2 28 mg/l (Protozoa)

Threshold limit algae 1 7500 mg/l (*Scenedesmus quadricauda*; pH = 7)

Threshold limit algae 2 3400 mg/l (48 h; *Chlorella* sp.)

Heptane (142-82-5)

LC50 fish 1 375 mg/l (96 h; *Tilapia mosambica*; Nominal concentration)

LC50 other aquatic organisms 1 > 1000 mg/l (96 h)

EC50 *Daphnia* 1 1.5 mg/l (48 h; *Daphnia magna*)

LC50 fish 2 > 100 mg/l (96 h; *Oncorhynchus kisutch*)

TLM fish 1 4924 mg/l (48 h; *Gambusia affinis*)

Threshold limit other aquatic organisms 1 > 1000 mg/l (96 h)

Threshold limit algae 1 > 200 mg/l (*Scenedesmus quadricauda*; Toxicity test)

Threshold limit algae 2 1.5 mg/l (8 h; Algae; Photosynthesis)

Methanol (67-56-1)

LC50 fish 1 15400 mg/l (96 h; *Lepomis macrochirus*; Lethal)

EC50 *Daphnia* 1 > 10000 mg/l (48 h; *Daphnia magna*; Lethal)

LC50 fish 2 10800 mg/l 96 h; *Salmo gairdneri* (*Oncorhynchus mykiss*)

EC50 *Daphnia* 2 24500 mg/l (48 h; *Daphnia magna*)

Threshold limit other aquatic organisms 1 6600 mg/l (16 h; *Pseudomonas putida*)

Threshold limit algae 1 530 mg/l (192 h; *Microcystis aeruginosa*)

Threshold limit algae 2 8000 mg/l (168 h; *Scenedesmus quadricauda*)

12.2. Persistence and degradability

ABRO NON-CHLORINATED BRAKE CLEANER 14 OZ.

Persistence and degradability not established.

Benzene (71-43-2)

Persistence and degradability Biodegradable in water. Ozonation in water. Forming sediments in water.

Biodegradable in the soil. Photolysis in the air.

Biochemical oxygen demand (BOD) 2.18 g O₂ /g substance

Chemical oxygen demand (COD) 2.15 g O₂ /g substance

ThOD 3.10 g O₂ /g substance

BOD (% of ThOD) 0.70 % ThOD

Carbon dioxide, liquefied, under pressure (124-38-9)

Persistence and degradability Biodegradability: not applicable. No (test) data on mobility of the substance available.

Biochemical oxygen demand (BOD) Not applicable

Chemical oxygen demand (COD) Not applicable

ThOD Not applicable

BOD (% of ThOD) Not applicable

Toluene (108-88-3)

Persistence and degradability readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.

Biochemical oxygen demand (BOD) 2.15 g O₂ /g substance

Chemical oxygen demand (COD) 2.52 g O₂ /g substance

ThOD 3.13 g O₂ /g substance

BOD (% of ThOD) 0.69 % ThOD

Acetone (67-64-1)

Persistence and degradability readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test) data on mobility of the substance available.

Biochemical oxygen demand (BOD) 1.43 g O₂ /g substance

Chemical oxygen demand (COD) 1.92 g O₂ /g substance

ThOD 2.20 g O₂ /g substance

BOD (% of ThOD) (20 day(s)) 0.872

Heptane (142-82-5)

Persistence and degradability readily biodegradable in water. Biodegradable in the soil. Adsorbs into the soil.

Biochemical oxygen demand (BOD) 1.92 g O₂ /g substance

Chemical oxygen demand (COD) 0.06 g O₂ /g substance

ThOD 3.52 g O₂ /g substance

BOD (% of ThOD) > % ThOD (5 day(s)) > 0.5

Heptane, branched cyclic (426260-76-6)

Persistence and degradability May cause long-term adverse effects in the environment.

Methanol (67-56-1)

Persistence and degradability readily biodegradable in water. Biodegradable in the soil.

Biochemical oxygen demand (BOD) 0.6 - 1.12 g O₂ /g substance
Chemical oxygen demand (COD) 1.42 g O₂ /g substance
ThOD 1.5 g O₂ /g substance
BOD (% of ThOD) 0.8 % ThOD

12.3. Bioaccumulative potential

ABRO NON-CHLORINATED BRAKE CLEANER 14 OZ.

Bioaccumulative potential not established.

Benzene (71-43-2)

BCF fish 1 19 *Salmo gairdneri* (*Oncorhynchus mykiss*)
BCF other aquatic organisms 1 30 (24 h; *Chlorella* sp.; Fresh weight)
Log Pow 2.13 (Experimental value)
Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).

Carbon dioxide, liquefied, under pressure (124-38-9)

Log Pow 0.83 (Experimental value)
Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).

Toluene (108-88-3)

BCF fish 1 13.2 (*Anguilla japonica*)
BCF fish 2 90 (72 h; *Leuciscus idus*)
BCF other aquatic organisms 1 380 (24 h; *Chlorella* sp.; Fresh weight)
BCF other aquatic organisms 2 4.2 (*Mytilus edulis*; Fresh weight)
Log Pow 2.73 (Experimental value; Other; 20 °C)
Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).

Acetone (67-64-1)

BCF fish 1 0.69 (*Pisces*)
BCF other aquatic organisms 1 3
Log Pow -0.24 (Test data)
Bioaccumulative potential not bioaccumulative.

Heptane (142-82-5)

BCF other aquatic organisms 1 552
Log Pow 4.66 (Experimental value; 4.5; Literature)
Bioaccumulative potential Potential for bioaccumulation ($4 \geq \text{Log Kow} \leq 5$).

Heptane, branched cyclic (426260-76-6)

Bioaccumulative potential not established.

Methanol (67-56-1)

BCF fish 1 < 10 (*Leuciscus idus*)
Log Pow -0.77 (Experimental value; Other)
Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

Benzene (71-43-2)

Surface tension 0.029 N/m (20 °C)

Toluene (108-88-3)

Surface tension 0.03 N/m (20 °C)

Acetone (67-64-1)

Surface tension 0.0237 N/m

Heptane (142-82-5)

Surface tension 0.020 N/m (20 °C)

Methanol (67-56-1)

Surface tension 0.023 N/m (20 °C)

12.5. Other adverse effects

Other information: Avoid release to the environment.

SECTION 13 Disposal Considerations

13.1. Waste treatment methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Additional information: Handle empty containers with care because residual vapors are flammable. Flammable vapors may accumulate in the container.

Ecology - waste materials: Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14 Transport Information

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

U.S. DOT UN/ID Number: UN1950
Proper shipping name: Aerosols *flammable, (each not exceeding 1 L capacity)*
Hazard class: 2.1
Packing Group:
Exceptions: N82 - See 173.306 for classification criteria for flammable aerosols. May be classed as Limited Quantity or ORM-D
Environmental Hazards:
Transport in Bulk:
Special Precautions:

IMO/IMDG UN/ID Number: UN1950

Proper shipping name: Aerosols
Hazard class: 2.1
Packing Group:
Exceptions: May be classed as Limited Quantity or ORM-D
Environmental Hazards:
Transport in Bulk:
Special Precautions:
DOT Vessel Stowage Location: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other: 48 - Stow "away from" sources of heat, 87 - Stow "separated from" Class 1 (explosives) except Division 14, 126 - Segregation same as for Class 9, miscellaneous hazardous materials

ICAO/IATA UN/ID Number: UN1950
Proper shipping name: Aerosols
Hazard Class: 2.1
Packing Group:
Exceptions: May be classed as Limited Quantity or ORM-D
Environmental Hazards:
Transport in Bulk:
Special Precautions:
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27): 75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): 150 kg

Canada (TDG) UN/ID Number: UN1950
Proper shipping name: Aerosols
Hazard class: 2.1
Packing Group:
Exceptions: May be classed as Limited Quantity or ORM-D
Environmental Hazards:
Transport in Bulk:
Special Precautions:

Europe (ADR/RID) UN/ID Number: UN1950
Proper shipping name: Aerosols
Hazard class: 2.1
Packing Group:
Exceptions: May be classed as Limited Quantity or ORM-D
Environmental Hazards:
Transport in Bulk:
Special Precautions:

SECTION 15 Regulatory Information

15.1. US Federal regulations

ABRO NON-CHLORINATED BRAKE CLEANER 14 OZ.

SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard

Fire hazard

Immediate (acute) health hazard

Sudden release of pressure hazard

Toluene (108-88-3)

Listed on United States SARA Section 313
Listed on the United States TSCA (Toxic Substances Control Act) inventory
SARA Section 311/312 Hazard Classes Delayed (chronic) health hazard
Fire hazard

Immediate (acute) health hazard

Heptane, branched cyclic (426260-76-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory
SARA Section 311/312 Hazard Classes Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

Acetone (67-64-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
SARA Section 311/312 Hazard Classes Immediate (acute) health hazard
Fire hazard
Delayed (chronic) health hazard

Methanol (67-56-1)

Listed on United States SARA Section 313
Listed on the United States TSCA (Toxic Substances Control Act) inventory
SARA Section 311/312 Hazard Classes Immediate (acute) health hazard
Delayed (chronic) health hazard
Fire hazard

15.2. International regulations

CANADA

ABRO NON-CHLORINATED BRAKE CLEANER 14 OZ.

WHMIS Classification Class B Division 5 - Flammable Aerosol
Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects
Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Toluene (108-88-3)

WHMIS Classification Class B Division 2 - Flammable Liquid
Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Heptane, branched cyclic (426260-76-6)

WHMIS Classification Class B Division 2 - Flammable Liquid
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Acetone (67-64-1)

Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification Class B Division 2 - Flammable Liquid
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Methanol (67-56-1)

WHMIS Classification Class B Division 2 - Flammable Liquid
Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects
Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

EU-Regulations

Toluene (108-88-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Acetone (67-64-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- Directive 79/831/EEC, sixth
Amendment of Directive 67/548/EEC (dangerous substances)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Repr.Cat.3; R63
F; R11
T; R23/24/25
T; R39/23/24/25
Xi; R36/38
Full text of R-phrases: see section 16

15.2.2. National regulations

Acetone (67-64-1)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on AICS (Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)

15.3. US State regulations

ABRO NON-CHLORINATED BRAKE CLEANER 14 OZ.

State or local regulations U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

Acetone (67-64-1)

U.S. - California -
Proposition 65 -
Carcinogens List
Yes

U.S. - California -
Proposition 65 -
Developmental Toxicity

U.S. - California -
Proposition 65 -
Reproductive Toxicity -
Female

U.S. - California -
Proposition 65 -
Reproductive Toxicity -
Male

No significance risk level
(NSRL)

Toluene (108-88-3)

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

Acetone (67-64-1)

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL) Benzene 71-43-2
U.S. - Massachusetts - Right to Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

HMIS

Health – 2
Flammability – 3
Physical – 1
PPE –

NFPA

Health – 2
Flammability – 3
Instability – 0
Special Hazard -

SECTION 16
Other Information

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

ABBREVIATIONS:

NG="NOT GIVEN"	BT="BETWEEN"
<="LESS THAN"	>="GREATER THAN"
ND = Not Determined	NA = Not Applicable