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<b>SAFETY DATA SHEET</b>		Revision Date: 05/22/2015
		Print Date: 6/10/2015
		SDS Number: R0253115
Pyroil™ NON-CHLORINATED BRAKE PARTS CLEANER		Version: 1.0
PY4003		

29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : Pyroil™ NON-CHLORINATED BRAKE PARTS CLEANER

### Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : BRAKE PARTS CLEANER

<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
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## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Flammable aerosols : Category 1

Acute toxicity (Oral) : Category 3

Acute toxicity (Inhalation) : Category 3

Acute toxicity (Dermal) : Category 3

Skin irritation : Category 2

Eye irritation : Category 2A

Reproductive toxicity : Category 2

Specific target organ systemic toxicity - single exposure : Category 1 (Central nervous system, Eyes)

Specific target organ systemic toxicity - single exposure : Category 3 (Central nervous system)

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Specific target organ systemic toxicity - repeated exposure (Inhalation) : Category 2 (Neurologic: other (neuropsychological effects, auditory dysfunction and effects on colour vision))

Aspiration hazard : Category 1

**GHS Label element**

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : Extremely flammable aerosol.  
Toxic if swallowed, in contact with skin or if inhaled.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.  
Suspected of damaging fertility or the unborn child.  
Causes damage to organs (Central nervous system, Eyes).  
May cause damage to organs (Neurologic: other (neuropsychological effects, auditory dysfunction and effects on colour vision)) through prolonged or repeated exposure if inhaled.

Precautionary Statements : **Prevention:**  
Obtain special instructions before use.  
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/ fume/ gas/ mist/ vapors/ spray.  
Wash skin 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 CENTER or doctor/ physician.  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.  
IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

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rinsing.

IF exposed: Call a POISON CENTER or doctor/ physician.

Do NOT induce vomiting.

If skin irritation occurs: Get medical advice/ attention.

If eye irritation persists: Get medical advice/ attention.

Take off contaminated clothing and wash before reuse.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture  
 Chemical nature : Static Accumulator  
 Chemical nature : Defatter

**Hazardous components**

Chemical Name	CAS-No.	Classification	Concentration (%)
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	Flam. Liq. 2; H225 STOT SE 3; H336 Asp. Tox. 1; H304 Aquatic Acute 2; H401 Aquatic Chronic 2; H411	41.86
METHANOL	67-56-1	Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 STOT SE 1; H370	34.84

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TOLUENE	108-88-3	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Repr. 2; H361 STOT SE 3; H336 STOT RE 2; H373 Asp. Tox. 1; H304	9.40
ACETONE	67-64-1	Flam. Liq. 2; H225 Eye Irrit. 2A; H319 STOT SE 3; H336	8.39
CARBON DIOXIDE	124-38-9	Press. Gas Liquefied gas; H280	5.51
n-HEPTANE	142-82-5	Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336 Asp. Tox. 1; H304	1.67

### SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.  
Consult a physician.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.

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- If inhaled : Move to fresh air.  
Call a physician or poison control centre immediately.  
Keep patient warm and at rest.  
If unconscious place in recovery position and seek medical advice.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.  
If on skin, rinse well with water.  
Wash contaminated clothing before re-use.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Get medical attention immediately.  
Rinse mouth with water.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : 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.

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

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)
- temporary changes in mood and behavior
- loss of appetite
- muscle cramps
- pain in the abdomen and lower back
- Blurred vision
- Shortness of breath
- confusion
- irregular heartbeat

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cyanosis (causes blue coloring of the skin and nails from lack of oxygen)  
 visual impairment (including blindness)  
 Toxic if swallowed, in contact with skin or if inhaled  
 May be fatal if swallowed and enters airways.  
 Causes skin irritation.  
 Causes serious eye irritation.  
 May cause drowsiness or dizziness.  
 Suspected of damaging fertility or the unborn child.  
 Causes damage to organs.  
 May cause damage to organs through prolonged or repeated exposure if inhaled.

Notes to physician : No hazards which require special first aid measures.

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## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
 Water spray  
 Foam  
 Alcohol-resistant foam  
 Carbon dioxide (CO<sub>2</sub>)  
 Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.  
 Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.  
 Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Aldehydes  
 carbon dioxide and carbon monoxide  
 organic compounds  
 Hydrocarbons
- Specific extinguishing methods :  
  
 Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
 Use a water spray to cool fully closed containers.
- Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

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for firefighters

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.  
Remove all sources of ignition.  
Use personal protective equipment.  
Ensure adequate ventilation.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.  
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a 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.

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## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Open drum carefully as content may be under pressure.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Do not breathe vapours/dust.  
Do not smoke.  
Container hazardous when empty.  
Take precautionary measures against static discharges.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.  
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects.  
Keep container tightly closed in a dry and well-ventilated place.

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Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
 Observe label precautions.  
 No smoking.  
 Electrical installations / working materials must comply with the technological safety standards.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	TWA	500 ppm	OSHA_TRANS
		TWA	300 ppm	ACGIH
		TWA	2,000 mg/m3	OSHA_TRANS
METHANOL	67-56-1	TWA	1,370 mg/m3	ACGIH
		TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		REL	200 ppm 260 mg/m3	NIOSH/GUIDE
		STEL	250 ppm 325 mg/m3	NIOSH/GUIDE
		PEL	200 ppm 260 mg/m3	OSHA_TRANS
		TWA	200 ppm 260 mg/m3	TN OEL
TOLUENE	108-88-3	STEL	250 ppm 325 mg/m3	TN OEL
		TWA	20 ppm	ACGIH
		REL	100 ppm 375 mg/m3	NIOSH/GUIDE
		STEL	150 ppm 560 mg/m3	NIOSH/GUIDE
		TWA	200 ppm	OSHA/Z2
ACETONE	67-64-1	Ceiling	300 ppm	OSHA/Z2
		MAX. CONC	500 ppm	OSHA/Z2
		TWA	500 ppm	ACGIH
		STEL	750 ppm	ACGIH
		REL	250 ppm 590 mg/m3	NIOSH/GUIDE
		PEL	1,000 ppm 2,400 mg/m3	OSHA_TRANS
		TWA	250 ppm	ACGIHLIS_P



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		STEL	500 ppm	ACGIHLIS_P
		TWA	750 ppm 1,800 mg/m3	Z1A
		STEL	1,000 ppm 2,400 mg/m3	Z1A
CARBON DIOXIDE	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		REL	5,000 ppm 9,000 mg/m3	NIOSH/GUID E
		STEL	30,000 ppm 54,000 mg/m3	NIOSH/GUID E
		PEL	5,000 ppm 9,000 mg/m3	OSHA_TRA NS
n-HEPTANE	142-82-5	REL	85 ppm 350 mg/m3	NIOSH/GUID E
		Ceil_Time	440 ppm 1,800 mg/m3	NIOSH/GUID E
		PEL	500 ppm 2,000 mg/m3	OSHA_TRA NS
		TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH

### Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
METHANOL	67-56-1	methanol	Urine	Sampling time: End of shift.	15 mg/l	
Remarks:	Background, Nonspecific					
TOLUENE	108-88-3	o-Cresol, with hydrolysis	Creatinine in urine	Sampling time: End of shift.	0.3 mg/g	
Remarks:	Background					
		toluene	Urine	Sampling time: End of shift.	0.03 mg/l	
		toluene	Blood	Sampling time: Prior to last shift of work week.	0.02 mg/l	
ACETONE	67-64-1	acetone	Urine	Sampling time: End of shift.	50 mg/l	
Remarks:	Nonspecific					

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**Engineering measures** : 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.

**Personal protective equipment**

**Respiratory protection** : In the case of vapour formation use a respirator with an approved filter.  
In the case of dust or aerosol formation use respirator with an approved filter.

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.

**Hand protection**  
**Remarks** : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

**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 as appropriate:  
impervious clothing  
Safety shoes  
Flame-resistant clothing  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Discard gloves that show tears, pinholes, or signs of wear.  
Wear resistant gloves (consult your safety equipment supplier).

**Hygiene measures** : Avoid contact with skin, eyes and clothing.  
Wash hands before breaks and immediately after handling the product.  
When using do not eat or drink.  
When using do not smoke.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical state** : aerosol

**Odour** : No data available

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Odour Threshold : No data available  
 pH : No data available  
 : No data available  
 : No data available  
 Flash point : 19.9 °F / -6.7 °C  
 Evaporation rate : No data available  
 Flammability (solid, gas) :  
 No data available  
 Flammability (liquids) : Static Accumulating liquid  
 Flammability (liquids) :  
 Upper explosion limit : No data available  
 Lower explosion limit : No data available  
 Vapour pressure : No data available  
 Relative vapour density : No data available  
 Relative density : No data available  
 Density : 0.8057 g/cm<sup>3</sup> (15.56 °C)  
 Solubility(ies)  
     Water solubility : No data available  
     Solubility in other solvents : No data available  
 Partition coefficient: n-octanol/water : No data available  
 Thermal decomposition : No data available  
 Viscosity  
     Viscosity, dynamic : No data available  
     Viscosity, kinematic : No data available  
 Oxidizing properties : No data available

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## SECTION 10. STABILITY AND REACTIVITY

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Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Acids  
alkalis  
aluminum  
Amines  
Ammonia  
halogens  
Lead  
peroxides  
Reducing agents  
sodium  
strong bases  
Strong oxidizing agents  
Zinc  
Peroxides

Hazardous decomposition products : Aldehydes  
carbon dioxide and carbon monoxide  
formaldehyde-like  
Hydrocarbons  
organic compounds

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## SECTION 11. TOXICOLOGICAL INFORMATION

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

### Acute toxicity

Toxic if swallowed, in contact with skin or if inhaled

#### **Components:**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

Acute oral toxicity : LD 50 (Rat): > 8,000 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 3400 ppm  
Exposure time: 4 h  
Test atmosphere: vapour

Acute dermal toxicity : LD 50 (Rat): > 4,000 mg/kg

METHANOL:

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Acute oral toxicity : LD L0 (Human): 300 mg/kg  
Assessment: The component/mixture is classified as acute oral toxicity, category 3.

Acute inhalation toxicity : LC 50 (Rat): 64000 ppm  
Exposure time: 4 h  
  
Assessment: The component/mixture is classified as acute inhalation toxicity, category 3.  
Remarks: Slightly toxic by inhalation

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

**TOLUENE:**

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 8000 ppm  
Exposure time: 4 h

Acute dermal toxicity : LD 50 (Rabbit): 12,124 mg/kg

**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

**n-HEPTANE:**

Acute oral toxicity : LD 50 (Rat): Expected > 5,000 mg/kg  
Remarks: Information given is based on data obtained from similar substances.

Acute inhalation toxicity : LC 50 (Rat, male and female): > 29.29 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour  
Method: OECD Test Guideline 403  
Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

Acute dermal toxicity : LD 50 (Rabbit): Expected > 2,000 mg/kg  
Assessment: Not classified as acutely toxic by dermal absorption under GHS.  
Remarks: Information given is based on data obtained from similar substances.

**Skin corrosion/irritation**

Causes skin irritation.

**Product:**

Remarks: May cause skin irritation and/or dermatitis.

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Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

Result: Mildly irritating to skin

METHANOL:

Species: Rabbit

Result: Not irritating to skin

TOLUENE:

Result: Irritating to skin

ACETONE:

Result: Mildly irritating to skin

Result: Repeated exposure may cause skin dryness or cracking.

CARBON DIOXIDE:

Result: Not irritating to skin

n-HEPTANE:

Result: Irritating to skin

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

**Components:**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

Result: Mildly irritating to eyes

METHANOL:

Species: Rabbit

Result: Mildly irritating to eyes

TOLUENE:

Result: Irritating to eyes

ACETONE:

Result: Irritating to eyes

CARBON DIOXIDE:

Result: Not irritating to eyes

n-HEPTANE:

Result: Mildly irritating to eyes

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**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Components:**

METHANOL:

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 406

n-HEPTANE:

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

n-HEPTANE:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Test species: rat hepatocytes

Method: OECD Test Guideline 473

Result: negative

: Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Suspected of damaging fertility or the unborn child.

**Components:**

TOLUENE:

Reproductive toxicity - : Some evidence of adverse effects on sexual function and  
Assessment fertility, and/or on development, based on animal experiments.

**STOT - single exposure**

May cause drowsiness or dizziness.

Causes damage to organs (Central nervous system, Eyes).

**Components:**

METHANOL:

Target Organs: Central nervous system, Eyes

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

TOLUENE:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness.

ACETONE:

Exposure routes: Inhalation

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Target Organs: Nervous system  
 Assessment: May cause drowsiness or dizziness.

n-HEPTANE:  
 Assessment: May cause drowsiness or dizziness.

**STOT - repeated exposure**

May cause damage to organs (Neurologic: other (neuropsychological effects, auditory dysfunction and effects on colour vision)) through prolonged or repeated exposure if inhaled.

**Components:**

TOLUENE:

Exposure routes: Inhalation

Target Organs: Neurologic: other (neuropsychological effects, auditory dysfunction and effects on colour vision)

Assessment: May cause damage to organs through prolonged or repeated exposure.

**Aspiration toxicity**

May be fatal if swallowed and enters airways.

**Components:**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

May be fatal if swallowed and enters airways.

TOLUENE:

May be fatal if swallowed and enters airways.

ACETONE:

May be harmful if swallowed and enters airways.

n-HEPTANE:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

**Components:**

METHANOL:

Remarks: Central nervous system

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.



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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### METHANOL:

Toxicity to fish : LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss)): 18,000 - 20,000 mg/l  
Exposure time: 96 h  
Test Type: static test

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

#### TOLUENE:

Toxicity to fish : LC50 (Oncorhynchus kisutch (coho salmon)): 5.5 mg/l  
Exposure time: 96 h  
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Water flea (Ceriodaphnia dubia)): 3.78 mg/l  
Exposure time: 48 h  
Remarks: Mortality

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (microalgae)): > 433 mg/l  
End point: Growth inhibition  
Exposure time: 96 h

NOEC (Scenedesmus quadricauda (Green algae)): > 400 mg/l  
End point: Growth inhibition  
Exposure time: 7 d

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 1.39 mg/l  
Exposure time: 40 d  
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Water flea (Ceriodaphnia dubia)): 0.74 mg/l  
Exposure time: 7 d

#### ACETONE:

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

LC 50 (Fathead minnow (Pimephales promelas)): 8,733 - 9,482 mg/l

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Exposure time: 96 h  
Test Type: flow-through test

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

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

**n-HEPTANE:**

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): 1.5 mg/l  
Exposure time: 48 h  
Test Type: static test

LC 50 (Mysidopsis bahia (opossum shrimp)): 0.1 mg/l  
Exposure time: 96 h  
Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR (Water flea (Daphnia magna)): 1 mg/l  
Exposure time: 21 d  
Test Type: static test  
Test substance: WAF  
Method: OECD Test Guideline 211  
Remarks: Information given is based on data obtained from similar substances.

Ecotoxicology Assessment  
Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

**Persistence and degradability**

**METHANOL:**

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

**TOLUENE:**

Biodegradability : Result: Readily biodegradable

**ACETONE:**

Biodegradability : Result: Readily biodegradable  
Biodegradation: 90.9 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

**n-HEPTANE:**

Biodegradability : Result: Readily biodegradable

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**Bioaccumulative potential**

**METHANOL:**

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

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

**TOLUENE:**

Bioaccumulation : Species: Ide, silver or golden orfe (Leuciscus idus)  
 Bioconcentration factor (BCF): 94  
 Exposure time: 3 d  
 Concentration: 0.05 mg/l  
 Method: Not reported

Partition coefficient: n-octanol/water : log Pow: 2.73

**ACETONE:**

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

**n-HEPTANE:**

Partition coefficient: n-octanol/water : log Pow: 4.66

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : The product should not be allowed to enter drains, water courses or the soil.  
 Do not contaminate ponds, waterways or ditches with chemical or used container.  
 Send to a licensed waste management company.

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

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Contaminated packaging : Empty remaining contents.  
 Empty containers should be taken to an approved waste  
 handling site for recycling or disposal.  
 Do not re-use empty containers.  
 Do not burn, or use a cutting torch on, the empty drum.

**SECTION 14. TRANSPORT INFORMATION****International transport regulations****REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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**U.S. DOT - ROAD**

	ORM-D, CONSUMER COMMODITY	ORM			
--	------------------------------	-----	--	--	--

**U.S. DOT - RAIL**

	ORM-D, CONSUMER COMMODITY	ORM			
--	------------------------------	-----	--	--	--

**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		MARINE POLLUTANT:( ALIPHATIC PETROLEUM NAPHTHA)LIM ITED QUANTITY
----	------	----------	-----	--	--

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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

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

UN	1950	Aerosols, flammable	2.1
----	------	---------------------	-----

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

UN	1950	AEROSOLS	2
----	------	----------	---

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	yes
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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.

**SECTION 15. REGULATORY INFORMATION**

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
TOLUENE	108-88-3	1000	10612.106291

**SARA 311/312 Hazards** : Acute Health Hazard  
Chronic Health Hazard  
Fire Hazard

SARA 313 Component(s)			
METHANOL	67-56-1		34.84 %
TOLUENE	108-88-3		9.40 %

<b>Pennsylvania Right To Know</b>			
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8		30.00 - 50.00 %
METHANOL	67-56-1		30.00 - 50.00 %
TOLUENE	108-88-3		5.00 - 10.00 %

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ACETONE	67-64-1	5.00 - 10.00 %
CARBON DIOXIDE	124-38-9	5.00 - 10.00 %
n-HEPTANE	142-82-5	1.00 - 5.00 %

**New Jersey Right To Know**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	30.00 - 50.00 %
METHANOL	67-56-1	30.00 - 50.00 %
TOLUENE	108-88-3	5.00 - 10.00 %
ACETONE	67-64-1	5.00 - 10.00 %
CARBON DIOXIDE	124-38-9	5.00 - 10.00 %
n-HEPTANE	142-82-5	1.00 - 5.00 %

**California Prop 65**

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

BENZENE 71-43-2

ETHYL BENZENE 100-41-4

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

METHANOL 67-56-1

TOLUENE 108-88-3

BENZENE 71-43-2

**The components of this product are reported in the following inventories:**

TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL.
AUSTR	: On the inventory, or in compliance with the inventory
NZIOC	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECL	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory

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**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

**SECTION 16. OTHER INFORMATION**

**Further information**

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<p><b>NFPA:</b></p> <p style="text-align: center;">Flammability</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">Health 2</div> <div style="text-align: center;"> </div> <div style="text-align: center;">Instability 0</div> </div> <p style="text-align: center;">Special hazard.</p>	<p><b>HMIS III:</b></p> <table border="1" style="width: 100%;"> <tr> <td style="background-color: blue; color: white;"><b>HEALTH</b></td> <td style="text-align: center;"><b>2</b></td> </tr> <tr> <td style="background-color: red; color: white;"><b>FLAMMABILITY</b></td> <td style="text-align: center;"><b>4</b></td> </tr> <tr> <td style="background-color: yellow;"><b>PHYSICAL HAZARD</b></td> <td style="text-align: center;"><b>0</b></td> </tr> </table> <p>0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>2</b>	<b>FLAMMABILITY</b>	<b>4</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>2</b>						
<b>FLAMMABILITY</b>	<b>4</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

**NFPA Flammable and Combustible Liquids Classification**

Not applicable

**Full text of H-Statements referred to under sections 2 and 3.**

- H225 Highly flammable liquid and vapor.
- H280 Contains gas under pressure; may explode if heated.
- H301 Toxic if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H311 Toxic in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H336 May cause drowsiness or dizziness.
- H361 Suspected of damaging fertility or the unborn child.
- H370 Causes damage to organs.
- H373 May cause damage to organs through prolonged or repeated exposure if inhaled.
  
- H401 Toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

Sources of key data used to compile the Safety Data Sheet

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Ashland internal data including own and sponsored test reports  
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

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 SDS 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  
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



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PMRA : Health Canada Pest Management Regulatory Agency  
RTK : Right to Know  
WHMIS : Workplace Hazardous Materials Information System