1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE 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 Valvoline™ Heavy Duty BRAKE PARTS CLEANER
Product code 681046

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: aerosol

DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. CONTENTS UNDER PRESSURE. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY BE HARMFUL IF INHALED. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS. HARMFUL IF SWALLOWED. MAY CAUSE BLINDNESS.

Potential Health Effects

Exposure routes
- Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact
- Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact
- Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

Ingestion
- Swallowing this material 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 small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).
Aggravated Medical Condition

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, kidney, central nervous system, pancreas, heart, blood-forming system, male reproductive system, auditory system. Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias. Individuals with preexisting heart disorders maybe more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: redness of the skin, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), discomfort in the chest, central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, effects on memory, muscle cramps, pain in the abdomen and lower back, respiratory depression (slowing of the breathing rate), blurred vision, shortness of breath, lack of coordination, confusion, irregular heartbeat, cyanosis (causes blue coloring of the skin and nails from lack of oxygen), narcosis (dazed or sluggish feeling), visual impairment (including blindness), coma.

Target Organs

This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Exposure to lethal concentrations of methanol has been shown to cause damage to organs including liver, kidneys, pancreas, heart, lungs and brain. Although this rarely occurs, survivors of severe intoxication may suffer from permanent neurological damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: blood abnormalities, cardiac sensitization, testis damage, kidney damage, liver damage, central nervous system damage, effects on hearing. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: central nervous system effects, visual impairment.

Carcinogenicity

Ethylbenzene has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. The International Agency for Research on Cancer (IARC) has classified ethylbenzene as a possible human carcinogen.

Reproductive hazard

Methanol has caused birth defects in laboratory animals, but only when inhaled at extremely high vapor concentrations. The relevance of this finding to humans is uncertain. This material (or a component) may be harmful to the human fetus based on positive test results with laboratory animals.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS-No. / Trade Secret No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACETONE</td>
<td>67-64-1</td>
<td>&gt;=80--90%</td>
</tr>
<tr>
<td>CARBON DIOXIDE</td>
<td>124-38-9</td>
<td>&gt;=5--10%</td>
</tr>
</tbody>
</table>
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.

**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 material (or a component) has produced hyperglycemia and ketosis following substantial ingestion. 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 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.

**Treatment:** No information available.

5. FIREFIGHTING MEASURES

**Suitable extinguishing media**
Water spray, Dry chemical, Carbon dioxide (CO2)

**Hazardous combustion products**
Precautions for fire-fighting
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. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

NFPA Flammable and Combustible Liquids Classification
Not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks).

Environmental precautions
Do not flush into surface water or sanitary sewer system.

Methods for cleaning up
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Other information
Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water spray jet.

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
Valvoline™ Heavy Duty BRAKE PARTS CLEANER
681046

Store in a cool, dry, ventilated area. Maximum recommended storage temperature 50 degrees C (122 degrees F).

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Guidelines

<table>
<thead>
<tr>
<th>ACETONE</th>
<th>67-64-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>time weighted average  500 ppm</td>
</tr>
<tr>
<td>ACGIH</td>
<td>Short term exposure limit    750 ppm</td>
</tr>
<tr>
<td>NIOSH</td>
<td>Recommended exposure limit (REL): 250 ppm</td>
</tr>
<tr>
<td>NIOSH</td>
<td>Recommended exposure limit (REL): 590 mg/m3</td>
</tr>
<tr>
<td>OSHA Z1</td>
<td>Permissible exposure limit   1,000 ppm</td>
</tr>
<tr>
<td>OSHA Z1</td>
<td>Permissible exposure limit   2,400 mg/m3</td>
</tr>
<tr>
<td>ACGIH NIC</td>
<td>time weighted average  250 ppm</td>
</tr>
<tr>
<td>ACGIH NIC</td>
<td>Short term exposure limit    500 ppm</td>
</tr>
<tr>
<td>OSHA Z1A</td>
<td>time weighted average  750 ppm</td>
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<tr>
<td>OSHA Z1A</td>
<td>time weighted average  1,800 mg/m3</td>
</tr>
<tr>
<td>OSHA Z1A</td>
<td>Short Term Exposure Limit (STEL): 1,000 ppm</td>
</tr>
<tr>
<td>OSHA Z1A</td>
<td>Short Term Exposure Limit (STEL): 2,400 mg/m3</td>
</tr>
<tr>
<td>US CA OEL</td>
<td>Time Weighted Average (TWA) Permissible Exposure Limit (PEL): 500 ppm</td>
</tr>
<tr>
<td>US CA OEL</td>
<td>Time Weighted Average (TWA) Permissible Exposure Limit (PEL): 1,200 mg/m3</td>
</tr>
<tr>
<td>US CA OEL</td>
<td>Ceiling Limit Value: 3,000 ppm</td>
</tr>
<tr>
<td>US CA OEL</td>
<td>Short Term Exposure Limit (STEL): 750 ppm</td>
</tr>
<tr>
<td>US CA OEL</td>
<td>Short Term Exposure Limit (STEL): 1,780 mg/m3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CARBON DIOXIDE</th>
<th>124-38-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>time weighted average  5,000 ppm</td>
</tr>
<tr>
<td>ACGIH</td>
<td>Short term exposure limit    30,000 ppm</td>
</tr>
<tr>
<td>NIOSH</td>
<td>Recommended exposure limit (REL): 5,000 ppm</td>
</tr>
<tr>
<td>NIOSH</td>
<td>Recommended exposure limit (REL): 9,000 mg/m3</td>
</tr>
<tr>
<td>NIOSH</td>
<td>Short term exposure limit    30,000 ppm</td>
</tr>
<tr>
<td>NIOSH</td>
<td>Short term exposure limit    54,000 mg/m3</td>
</tr>
<tr>
<td>OSHA Z1</td>
<td>Permissible exposure  5,000 ppm</td>
</tr>
</tbody>
</table>
Limit values are provided in accordance with OSHA Z1, Permissible exposure limit, accepable cancer risk limits, and current standards. It is important to note that occupational exposure limits are not inherently protective. They are intended to provide a reasonable margin of safety and are not absolute standards. It is crucial for employers and employees to ensure that they are aware of the potential hazards associated with these substances and to take appropriate precautions to protect their health and safety.

**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 exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection
Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection
Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.
Wear resistant gloves (consult your safety equipment supplier).
Discard gloves that show tears, pinholes, or signs of wear.

Respiratory protection
A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state</th>
<th>aerosol</th>
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</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>-4 °F / -20 °C Value for Component</td>
</tr>
<tr>
<td>Lower explosion limit/Upper explosion limit</td>
<td>1 %(V) / 36 %(V) Calculated Explosive Limit</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>(&gt;9.999.000 hPa @ 70 °F / 21 °C Value for Component</td>
</tr>
<tr>
<td>Density</td>
<td>0.756 g/cm3 @ 70.0 °F / 21.1 °C</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability
Stable. Stable.

Conditions to avoid
excessive heat, Heat, flames and sparks.

Incompatible products
Acids, alkalis, Amines, Ammonia, halogens, Lead, peroxides, Reducing agents, sodium, strong bases, Strong oxidizing agents, Zinc, Peroxides
Hazardous decomposition products
carbon dioxide and carbon monoxide, formaldehyde-like, Hydrocarbons carbon dioxide and carbon monoxide, formaldehyde-like, Hydrocarbons

Hazardous reactions
Product will not undergo hazardous polymerization. Product will not undergo hazardous polymerization.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:
- Inhalation
- Skin absorption
- Skin contact
- Eye Contact
- Ingestion

Product:
- Acute oral toxicity: No data available
- Acute inhalation toxicity: No data available
- Acute dermal toxicity: No data available
- Skin corrosion/irritation: No data available
- Serious eye damage/eye irritation: No data available
- Respiratory or skin sensitisation: No data available

Target Organ Systemic Toxicant - Repeated exposure:
Target Organs: This material (or a component) shortens the time of onset or worsens the liver and kidney damage induced by other chemicals. Exposure to lethal concentrations of methanol has been shown to cause damage to organs including liver, kidneys, pancreas, heart, lungs and brain. Although this rarely occurs, survivors of severe intoxication may suffer from permanent neurological damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: blood abnormalities, cardiac sensitization, testis damage, kidney damage, liver damage, central nervous system damage, effects on hearing. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: central
nervous system effects, visual impairment

Aspiration toxicity: The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Components:

**ACETONE:**
- Acute oral toxicity: LD 50 Rat, female: 5,800 mg/kg
- Acute inhalation toxicity: LC 50 Rat, female: 76 mg/l
  Exposure time: 4 h
- Acute dermal toxicity: LD 50 Rabbit: > 7,426 mg/kg

**STOT - single exposure**:
- Exposure routes: Inhalation
- Target Organs: Nervous system
- Assessment: May cause drowsiness or dizziness.

Experience with human exposure: Prolonged skin contact may defat the skin and produce dermatitis.

**XYLENE:**
- Acute oral toxicity: LD 50 Rat: 3,523 - 8,600 mg/kg
- Acute inhalation toxicity: LC 50 Rat: 6700 ppm
  Exposure time: 4 h
  Test atmosphere: vapour
- Acute dermal toxicity: LD 50 Rabbit: 1,700 mg/kg

**STOT - single exposure**:
- Assessment: May cause respiratory irritation., May cause drowsiness or dizziness.

Aspiration toxicity: May be fatal if swallowed and enters airways.

**METHANOL:**
- Acute oral toxicity: LD L0 Human: 300 mg/kg
  The component/mixture is classified as acute oral toxicity, category 3.
Acute inhalation toxicity : LC 50 Rat: 64000 ppm
Exposure time: 4 h

The component/mixture is classified as acute inhalation toxicity, category 3.
Slightly toxic by inhalation

Acute dermal toxicity : LD 50 Rabbit: 12,800 mg/kg
The component/mixture is classified as acute dermal toxicity, category 3.

Respiratory or skin sensitisation : Test Method: Maximisation Test (GPMT)
Species: Guinea pig
Classification: Does not cause skin sensitisation.
Method: OECD Test Guideline 406

STOT - single exposure : Exposure routes: inhalation (vapour)
Target Organs: Central nervous system, Eyes
Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

Exposure routes: Skin contact
Target Organs: Central nervous system, Eyes
Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

Exposure routes: Ingestion
Target Organs: Central nervous system, Eyes
Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

ETHYL BENZENE:
Acute oral toxicity : LD 50 Rat: ca. 3,500 mg/kg

Acute inhalation toxicity : LC Lo Rat: 4000 ppm
Exposure time: 4 h

Acute dermal toxicity : LD 50 Rabbit: 17,800 mg/kg

STOT - repeated exposure : Target Organs: Auditory system
Assessment: May cause damage to organs through prolonged or
12. ECOLOGICAL INFORMATION

Ecotoxicity
Product:
No data available

Components:

ACETONE:
Toxicity to fish
LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss)): 4,740 - 6,330 mg/l
Exposure time: 96 h
Test Method: static test

LC 50 (Fathead minnow (Pimephales promelas)): 8,733 - 9,482 mg/l
Exposure time: 96 h
Test Method: flow-through test

Toxicity to algae
NOEC (Microcystis aeruginosa): 530 mg/l
Exposure time: 8 d
Test Method: static test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
NOEC: 2,112 mg/l
Exposure time: 28 d
Species: Daphnia magna (Water flea)
Test Method: flow-through test

XYLENE:
Toxicity to fish
LC 50 (Fathead minnow (Pimephales promelas)): 23.53 - 29.97 mg/l
Exposure time: 96 h
Test Method: static test

Toxicity to daphnia and other aquatic invertebrates
LC 50 (Water flea (Daphnia magna)): > 100 - < 1,000 mg/l
Exposure time: 24 h
Test Method: static test
METHANOL:
Toxicity to fish : LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss)): 18,000 - 20,000 mg/l
Exposure time: 96 h
Test Method: static test

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): > 10,000 mg/l
Exposure time: 48 h
Test Method: static test

ETHYL BENZENE:
Toxicity to fish : LC 50 (Fathead minnow (Pimephales promelas)): 9.1 - 15.6 mg/l
Exposure time: 96 h
Test Method: static test

LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss)): 4.2 mg/l
Exposure time: 96 h
Test Method: Renewal

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): 1.37 - 4.4 mg/l
Exposure time: 48 h
Test Method: static test

Toxicity to algae : (Pseudokirchneriella subcapitata (green algae)): 3.6 mg/l
Exposure time: 96 h
Test Method: Growth inhibition

Persistence and degradability
Product: No data available

Components:

ACETONE:
Biodegradability : Result: Readily biodegradable.
Biodegradation: 90.9 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
XYLENE:
Physico-chemical removability : The product evaporates readily.

METHANOL:
Biodegradability : Biodegradation: 99 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

ETHYL BENZENE:
Biodegradability : Result: Readily biodegradable.
Biodegradation: 70 - 80 %
Exposure time: 28 d

Bioaccumulative potential
Product:
No data available

Components:

ACETONE:
Partition coefficient: n-octanol/water : log Pow: -0.24

XYLENE:
Partition coefficient: n-octanol/water : log Pow: 3.16

METHANOL:
Bioaccumulation : Species: Green algae (Chlorella fusca vacuolata)
Exposure time: 24 h
Concentration: 0.05 mg/l
Bioconcentration factor (BCF): 28,400
Method: Static

Partition coefficient: n-octanol/water : log Pow: -0.77

ETHYL BENZENE:
Partition coefficient: n-octanol/water : log Pow: 3.15

Mobility in soil
SAFETY DATA SHEET

Valvoline™ Heavy Duty BRAKE PARTS CLEANER

681046

Product: No data available

Components:

ACETONE:
Surface tension : 23.7 mN/m

CARBON DIOXIDE:
Surface tension : 16.2 mN/m

METHANOL:
Surface tension : 22.61 mN/m

ETHYL BENZENE:
Surface tension : 4.3 N/m

13. DISPOSAL CONSIDERATIONS
Waste disposal methods
Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

REGULATION

<table>
<thead>
<tr>
<th>ID NUMBER</th>
<th>PROPER SHIPPING NAME</th>
<th>*HAZARD CLASS</th>
<th>SUBSIDIARY HAZARDS</th>
<th>PACKING GROUP</th>
<th>MARINE POLLUTANT / LTD. QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. DOT - ROAD</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>ORM-D, CONSUMER COMMODITY</td>
<td>ORM</td>
<td></td>
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</tr>
</tbody>
</table>

| U.S. DOT - RAIL |
| ORM-D, CONSUMER COMMODITY | ORM |

Page 14 / 18
U.S. DOT - INLAND WATERWAYS
ORM-D, CONSUMER COMMODITY ORM

TRANSPORT CANADA - ROAD
UN 1950 AEROSOLS 2.1

TRANSPORT CANADA - RAIL
UN 1950 AEROSOLS 2.1

TRANSPORT CANADA - INLAND WATERWAYS
UN 1950 AEROSOLS 2.1

INTERNATIONAL MARITIME DANGEROUS GOODS
UN 1950 AEROSOLS 2.1

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO
UN 1950 Aerosols, flammable 2.1

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER
UN 1950 Aerosols, flammable 2.1

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES
UN 1950 AEROSOLES 2

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65
WARNING! This product contains a chemical known to the State of California to cause cancer. ETHYL BENZENE BENZENE
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

| METHANOL |
| TOLUENE |
| BENZENE |

### SARA Hazard Classification

**SARA 311/312 Classification**
- Sudden Release of Pressure Hazard
- Acute Health Hazard
- Chronic Health Hazard
- Fire Hazard

### SARA 313 Component(s)

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>XYLENE</td>
<td>6.11 %</td>
</tr>
<tr>
<td>METHANOL</td>
<td>3.72 %</td>
</tr>
<tr>
<td>ETHYL BENZENE</td>
<td>1.83 %</td>
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### New Jersey RTK Label Information

<table>
<thead>
<tr>
<th>Component</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACETONE</td>
<td>67-64-1</td>
</tr>
<tr>
<td>XYLENE</td>
<td>1330-20-7</td>
</tr>
<tr>
<td>CARBON DIOXIDE</td>
<td>124-38-9</td>
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<tr>
<td>METHANOL</td>
<td>67-56-1</td>
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<tr>
<td>ETHYL BENZENE</td>
<td>100-41-4</td>
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### Pennsylvania RTK Label Information

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<th>Code</th>
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<tr>
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<td>67-56-1</td>
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<tr>
<td>ETHYL BENZENE</td>
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### Notification status

<table>
<thead>
<tr>
<th>Country</th>
<th>Status</th>
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<tbody>
<tr>
<td>US. Toxic Substances Control Act</td>
<td>y (positive listing)</td>
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<tr>
<td>Australia. Industrial Chemical (Notification and Assessment) Act</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>Japan. ENCS - Existing and New Chemical Substances Inventory</td>
<td>y (positive listing)</td>
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<tr>
<td>Korea. Toxic Chemical Control Law (TCCL) List</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act</td>
<td>y (positive listing)</td>
</tr>
<tr>
<td>China. Inventory of Existing Chemical Substances</td>
<td>y (positive listing)</td>
</tr>
</tbody>
</table>

### Reportable quantity - Product

<table>
<thead>
<tr>
<th>Component</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>US. EPA CERCLA Hazardous Substances (40 CFR 302)</td>
<td>1636 lbs</td>
</tr>
</tbody>
</table>

### Reportable quantity-Components

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SAFETY DATA SHEET

Valvoline™ Heavy Duty BRAKE PARTS CLEANER

681046

| XYLENE       | 1330-20-7 | 100 lbs |

<table>
<thead>
<tr>
<th>HMIS</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2*</td>
</tr>
<tr>
<td>Flammability</td>
<td>4</td>
</tr>
<tr>
<td>Physical hazards</td>
<td>0</td>
</tr>
<tr>
<td>Instability</td>
<td></td>
</tr>
<tr>
<td>Specific Hazard</td>
<td></td>
</tr>
</tbody>
</table>

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

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet:

- ACGIH: American Conference of Industrial Hygienists
- BEI: Biological Exposure Index
- CAS: Chemical Abstracts Service (Division of the American Chemical Society)
- CMR: Carcinogenic, Mutagenic or Toxic for Reproduction
- FG: Food grade
- GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
- H-statement: Hazard Statement
- IATA: International Air Transport Association
- IATA-DGR: Dangerous Goods Regulation by the “International Air Transport Association” (IATA)
- ICAO: International Civil Aviation Organization
- ICAO-TI (ICAO): Technical Instructions by the “International Civil Aviation Organization”
- IMDG: International Maritime Code for Dangerous Goods
- ISO: International Organization for Standardization
- logPow: octanol-water partition coefficient
- LCxx: Lethal Concentration, for xx percent of test population
- LDxx: Lethal Dose, for xx percent of test population
- ICxx: Inhibitory Concentration for xx of a substance
- Ecxx: Effective Concentration of xx
- N.O.S.: Not Otherwise Specified
- OECD: Organization for Economic Co-operation and Development
- OEL: Occupational Exposure Limit
- P-Statement: Precautionary Statement
- PBT: Persistent, Bioaccumulative and Toxic
- PPE: Personal Protective Equipment
- STEL: Short-term exposure limit
- STOT: Specific Target Organ Toxicity
- TLV: Threshold Limit Value
- TWA: Time-weighted average
- vPvB: Very Persistent and Very Bioaccumulative
Valvoline™ Heavy Duty BRAKE PARTS CLEANER

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WEL: Workplace Exposure Level

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
DOT: Department of Transportation
FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act
HMIRC: Hazardous Materials Information Review Commission
HMIS: Hazardous Materials Identification System
NFPA: National Fire Protection Association
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety and Health Administration
PMRA: Health Canada Pest Management Regulatory Agency
RTK: Right to Know
WHMIS: Workplace Hazardous Materials Information System