

MATERIAL SAFETY DATA SHEET

The Valvoline Company

Page 001
Date Prepared: 01/14/02
Date Printed: 01/09/03
MSDS No: 503.0339974-001.003

PYROIL BRAKE PARTS CLEANER 12/18 OZ

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: PYROIL BRAKE PARTS CLEANER 12/18 OZ
SAP Material No: PYBPC20
General or Generic ID: BRAKE PARTS CLEANER

Company

The Valvoline Company
P.O. Box 14000
Lexington, KY 40512

Telephone Numbers

Emergency: 1-800-274-5263
Information: 1-859-357-7206

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
PERCHLOROETHYLENE	127-18-4	97.0- 97.0
CARBON DIOXIDE	124-38-9	1.0- 8.0

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

Can cause eye irritation.

Skin

Can cause skin irritation. Prolonged or repeated contact may dry and crack the skin. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing aerosol and/or mist is possible when material is sprayed. Aerosol and mist may present a greater risk of injury because more material may be present in the air than from vapor alone. Breathing this material may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8). Alcohol consumed before or after exposure may worsen harmful effects.

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), temporary changes in mood and behavior, loss of coordination, confusion, irregular heartbeat, anesthesia, liver damage, and death.

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Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals, and may aggravate preexisting disorders of these organs in humans: kidney damage, liver damage.

Developmental Information

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

Cancer Information

This material (or a component) causes cancer in laboratory animals and therefore may present a carcinogenic risk to humans. Exposure to perchloroethylene has been shown to cause cancer in laboratory animals. It has been listed as a possible carcinogen by the International Agency for Research on Cancer and the National Toxicology Program.

Other Health Effects

No data

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact.

4. FIRST AID MEASURES

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen.

Note to Physicians

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 - Swallowing) when deciding whether to induce vomiting. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), liver, kidneys. Individuals with pre-existing heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this

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material.

5. FIRE FIGHTING MEASURES

Flash Point

Not applicable

Explosive Limit

No data

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: hydrogen chloride.

Fire and Explosion Hazards

Material is highly volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point.

Extinguishing Media

regular foam, alcohol foam, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Health - 2, Flammability - 0, Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five gallon pails

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and larger metal containers including tank cars and tank trucks should be grounded and/or bonded when material is transferred.

Storage

Do not store exposed to direct light. Do not store near extreme heat, open flame, or sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory Protections

If workplace exposure limit(s) of product or any component is exceeded (See Exposure Guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (consult your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines

Component

PERCHLOROETHYLENE (127-18-4)

OSHA VPEL 25.000 ppm - TWA

ACGIH TLV 25.000 ppm - TWA

ACGIH TLV 100.000 ppm - STEL

CARBON DIOXIDE (124-38-9)

OSHA VPEL 10000.000 ppm - TWA

OSHA VPEL 30000.000 ppm - STEL

ACGIH TLV 5000.000 ppm - TWA

ACGIH TLV 30000.000 ppm - STEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for product) 250.0 F (121.1 C) @ 760.00 mmHg

Vapor Pressure

(for product) 13.000 mmHg @ 68.00 F

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Specific Vapor Density
5.760 @ AIR=1

Specific Gravity
1.570 - 1.610 @ 77.00 F

Liquid Density
13.240 lbs/gal @ 77.00 F
1.590 kg/l @ 25.00 C

Percent Volatiles (Including Water)
100.0 %

Volatile Organic Compounds (VOC) (Maximum)
.000 %

Evaporation Rate
2.80 (N-BUTYL ACETATE)

Appearance
CLEAR

State
LIQUID

Physical Form
No data

Color
COLORLESS

Odor
MILDLY SWEET

pH
No data

Freezing Point
-8.1 F (-22.3 C)

10. STABILITY AND REACTIVITY

Hazardous Polymerization
Product will not undergo hazardous polymerization.

Hazardous Decomposition
May form: chlorine, hydrogen chloride, phosgene, Open flame, welding arcs, resistance heaters, etc., which can result in thermal decomposition releasing hydrogen chloride and small amounts of phosgene and chlorine.

Chemical Stability
Stable. Gross contamination with water can cause hydrolysis, producing small amounts of hydrochloric acid.

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Incompatibility

aluminum powder, amines, direct sunlight, excessive heat, powdered metals, strong bases, strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:
CONSUMER COMMODITY,ORM-D

Container/Mode:
CASES/SURFACE - ORM-D EXCEPTION

NOS Component:
None

RQ (Reportable Quantity) - 49 CFR 172.101

Product Quantity (lbs)	Component
103	PERCHLOROETHYLENE

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4

Component	Component
TETRACHLOROETHYLENE	100

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SARA 302 Components - 40 CFR 355 Appendix A
None

Section 311/312 Hazard Class - 40 CFR 370.2
Immediate(X) Delayed(X) Fire(X) Reactive() Sudden Release of Pressure()

SARA 313 Components - 40 CFR 372.65
Section 313 Component(s) CAS Number

TETRACHLOROETHYLENE (PERCHLOROETHYLENE) 127-18-4

International Regulations

Inventory Status

DSL (CANADA) The intentional ingredients of this product are listed.
EINECS (EUROPE) The intentional ingredients of this product are listed.
TCCL (KOREA) The intentional ingredients of this product are listed.

State and Local Regulations

California Proposition 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer.
TETRACHLOROETHYLENE (PERCHLOROETHYLENE)

New Jersey RTK Label Information

TETRACHLOROETHYLENE 127-18-4
CARBON DIOXIDE 124-38-9

Pennsylvania RTK Label Information

ETHENE, TETRACHLORO- 127-18-4
CARBON DIOXIDE 124-38-9

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.