

Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

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™ ALL-PURPOSE CLEANER DEGREASER

Product code PYAPCD30

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid

DANGER! MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY BE HARMFUL IF SWALLOWED. MAY BE HARMFUL. MAY CAUSE SEVERE BURNS OF RESPIRATORY AND DIGESTIVE TRACTS. CAUSES SEVERE BURNS OF THE EYES AND SKIN.

Potential Health Effects

Exposure routes

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

Eye contact

Can cause permanent eye injury. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure the cornea and cause blindness.

Skin contact

Can cause permanent skin damage. Symptoms may include redness, burning, and swelling of skin, burns, 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.

Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

Ingestion

Swallowing this material may be harmful or fatal. Symptoms may include severe stomach and intestinal irritation (nausea, vomiting, diarrhea), abdominal pain, and vomiting of blood. Swallowing this material may cause burns and destroy tissue in the mouth, throat, and digestive tract. Low blood pressure and shock may occur as a result of severe tissue injury.

Inhalation

Breathing of vapor or mist is possible. Breathing this material may be harmful or fatal. Symptoms may include severe irritation and burns to the nose, throat, and respiratory tract. 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: lung (for example, asthma-like conditions), Liver, kidney, Skin

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), Lowered blood pressure, Difficulty in breathing, Bloody urine, blood abnormalities (breakage of red blood cells), kidney damage, liver damage, 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., Frequent ingestion of silicates over long periods of time is associated with the formation of stones in the kidney and urinary tract in humans., 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

Carcinogenicity

Diethanolamine has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. Diethanolamine is listed as a possible human carcinogen by the International Agency for Research on Cancer (IARC). Diethanolamine and coco diethanolamide have been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. Coco diethanolamide is listed as a possible human carcinogen by the International Agency for Research

Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

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

Reproductive hazard

This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. The relevance of these findings to humans is uncertain.

Other information

This product contains amines which may react with nitrites or other nitrosating agents to form nitrosamines. Certain nitrosamines have been shown to cause cancer in laboratory animals.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No. / Trade Secret No.	Concentration
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	>=1.5-<5%
SODIUM TRIPOLYPHOSPHATE	7758-29-4	>=1.5-<5%
SODIUM METASILICATE	6834-92-0	>=1.5-<5%
NON-IONIC SURFACTANT	254504001-5448	>=1.5-<5%
ALCOHOL ETHOXYLATE		>=1.5-<5%
SODIUM XYLENE SULFONATE	1300-72-7	>=1-<1.5%
COCO DIETHANOLAMIDE	68603-42-9	>=1-<1.5%
DIETHANOLAMINE	111-42-2	>=0.1-<0.5%

4. FIRST AID MEASURES

Eyes

If material gets into the eyes, immediately flush eyes gently with water for at least 15 minutes while holding eyelids apart. If symptoms develop as a result of vapor exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Seek immediate medical attention.

Skin

Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

Immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes. Seek immediate medical attention. Wash clothing before reuse and discard contaminated shoes.

Ingestion

Seek immediate medical attention. Do not induce vomiting. Vomiting will cause further damage to the mouth and throat. If individual is conscious and alert, immediately rinse mouth with water and give milk or water to drink. 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: Excessive levels of phosphorus can cause low blood calcium, with tetany and convulsions.

Treatment: No information available.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Carbon dioxide (CO₂), Water spray

Hazardous combustion products

carbon dioxide and carbon monoxide, Aldehydes, Ketones, Organic acids, Hydrogen, toxic fumes, Oxides of phosphorus, Sodium oxides, Hydrocarbons, Sulphur oxides, nitrogen oxides (NO_x)

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

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

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

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

ETHYLENE GLYCOL MONOBUTYL ETHER		111-76-2
ACGIH	time weighted average	20 ppm
NIOSH	Recommended exposure limit (REL):	5 ppm
NIOSH	Recommended exposure limit (REL):	24 mg/m ³
OSHA Z1	Permissible exposure limit	50 ppm
OSHA Z1	Permissible exposure limit	240 mg/m ³

General advice

Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

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. Mechanical ventilation systems used to ventilate corrosive storage or process areas must be designed with components that are corrosion resistant. Mechanical ventilation systems used to ventilate corrosive storage or process areas must be designed with components that are corrosion resistant.

Eye protection

Wear chemical splash goggles and face shield when there is potential for exposure of the eyes or face to liquid, vapor or mist. Maintain eye wash station in immediate work area.

Skin and body protection

Wear appropriate chemical impervious clothing and boots whenever there is potential for skin contact with product. Launder clothing before reuse. Maintain safety shower at all locations where skin contact could occur. Contact your local safety equipment supplier to assist the facility in determining proper selection of personal protective equipment for the applications/operations present at your facility. 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

Physical state	liquid
Boiling point/boiling range	212 °F / 100 °C @ 1,013.33 hPa Calculated Phase

Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

	Transition Liquid/Gas
pH	13.5
Flash point	not applicable
Lower explosion limit/Upper explosion limit	1.1 %(V) / 10.6 %(V) Calculated Explosive Limit
Vapour pressure	23.333 hPa @ 68 °F / 20 °C Calculated Vapor Pressure
Density	1.04 g/cm ³ @ 60.00 °F / 15.56 °C

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Do not allow evaporation to dryness., excessive heat

Incompatible products

Acids, aluminum salts, Amines, Ammonia, Bases, chlorates, Lead, salts of strong bases, Strong oxidizing agents, strong reducing agents, Zinc

Hazardous decomposition products

Aldehydes, carbon dioxide and carbon monoxide, ketones, Organic acids, Hydrogen, Oxides of phosphorus, Sodium oxides, Sulphur oxides, nitrogen oxides (NO_x)

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

Pyroil™ ALL-PURPOSE CLEANER
 DEGREASER
 PYAPCD30

ETHYLENE GLYCOL MONOBUTYL ETHER	: LD 50: 1.2 g/kg Species: Guinea pig
SODIUM TRIPOLYPHOSPHATE	: LD 50: 3,120 mg/kg Species: Rat
SODIUM METASILICATE	: LD 50: 1,153 mg/kg Species: Rat
ALCOHOL ETHOXYLATE	: LD50: > 2,000 mg/kg Species: rat Remarks: Based on a similar product formulation.
SODIUM XYLENE SULFONATE	: LD 50: > 7,000 mg/kg Species: Rat
COCO DIETHANOLAMIDE	: LD 50: 2,700 mg/kg Species: Rat
DIETHANOLAMINE	: LD 50: 680 mg/kg Species: Rat

Acute inhalation toxicity

Acute inhalation toxicity - Product	: no data available
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Acute inhalation toxicity - Components

ETHYLENE GLYCOL MONOBUTYL ETHER	: LC 50: > 633 ppm Exposure time: 1 h Species: Guinea pig Remarks: Slightly toxic by inhalation
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Acute dermal toxicity

Acute dermal toxicity - Product	: no data available
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Acute dermal toxicity - Components

ETHYLENE GLYCOL MONOBUTYL ETHER	: LD 50: 400 - 500 mg/kg Species: Rabbit
	LD 50: > 2,000 mg/kg Species: Guinea pig
SODIUM TRIPOLYPHOSPHATE	: LD 50: > 4,640 mg/kg Species: Rabbit
ALCOHOL ETHOXYLATE	: LD 50: 3,300 mg/kg Species: Rat
SODIUM XYLENE SULFONATE	: LD 50: > 2,000 mg/kg Species: Rabbit

Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

COCO DIETHANOLAMIDE	: LD 50: > 2 g/kg Species: Rabbit
DIETHANOLAMINE	: LD 50: > 8,200 mg/kg Species: Rabbit

Acute toxicity (other routes of administration)

Acute toxicity (other routes of administration)	: no data available
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12. ECOLOGICAL INFORMATION

Biodegradability

Biodegradability - Product	: no data available
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Biodegradability - Components

ALCOHOL ETHOXYLATE	: Remarks: Expected to be biodegradable
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COCO DIETHANOLAMIDE	: Remarks: Readily biodegradable
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Bioaccumulation

Bioaccumulation - Product	: no data available
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Ecotoxicity effects

Toxicity to fish

Toxicity to fish - Product	: no data available
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Toxicity to fish - Components

ALCOHOL ETHOXYLATE	: 8.5 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow) Remarks: Based on a similar product formulation.
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COCO DIETHANOLAMIDE	: LC 50: 3.6 mg/l Exposure time: 96 h Species: Danio rerio (zebra fish)
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Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

Test Type: semi-static test

DIETHANOLAMINE : LC 50: > 100 mg/l
Exposure time: 96 h
Species: Fathead minnow (*Pimephales promelas*)
Method: Static
Remarks: Mortality

Toxicity to daphnia and other aquatic invertebrates

Toxicity to daphnia and other aquatic invertebrates : no data available
- Product

Toxicity to daphnia and other aquatic invertebrates - Components

SODIUM : EC 50: 238.35 - 321.01 mg/l
TRIPOLYPHOSPHATE Exposure time: 48 h
Species: Water flea (*Ceriodaphnia dubia*)
Method: Not reported
Remarks: Intoxication

ALCOHOL : 5.3 mg/l
ETHOXYLATE Species: Daphnia
Remarks: Based on a similar product formulation.

COCO : EC 50: 2.15 mg/l
DIETHANOLAMIDE Exposure time: 48 h
Species: Water flea (*Daphnia pulex*)
Test Type: static test

DIETHANOLAMINE : LC 50: 96.3 - 124.6 mg/l
Exposure time: 48 h
Species: Water flea (*Daphnia magna*)
Method: Static
Remarks: Mortality

LC 50: 55 mg/l
Exposure time: 48 h
Species: Water flea (*Daphnia magna*)
Test Type: static test

Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

Toxicity to algae

Toxicity to algae - Product	: no data available
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Toxicity to algae - Components

COCO	: EC 50: 2.2 mg/l
DIETHANOLAMIDE	Exposure time: 72 h Species: <i>Desmodesmus subspicatus</i> (green algae)

DIETHANOLAMINE	: EC 50: 2.2 mg/l Exposure time: 96 h Species: <i>Pseudokirchneriella subcapitata</i> (green algae)
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Toxicity to bacteria

Toxicity to bacteria - Product	: no data available
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13. DISPOSAL CONSIDERATIONS

Waste disposal methods

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

14. TRANSPORT INFORMATION

REGULATION

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

Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

UN	3266	Corrosive liquid, basic, inorganic, n.o.s. (SODIUM METASILICATE, TRISODIUM PHOSPHATE)	8	II
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U.S. DOT - RAIL

UN	3266	Corrosive liquid, basic, inorganic, n.o.s. (SODIUM METASILICATE, TRISODIUM PHOSPHATE)	8	II
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U.S. DOT - INLAND WATERWAYS

UN	3266	Corrosive liquid, basic, inorganic, n.o.s. (SODIUM METASILICATE, TRISODIUM PHOSPHATE)	8	II
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TRANSPORT CANADA - ROAD

UN	3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM METASILICATE, TRISODIUM PHOSPHATE)	8	II
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TRANSPORT CANADA - RAIL

UN	3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM METASILICATE, TRISODIUM PHOSPHATE)	8	II
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TRANSPORT CANADA - INLAND WATERWAYS

UN	3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM METASILICATE, TRISODIUM PHOSPHATE)	8	II
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INTERNATIONAL MARITIME DANGEROUS GOODS

UN	3266	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM METASILICATE, TRISODIUM PHOSPHATE)	8	II
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Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN	3266	Corrosive liquid, basic, inorganic, n.o.s. (SODIUM METASILICATE, TRISODIUM PHOSPHATE)	8	II
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INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	3266	Corrosive liquid, basic, inorganic, n.o.s. (SODIUM METASILICATE, TRISODIUM PHOSPHATE)	8	II
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MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	3266	LIQUIDO CORROSIVO, BASICO, INORGANICO, N.E.P. (SODIUM METASILICATE, TRISODIUM PHOSPHATE)	8	II
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*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

SARA Hazard Classification
SARA 311/312 Classification
Acute Health Hazard

SARA 313 Component(s)

ETHYLENE GLYCOL MONOBUTYL ETHER	4.00 %
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New Jersey RTK Label Information

WATER	7732-18-5
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2
SODIUM METASILICATE	6834-92-0
SODIUM TRIPOLYPHOSPHATE	7758-29-4

Pyroil™ ALL-PURPOSE CLEANER
 DEGREASER
 PYAPCD30

NON-IONIC SURFACTANT	254504001-5448
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Pennsylvania RTK Label Information

WATER	7732-18-5
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2
SODIUM METASILICATE	6834-92-0
SODIUM TRIPOLYPHOSPHATE	7758-29-4

Notification status

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

Reportable quantity - Product

US. EPA CERCLA Hazardous Substances (40 CFR 302)	61162 lbs
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Reportable quantity-Components

DIETHANOLAMINE	111-42-2	100 lbs
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	HMIS	NFPA
Health	3	3
Flammability	1	1
Physical hazards	0	
Instability		0
Specific Hazard	--	--

Pyroil™ ALL-PURPOSE CLEANER
DEGREASER
PYAPCD30

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).