

PYROIL® NON-FLAMMABLE TIRE
INFLATOR
PYNFTI12

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	1-800-ASHLAND (1-800-274-5263)

Product name	PYROIL® NON-FLAMMABLE TIRE INFLATOR
Product code	PYNFTI12
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: aerosol

MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.

Potential Health Effects

Routes of exposure

Inhalation, Skin absorption, Skin contact, Eye Contact

Eye contact

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

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.

Inhalation

PYROIL® NON-FLAMMABLE TIRE
INFLATOR
PYNFTI12

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.

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (for example, asthma-like conditions), liver, kidney, 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.

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: Cough, involuntary eye movement, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Bloody urine, blood abnormalities (breakage of red blood cells), kidney damage, liver damage, 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, cyanosis (causes blue coloring of the skin and nails from lack of oxygen), lung edema (fluid buildup in the lung tissue), acute kidney failure (sudden slowing or stopping of urine production), Convulsions, coma

Target Organs

Acute lethal exposure to ethylene glycol monobutyl ether in animal studies has resulted in congestion of organs including kidney, spleen, and lung. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible spleen effects, blood abnormalities, reproductive effects, kidney damage, liver damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: kidney damage, liver damage

Carcinogenicity

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). Ethylene glycol monobutyl ether has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain.

PYROIL® NON-FLAMMABLE TIRE
INFLATOR
PYNFTI12

Reproductive hazard

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain., Ethylene glycol has caused birth defects in animal studies at high oral doses. However, it did not cause harm to the pregnant animal or to the fetus when applied to the skin of the pregnant animal.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
TETRAFLUOROETHANE	811-97-2	>=30-<40%
ETHYLENE GLYCOL	111-76-2	>=20-<30%
MONOBUTYL ETHER		
ETHYLENE GLYCOL	107-21-1	>=5-<10%

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, 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.

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INFLATOR
PYNFTI12

Notes to physician

Hazards: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting. Effects of acute ethylene glycol poisoning appear in three fairly distinct stages. The initial stage occurs shortly after exposure, lasts 6-12 hours, and is characterized by central nervous system effects (transient exhilaration, nausea, vomiting, and in severe cases, coma, convulsions, and possible death). The second stage lasts from 12-36 hours after exposure and is initiated by the onset of coma. This phase is characterized by tachypnea, tachycardia, mild hypotension, cyanosis, and in severe cases, pulmonary edema, bronchopneumonia, cardiac enlargement, and congestive failure. The final stage occurs 24-72 post-exposure and is characterized by renal failure, ranging from a mild increase in blood urea nitrogen and creatinine followed by recovery, to complete anuria with acute tubular necrosis that can lead to death. Oxaluria is found in most cases. The most significant laboratory finding in ethylene glycol intoxication is severe metabolic acidosis.

Treatment: This product contains ethylene glycol. Ethanol decreases the metabolism of ethylene glycol to toxic metabolites. Ethanol should be administered as soon as possible in cases of severe poisoning since the elimination half-life of ethylene glycol is 3 hours. If medical care will be delayed several hours, give the patient three to four 1-ounce oral "shots" of 86-proof or higher whiskey before or during transport to the hospital. Fomepizole (4-methylpyrazole) is an effective antagonist of alcohol dehydrogenase, and as such, may be used as an antidote in the treatment of ethylene glycol poisoning. Hemodialysis effectively removes ethylene glycol and its metabolites from the body.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water mist, Carbon dioxide (CO₂), Dry chemical

Hazardous combustion products

May form: carbon dioxide and carbon monoxide, halogen and halogen acids, nitrogen oxides (NO_x)

Precautions for fire-fighting

PYROIL® NON-FLAMMABLE TIRE
INFLATOR
PYNFTI12

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 liquid with water used for cooling purposes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

No data

Environmental precautions

No data

Methods for cleaning up

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood.

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

ETHYLENE GLYCOL MONOBUTYL 111-76-2
ETHER

ACGIH	time weighted average	20 ppm
NIOSH	Recommended exposure limit (REL):	5 ppm

PYROIL® NON-FLAMMABLE TIRE
INFLATOR
PYNFTI12

NIOSH	Recommended exposure limit (REL):	24 mg/m3
OSHA Z1	Permissible exposure limit	50 ppm
OSHA Z1	Permissible exposure limit	240 mg/m3

ETHYLENE GLYCOL **107-21-1**

ACGIH	Ceiling Limit Value:	100 mg/m3	Aerosol.
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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).

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

To prevent repeated or prolonged skin contact, wear impervious clothing and boots. Wear resistant gloves such as:
polyvinyl alcohol
Viton (R)

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

PYROIL® NON-FLAMMABLE TIRE
INFLATOR
PYNFTI12

Physical state	aerosol
Form	aerosol
Colour	No data
Odour	No data
Boiling point/boiling range	212.00 °F / 212 °F
pH	No data
Flash point	No data
Evaporation rate	0.2 (N-Butyl Acetate)
Explosion limits	No data
Vapour pressure	No data
Vapour density	(>) 1 ((Air = 1.0))
Density	No data
	No data
Solubility	soluble in water
Partition coefficient: n-octanol/water	No data
log Pow	no data available
Autoignition temperature	No data

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Avoid contact with:, excessive heat, temperatures over 120 degrees F

Incompatible products

Avoid contact with:, Strong acids, Strong oxidizing agents

Hazardous decomposition products

carbon dioxide and carbon monoxide, hydrogen chloride, Phosgene, Avoid contact with open flame, welding arcs, resistance heaters, etc., which can result in thermal decomposition releasing hydrogen chloride and small amounts of phosgene and chlorine.

Hazardous reactions

Product will not undergo hazardous polymerization.

PYROIL® NON-FLAMMABLE TIRE
INFLATOR
PYNFTI12

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

TETRAFLUOROETHANE	no data available
ETHYLENE GLYCOL MONOBUTYL ETHER	LD 50 Guinea pig: 1,200 mg/kg
ETHYLENE GLYCOL	LD 50 Rat: 6,140 mg/kg LD 50 Mouse: 14,600 mg/kg

Acute inhalation toxicity

TETRAFLUOROETHANE	no data available
ETHYLENE GLYCOL MONOBUTYL ETHER	LC 50 Guinea pig: > 633 ppm, 1 h
ETHYLENE GLYCOL	no data available

Acute dermal toxicity

TETRAFLUOROETHANE	no data available
ETHYLENE GLYCOL MONOBUTYL ETHER	LD 50 Guinea pig: > 2,000 mg/kg
ETHYLENE GLYCOL	LD 50 Rabbit: 10,611 mg/kg

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

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INFLATOR
PYNFTI12

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

IMDG:

UN1950, AEROSOLS 2.2,

IATA_P:

UN1950, Aerosols, non-flammable 2.2,

IATA_C:

UN1950, Aerosols, non-flammable 2.2,

CFR_ROAD:

UN1950, Aerosols 2.2,

CFR_RAIL:

UN1950, Aerosols 2.2,

CFR_INWTR:

UN1950, Aerosols 2.2,

IMDG_ROAD:

UN1950, AEROSOLS 2.2,

IMDG_RAIL:

UN1950, AEROSOLS 2.2,

Dangerous goods descriptions (if indicated above) may not reflect package size, 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

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

SARA Hazard Classification Acute Health Hazard

SARA 313 Component(s)

ETHYLENE GLYCOL	111-76-2	29.99%
MONOBUTYL ETHER		

PYROIL® NON-FLAMMABLE TIRE
INFLATOR
PYNFTI12

ETHYLENE GLYCOL 107-21-1 8.99%

Reportable quantity - Product

US. EPA CERCLA Hazardous Substances (40 CFR 302) 55617 lbs

Reportable quantity - Components

TETRAFLUOROETHANE	811-97-2	none
ETHYLENE GLYCOL	111-76-2	none
MONOBUTYL ETHER		
ETHYLENE GLYCOL	107-21-1	5000 lbs

	Health	Flammability	Reactivity	Other
HMIS	2	1	0	
NFPA	2	0	0	

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).