

Revision Date: 09/25/2012

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MSDS Number: 000000023124

Version: 1.13

Pyroil™ PYROIL PENETRATING OIL PENETRATING OIL 596555

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 Pyroil™ PYROIL PENETRATING OIL PENETRATING OIL

Product code 596555

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: aerosol

WARNING! CONTENTS UNDER PRESSURE. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause severe eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure eye tissue.

Skin contact

May cause slight skin irritation. 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



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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 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)

Symptoms

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), Blurred vision, Lack of coordination

Target Organs

Diethylene glycol monobutyl ether has been found to cause breakage of red blood cells following ingestion in rats. Injury to other organs including liver and kidneys was considered secondary to the effect on the blood., Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans.

Carcinogenicity

This product (or a component) is a petroleum-derived material. Similar materials and certain compounds occurring naturally in petroleum oils have been shown to cause skin cancer in laboratory animals following repeated exposure without washing or removal. This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

Reproductive hazard

Diethylene glycol monobutyl ether did not cause harm to the fetus when given orally or when applied to the skin in laboratory animal studies.



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3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No. / Trade Secret No.	Concentration
SOLVENT NAPHTHA (PETROLEUM), HEAVY	64742-96-7	>=80-<90%
ALIPHATIC		
DISTILLATES (PETROLEUM),	64742-53-6	>=10-<15%
HYDROTREATED LIGHT NAPHTHENIC		
DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5	>=1.5-<5%
CARBON DIOXIDE	124-38-9	>=1.5-<5%

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. 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, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician

Hazards: Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-



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term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities. Diglycol ethers may cause acidosis. 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. FIREFIGHTING MEASURES

Suitable extinguishing media

Water spray, Foam, Dry powder, Carbon dioxide (CO2)

Hazardous combustion products

Aldehydes, carbon dioxide and carbon monoxide, Hydrocarbons, nitrogen oxides (NOx)

Precautions for fire-fighting

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.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

Methods for cleaning up



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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.

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.

Storage

Store in a cool, dry, ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

DISTILLATES (PETROLEUM), HYDROTREATED		64742-53-6	
LIGHT NAPHTHENIC			
OSHA Z1	Permissible exposure limit	500 ppm	
OSHA Z1	Permissible exposure limit	2,000 mg/m3	
NIOSH	Recommended exposure limit (REL):	5 mg/m3	Mist.
NIOSH	Short term exposure limit	10 mg/m3	Mist.
OSHA Z1	Permissible exposure limit	5 mg/m3	Mist.
ACGIH	time weighted average	5 mg/m3	Inhalable fraction.
DIETHYLENE GLYCOI	L MONOBUTYL ETHER	112-34-5	
ACGIH NIC	time weighted average	7 ppm	Inhalable fraction and vapor
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	





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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 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. Maintain eye wash station near work area.

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).

Respiratory protection

Respiratory protection is not required under normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	aerosol	
Boiling point/boiling range	354 °F / 179 °C Value for Component	
Flash point		
not applicable		
Density	0.813 g/cm3 @ 60.1 °F / 15.6 °C	



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10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Do not allow evaporation to dryness., Heat, flames and sparks.

Incompatible products

Oxidizing agents, Strong acids, Strong bases, strong reducing agents

Hazardous decomposition products

Aldehydes, carbon dioxide and carbon monoxide, Hydrocarbons, nitrogen oxides (NOx), Organic acids, ketones

Hazardous reactions

Product will not undergo hazardous polymerization.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

Acute oral toxicity - : no data available

Product

Acute oral toxicity - Components

SOLVENT NAPHTHA : LD 50: > 5 g/kg Species: Rat Remarks: Information given

(PETROLEUM), HEAVY is based on data obtained from similar substances.

ALIPHATIC

DISTILLATES : LD 50: > 5 g/kg Species: Rat

(PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

DIETHYLENE GLYCOL : LD 50: 6,560 mg/kg Species: Rat

MONOBUTYL ETHER



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Acute inhalation toxicity

Acute inhalation toxicity - : no data available

Product

Acute inhalation toxicity - Components

SOLVENT NAPHTHA : LC 50: > 5 mg/l Exposure time: 4 h Species: Rat Remarks:

(PETROLEUM), HEAVY Information given is based on data obtained from similar

ALIPHATIC substances.

Acute dermal toxicity

Acute dermal toxicity - : no data available

Product

Acute dermal toxicity - Components

SOLVENT NAPHTHA : LD 50: > 2,000 mg/kg Species: Rat Remarks: Information

(PETROLEUM), HEAVY given is based on data obtained from similar substances.

ALIPHATIC

DISTILLATES : LD 50: > 2,000 mg/kg Species: Rabbit

(PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

DIETHYLENE GLYCOL : LD 50: 2,700 mg/kg Species: Rabbit

MONOBUTYL ETHER

Acute toxicity (other routes of administration)

Acute toxicity (other : no data available

routes of administration)

12. ECOLOGICAL INFORMATION

Biodegradability

Biodegradability - Product : no data available

Bioaccumulation

Bioaccumulation - Product : no data available



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Ecotoxicity effects

Toxicity to fish

Toxicity to fish - Product : no data available

Toxicity to fish - Components

DIETHYLENE GLYCOL : LC 50: 1,300 mg/l MONOBUTYL ETHER Exposure time: 96 h

Species: Bluegill (Lepomis macrochirus)

Method: Static Remarks: Mortality

Toxicity to daphnia and other aquatic invertebrates

Toxicity to daphnia and : no data available

other aquatic invertebrates

- Product

Toxicity to daphnia and other aquatic invertebrates - Components

DIETHYLENE GLYCOL : LC 50: 2,850 mg/l MONOBUTYL ETHER Exposure time: 24 h

Species: Water flea (Daphnia magna)

Method: Static Remarks: Mortality

Toxicity to algae

Toxicity to algae - : no data available

Product

Toxicity to bacteria

Toxicity to bacteria - : no data available

Product

13. DISPOSAL CONSIDERATIONS



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Waste disposal methods

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

14. TRANSPORT INFORMATION						
	LATIO					
ID		PROPER SHIPPING NAME	*HAZARD	SUBSIDIARY	PACKING	MARINE
NUM	BER		CLASS	HAZARDS	GROUP	POLLUTANT / LTD. QTY.
U.S. D	OT - RO	OAD	- 1	•	•	
UN	1950	Aerosols	2.1			LIMITED
						QUANTITY
iic n	OT - RA	II				
UN UN	1950	Aerosols	2.1			LIMITED
OIV	1750	ACIOSOIS	2.1			QUANTITY
U.S. D	OT - IN	LAND WATERWAYS				
UN	1950	Aerosols	2.1			LIMITED
						QUANTITY
TRAN	SPORT	CANADA - ROAD				
UN	1950	AEROSOLS	2.1			LIMITED
						QUANTITY
TRAN	SPORT	CANADA - RAIL				
UN	1950	AEROSOLS	2.1			LIMITED
	1750	TEROSOLS	2.1			QUANTITY
TRAN	SPORT	CANADA - INLAND WATER	WAYS			
UN	1950	AEROSOLS	2.1			LIMITED
						QUANTITY
INTFI	RNATIO	NAL MARITIME DANGERO	US GOODS			
UN	1950		2.1			LIMITED
	1,50	12100020	2.1			OUANTITY
						~ ,

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO



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UN	1950	Aerosols, non-flammable	2.2		
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INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

	11111		0001111011	111002110211	
UN	1950	Aerosols, non-flammable	2.2		

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

WASI	LO			
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. 65This product does not contain any chemicals	
known to State of California to cause cancer, birth defects, or any	
other reproductive harm.	

SARA Hazard Classification SARA 311/312 Classification

Acute Health Hazard

Sudden Release of Pressure Hazard

SARA 313 Component(s)

DIETHYLENE GLYCOL MONOBUTYL ETHER	3.08 %
ETHYLENE GLYCOL MONOBUTYL ETHER	0.03 %

New Jersey RTK Label Information

SOLVENT NAPHTHA (PETROLEUM), HEAVY	64742-96-7
ALIPHATIC	
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	64742-53-6
NAPHTHENIC	
DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5



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CARBON DIOXIDE	124-38-9

Pennsylvania RTK Label Information

SOLVENT NAPHTHA (PETROLEUM), HEAVY	64742-96-7
ALIPHATIC	
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	64742-53-6
NAPHTHENIC	
DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5
CARBON DIOXIDE	124-38-9

Notification status

US. Toxic Substances Control Act	y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA).	q (quantity restricted)
Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	
Australia. Industrial Chemical (Notification and Assessment)	n (Negative listing)
Act	
New Zealand. Inventory of Chemicals (NZIoC), as published	n (Negative listing)
by ERMA New Zealand	
Japan. Kashin-Hou Law List	n (Negative listing)
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear	q (quantity restricted)
Waste Control Act	
China. Inventory of Existing Chemical Substances	y (positive listing)

	HMIS	NFPA
Health	2	2
Flammability	1	1
Physical hazards	0	
Instability		0
Specific Hazard	1	

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



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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).