

PYROIL® NON-CHLORINATED
BRAKE PARTS CLEANER PY4003

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

| | | |
|--------------------|-------------------------------|-----------------------------------|
| Ashland | Regulatory Information Number | 1-800-325-3751 |
| P.O. Box 2219 | Telephone | 614-790-3333 |
| Columbus, OH 43216 | Emergency telephone number | 1-800-ASHLAND (1-800-274-5263) |

| | |
|-------------------------|--|
| Product name | PYROIL® NON-CHLORINATED BRAKE PARTS CLEANER |
| Product code | PY4003 |
| Product Use Description | No data |

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: aerosol
DANGER! POISON! Moderate skin irritant, Severe eye irritant.

Potential Health Effects

Routes of exposure

Inhalation, Skin absorption, Skin contact

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Additional symptoms of eye exposure may include: blurred vision

Skin contact

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns.

Ingestion

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 of vapor or mist is possible.

PYROIL® NON-CHLORINATED
BRAKE PARTS CLEANER PY4003

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material:, skin

Symptoms

stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), and death

Target Organs

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals:, cardiac sensitization, liver abnormalities, anemia, spleen damage, nervous system damage, eye damage, kidney damage, lung damage, brain damage, effects on hearing, central nervous system damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans:, liver abnormalities, cardiac sensitization, eye damage, visual impairment

Carcinogenicity

No data

Reproductive hazard.

Toluene may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intentional abuse of toluene during pregnancy can cause birth defects in humans.

Other information

No data

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components | CAS-No. | Concentration |
|---|----------------|----------------------|
| TOLUENE | 108-88-3 | >=50-<60% |
| METHANOL | 67-56-1 | >=20-<30% |
| SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC | 64742-89-8 | >=15-<20% |
| CARBON DIOXIDE | 124-38-9 | >=1.5-<5% |

4. FIRST AID MEASURES

Eyes

PYROIL® NON-CHLORINATED
BRAKE PARTS CLEANER PY4003

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. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion

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.

Notes to physician

Hazards: This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water mist, carbon dioxide (CO₂), dry chemical

Hazardous combustion products

May form:, carbon dioxide and carbon monoxide, various hydrocarbons

Precautions for fire-fighting

PYROIL® NON-CHLORINATED
BRAKE PARTS CLEANER PY4003

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

For personal protection see section 8. 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.

Environmental precautions

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.

Methods for cleaning up

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

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. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

Storage

No data

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PYROIL® NON-CHLORINATED
BRAKE PARTS CLEANER PY4003

Exposure Guidelines

| TOLUENE | | 108-88-3 |
|-----------------------|-----------------------------------|-----------------|
| ACGIH NIC | time weighted average | 20 ppm |
| ACGIH | time weighted average | 50 ppm |
| NIOSH | Recommended exposure limit (REL): | 100 ppm |
| NIOSH | Recommended exposure limit (REL): | 375 mg/m3 |
| NIOSH | Short term exposure limit | 150 ppm |
| NIOSH | Short term exposure limit | 560 mg/m3 |
| OSHA Z2 | time weighted average | 200 ppm |
| OSHA Z2 | Ceiling Limit Value: | 300 ppm |
| OSHA Z2 | Maximum concentration: | 500 ppm |
| METHANOL | | 67-56-1 |
| ACGIH | time weighted average | 200 ppm |
| ACGIH | Short term exposure limit | 250 ppm |
| NIOSH | Recommended exposure limit (REL): | 200 ppm |
| NIOSH | Recommended exposure limit (REL): | 260 mg/m3 |
| NIOSH | Short term exposure limit | 250 ppm |
| NIOSH | Short term exposure limit | 325 mg/m3 |
| OSHA Z1 | Permissible exposure limit | 200 ppm |
| OSHA Z1 | Permissible exposure limit | 260 mg/m3 |
| CARBON DIOXIDE | | 124-38-9 |
| ACGIH | time weighted average | 5,000 ppm |
| ACGIH | Short term exposure limit | 30,000 ppm |
| NIOSH | Recommended exposure limit (REL): | 5,000 ppm |
| NIOSH | Recommended exposure limit (REL): | 9,000 mg/m3 |
| NIOSH | Short term exposure limit | 30,000 ppm |
| NIOSH | Short term exposure limit | 54,000 mg/m3 |
| OSHA Z1 | Permissible exposure limit | 5,000 ppm |
| OSHA Z1 | Permissible exposure limit | 9,000 mg/m3 |

General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls

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

PYROIL® NON-CHLORINATED
BRAKE PARTS CLEANER PY4003

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 and body protection

Other protective equipment: not required under normal conditions of use. Wear resistant gloves such as:
Neoprene

Respiratory protection

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

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|--|
| Physical state | aerosol |
| Form | No data |
| Colour | No data |
| Odour | No data |
| Boiling point/range | No data |
| pH | No data |
| Flash point | No data |
| Evaporation rate | No data |
| Explosion limits | No data |
| Vapour pressure | No data |
| Vapour density | No data |
| Density | 0.8057 g/cm ³ @ 60.01 °F / 15.56 °C |
| Solubility | No data |
| Partition coefficient (n-octanol/water) | No data |
| Autoignition temperature | No data |

10. STABILITY AND REACTIVITY

ASHLAND
SAFETY DATA SHEET

Page: 7
Revision Date: 02/21/2007
Print Date: 3/9/2007
MSDS Number: R0253115
Version: 1.2

PYROIL® NON-CHLORINATED
BRAKE PARTS CLEANER PY4003

Stability

Stable.

Conditions to avoid

None known.

Incompatible products

Avoid contact with:, strong oxidizing agents

Hazardous decomposition products

May form:, carbon dioxide and carbon monoxide, various hydrocarbons

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

| | |
|---|------------------------|
| TOLUENE | LD 50 Rat: 5,000 mg/kg |
| METHANOL | LD 50 Rat: 5,045 mg/kg |
| SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC | LD 50 Rat: 8,000 mg/kg |

Acute inhalation toxicity

| | |
|---|---------------------------|
| TOLUENE | LC 50 Rat: 8000 ppm, 4 h |
| METHANOL | LC 50 Rat: 64000 ppm, 4 h |
| SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC | LC 50 Rat: 3400 ppm, 4 h |

Acute dermal toxicity

| | |
|---------|----------------------------|
| TOLUENE | LD 50 Rabbit: 12,124 mg/kg |
|---------|----------------------------|

PYROIL® NON-CHLORINATED
BRAKE PARTS CLEANER PY4003

METHANOL

LD 50 Rabbit: 12,800 mg/kg

SOLVENT NAPHTHA (PETROLEUM), LD 50 Rat: 4,000 mg/kg
LIGHT ALIPHATIC

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

No data

Acute Toxicity to Aquatic Invertebrates

No data

Environmental fate and pathways

No data

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

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

14. TRANSPORT INFORMATION

IMDG:

UN1950, AEROSOLS 2.1,

IATA_P:

UN1950, Aerosols, flammable 2.1,

IATA_C:

UN1950, Aerosols, flammable 2.1,

CFR_ROAD:

UN1950, Aerosols 2.1,

CFR_RAIL:

UN1950, Aerosols 2.1,

CFR_INWTR:

UN1950, Aerosols 2.1,

IMDG_INWTR:

PYROIL® NON-CHLORINATED
BRAKE PARTS CLEANER PY4003

UN1950, AEROSOLS 2.1,
IMDG_ROAD:
UN1950, AEROSOLS 2.1,
IMDG_RAIL:
UN1950, AEROSOLS 2.1,

Dangerous goods descriptions may not reflect package size, quantity, end-use or region-specific exceptions that can be applied to shipments. Consult shipping documents for material-specific descriptions.

15. REGULATORY INFORMATION

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer.

BENZENE

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

TOLUENE

BENZENE

SARA Hazard Classification Acute Health Hazard

SARA 313 Component(s)

| | | |
|----------|----------|---------|
| TOLUENE | 108-88-3 | 50.019% |
| METHANOL | 67-56-1 | 28% |

OSHA Hazards Moderate skin irritant
Severe eye irritant

| | Health | Flammability | Reactivity | Other |
|-------------|---------------|---------------------|-------------------|--------------|
| HMIS | | | | No data |
| NFPA | | | | No data |

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.

ASHLAND
SAFETY DATA SHEET

Page: 10
Revision Date: 02/21/2007
Print Date: 3/9/2007
MSDS Number: R0253115
Version: 1.2

PYROIL® NON-CHLORINATED
BRAKE PARTS CLEANER PY4003

This MSDS has been prepared by Ashland's Environmental Health and Safety Department
(1-800-325-3751).