Eagle One™ MAG & TIRE CLEANER EXPT
FC WHEEL CLEANER
3547

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland P.O. Box 2219 Columbus, OH 43216	Regulatory Information Number Telephone Emergency telephone number	1-800-325-3751 614-790-3333 1-800-ASHLAND (1-800-274-5263)

Product name: Eagle One™ MAG & TIRE CLEANER EXPT FC WHEEL CLEANER

Product code: 3547
Product Use Description: No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, colourless

DANGER! CONTAINS HYDROFLUORIC ACID. MAY BE HARMFUL. MAY CAUSE SEVERE BURNS OF RESPIRATORY AND DIGESTIVE TRACTS. MAY BE HARMFUL IF ABSORBED THROUGH THE SKIN. 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. Exposure can cause severe irritation and fluoride-like burns which may not be immediately evident.

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

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). 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), Upper respiratory tract, skin, Liver, kidney, Central nervous system, bone, 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:, stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), Cough, sneezing, choking, Headache, Difficulty in breathing, lung edema (fluid buildup in the lung tissue), damage to the mouth, throat, and/or airways

Target Organs

Repeated, prolonged overexposure to inorganic fluoride compounds may result in gastrointestinal disturbances, loss of weight, anemia (reduced number of red blood cells), diseases of the teeth,and skeletal fluorosis. Skeletal fluorosis is characterized by bone and joint pain, limited motion in the joints or spine, increased bone density which can cause the bones to become brittle, and hardening of ligaments., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals:, nervous system effects, blood abnormalities, liver abnormalities, kidney damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans:, damage to tooth enamel, effects on lung function, respiratory tract damage (nose, throat, and airways)

Carcinogenicity

This product contains sulfuric acid. The International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) have listed strong-inorganic-acid mists containing sulfuric acid as causing cancer in humans.

Reproductive hazard

Inhalation of sulfuric acid fumes was not harmful to the fetus in laboratory animal studies even at levels that caused some harm to the pregnant animals., 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.

Other information

Hydrofluoric acid has been shown to cause permanent changes in the DNA of insect germ cells. Changes in these cells can be passed to the next generation. The relevance of this finding to human health is uncertain.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No.	Concentration
PHOSPHORIC ACID	7664-38-2	>=10-<15%
SULFURIC ACID	7664-93-9	>=1.5-<5%
HYDROFLUORIC ACID	7664-39-3	>=1.5-<5%
ALCOHOL ETHOXYLATE		>=1-<1.5%
SODIUM 1-OCTANESULFONATE	5324-84-5	>=1-<1.5%

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

Immediately flush contaminated skin with large quantities of cool running water for 5 minutes. Remove contaminated clothing while flushing contaminated skin. Immediately after washing, apply 2.5% calcium gluconate gel to all affected skin areas. (Note: If gel is not prepared within 5 minutes, continue flushing until gel is prepared.) The gel should be massaged into the affected skin by personnel wearing gloves to prevent skin contamination during first aid. Gel should be applied every 15 minutes

and massaged continuously. Instead of calcium gluconate treatment, the affected areas may be soaked in iced 0.13% benzalkonium chloride solution (Zephiran chloride). Use ice cubes rather than shaved ice to prevent frostbite. If it is not practical to immerse affected area, towels should be soaked with iced 0.13% benzalkonium chloride solution and used as compresses for the burned area. Compresses should be changed every 2-3 minutes and continued until pain is relieved or victim is seen by a physician. If neither calcium gluconate nor benzalkonium chloride is available, use an iced saturated water solution of magnesium sulfate (Epsom salts), or if that is not available, iced 70% alcohol or ice water. Local anesthetics should be avoided since relief of pain indicates success of the treatment. ***Get medical attention as soon as possible.*** ::::NOTE::::Calcium gluconate gel can be prepared by mixing a 10 milliliter ampule of calcium gluconate with a 2-ounce tube of K-Y jelly (Johnson & Johnson). After a jar of this mixture has been opened and used, it should be discarded to prevent bacterial or chemical contamination.

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 product contains hydrofluoric acid (HF). Acute local effects from HF exposure are concentration-dependent. If untreated or exposure is prolonged, even dilute solutions of HF can cause delayed toxicity following penetration to subcutaneous tissue. Acute systemic toxicity is largely dependent upon the total amount of fluoride ion absorbed. Thus ingestion, skin contact or significant inhalation can cause severe systemic effects including electrolyte (calcium, magnesium, potassium) and acid-base abnormalities with resulting cardiovascular effects. Exposure of >5% of the body surface area with any concentration of HF may predispose the patient to development of hypocalcemia. Chronic exposure to less than acutely toxic amounts of HF is a low toxicity hazard. Repeated exposure and absorption of 10-80 mg of fluoride per day may produce systemic fluorosis.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, Foam, Carbon dioxide (CO2)

Hazardous combustion products

Oxides of phosphorus, corrosive vapors, sulfur oxides, toxic fumes, acid vapors, Hydrogen fluoride

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

Combustible Liquid Class IIIB

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

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

PHOSPHORIC ACID		**7664-38-2**	
ACGIH	time weighted average	1 mg/m3	
ACGIH	Short term exposure limit	3 mg/m3	
NIOSH	Recommended exposure limit (REL):	1 mg/m3	
NIOSH	Short term exposure limit	3 mg/m3	
OSHA Z1	Permissible exposure limit	1 mg/m3	
SULFURIC ACID		**7664-93-9**	
ACGIH	time weighted average	0.2 mg/m3	Thoracic fraction.
NIOSH	Recommended exposure limit (REL):	1 mg/m3	
OSHA Z1	Permissible exposure limit	1 mg/m3	
HYDROFLUORIC ACID		**7664-39-3**	
ACGIH	time weighted average	0.5 ppm	
ACGIH	Ceiling Limit Value:	2 ppm	
NIOSH	Recommended exposure limit (REL):	3 ppm	
NIOSH	Recommended exposure limit (REL):	2.5 mg/m3	
NIOSH	Ceiling Limit Value and Time Period (if specified):	6 ppm	
NIOSH	Ceiling Limit Value and Time Period (if specified):	5 mg/m3	
OSHA Z2	time weighted average	3 ppm	

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. 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 resistant gloves (consult your safety equipment supplier).
Discard gloves that show tears, pinholes, or signs of wear.
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.

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
Form	no data available
Colour	colourless
Odour	no data available
Boiling point/boiling range	195.1 °F / 90.6 °C @ 1,013.33 hPa Calculated Phase Transition Liquid/Gas
Melting point/range	no data available
Sublimation point	no data available
pH	1
Flash point	(>)212 °F / 100 °C
Ignition temperature	no data available
Evaporation rate	(>)1 Ethyl Ether
Lower explosion limit/Upper explosion limit	no data available
Particle size	no data available
Vapour pressure	23.333 hPa @ 68 °F / 20 °C Calculated Vapor

	Pressure
Relative vapour density	no data available
Density	1.1 g/cm3 9.46 lb/gal @ 60.00 °F / 15.56 °C
Bulk density	No data
Water solubility	no data available
Solubility(ies)	no data available
Partition coefficient: n-octanol/water	no data available
log Pow	no data available
Autoignition temperature	no data available
Viscosity, dynamic	no data available
Viscosity, kinematic	no data available
Solids in Solution	no data available
Decomposition temperature	no data available
Burning number	no data available
Dust explosion constant	no data available
Minimum ignition energy	no data available

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

excessive heat

Incompatible products

Fluorine, Metals, nitromethane, Strong oxidizing agents, strong reducing agents, Sulphides, sulphites, Acids, Acid anhydrides, Aldehydes, Alcohols, Amines, Bases, carbide, carbonates, Combustible material, Copper, Cyanides, glycols, halogens, Nitriles, Organic materials, organic nitro compounds, Powdered metals, sulfides

Hazardous decomposition products

Oxides of phosphorus, corrosive vapors, Sulphur oxides, toxic fumes, acid vapors, Hydrogen fluoride

Hazardous reactions

Product will not undergo hazardous polymerization.

Thermal decomposition
No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity

PHOSPHORIC ACID	:	LD 50 Rat: 1,530 mg/kg
SULFURIC ACID	:	LD 50 Rat: 2,140 mg/kg
HYDROFLUORIC ACID	:	no data available
ALCOHOL ETHOXYLATE	:	LD50 rat: > 2,000 mg/kg
SODIUM 1-OCTANESULFONATE	:	no data available

Acute inhalation toxicity

PHOSPHORIC ACID	:	no data available
SULFURIC ACID	:	no data available
HYDROFLUORIC ACID	:	LC 50 Rat: 1276 ppm; 1 h LC 50 Rat: 1,278 mg/l; 1 h LC 50 Mouse: 500 mg/l; 1 h LC 50 Monkey: 1,780 mg/l; 1 h LC 50 Guinea pig: 3.54 mg/l; 15 min
ALCOHOL ETHOXYLATE	:	no data available
SODIUM 1-OCTANESULFONATE	:	no data available

Acute dermal toxicity

PHOSPHORIC ACID	:	LD 50 Rabbit: 2,740 mg/kg
SULFURIC ACID	:	no data available
HYDROFLUORIC ACID	:	LD Lo

		Mouse: 500 mg/kg
ALCOHOL ETHOXYLATE	:	LD 50 Rat: 3,300 mg/kg
SODIUM 1-OCTANESULFONATE	:	no data available

12. ECOLOGICAL INFORMATION

Biodegradability

PHOSPHORIC ACID	:	no data available
SULFURIC ACID	:	no data available
HYDROFLUORIC ACID	:	no data available
ALCOHOL ETHOXYLATE	:	Expected to be biodegradable
SODIUM 1-OCTANESULFONATE	:	no data available

Bioaccumulation

PHOSPHORIC ACID	:	no data available
SULFURIC ACID	:	no data available
HYDROFLUORIC ACID	:	no data available
ALCOHOL ETHOXYLATE	:	no data available
SODIUM 1-OCTANESULFONATE	:	no data available

Ecotoxicity effects

Toxicity to fish

PHOSPHORIC ACID	:	no data available
SULFURIC ACID	:	96 h LC 50 Western mosquitofish (Gambusia affinis):

		42.00 mg/l Method: Static; Mortality
HYDROFLUORIC ACID	:	no data available
ALCOHOL ETHOXYLATE	:	96 h Pimephales promelas (fathead minnow): 8.50 mg/l ; Based on a similar product formulation.
SODIUM 1-OCTANESULFONATE	:	no data available

Toxicity to daphnia and other aquatic invertebrates.

PHOSPHORIC ACID	:	no data available
SULFURIC ACID	:	no data available
HYDROFLUORIC ACID	:	no data available
ALCOHOL ETHOXYLATE	:	Daphnia: 5.30 mg/l Based on a similar product formulation.
SODIUM 1-OCTANESULFONATE	:	no data available

Toxicity to algae

PHOSPHORIC ACID	:	no data available
SULFURIC ACID	:	no data available
HYDROFLUORIC ACID	:	no data available
ALCOHOL ETHOXYLATE	:	no data available
SODIUM 1-OCTANESULFONATE	:	no data available

Toxicity to bacteria

PHOSPHORIC ACID	:	no data available
SULFURIC ACID	:	no data available
HYDROFLUORIC ACID	:	no data available
ALCOHOL ETHOXYLATE	:	no data available
SODIUM 1-OCTANESULFONATE	:	no data available

Biochemical Oxygen Demand (BOD)

PHOSPHORIC ACID	:	no data available
SULFURIC ACID	:	no data available
HYDROFLUORIC ACID	:	no data available
ALCOHOL ETHOXYLATE	:	no data available
SODIUM 1-OCTANESULFONATE	:	no data available

Chemical Oxygen Demand (COD)

PHOSPHORIC ACID	:	no data available
SULFURIC ACID	:	no data available
HYDROFLUORIC ACID	:	no data available
ALCOHOL ETHOXYLATE	:	no data available
SODIUM 1-OCTANESULFONATE	:	no data available

Additional ecological information

PHOSPHORIC ACID	:	no data available
SULFURIC ACID	:	no data available
HYDROFLUORIC ACID	:	no data available
ALCOHOL ETHOXYLATE	:	no data available
SODIUM 1-OCTANESULFONATE	:	no data available

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

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

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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 3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, SULFURIC ACID)	8		II	LIMITED QUANTITY
TRANSPORT CANADA - RAIL					
UN 3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, SULFURIC ACID)	8		II	LIMITED QUANTITY
TRANSPORT CANADA - INLAND WATERWAYS					
UN 3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, SULFURIC ACID)	8		II	LIMITED QUANTITY
INTERNATIONAL MARITIME DANGEROUS GOODS					
UN 3264	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, SULFURIC ACID)	8		II	LIMITED QUANTITY

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN	3264	Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID, SULFURIC ACID)	8	II

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	3264	Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID, SULFURIC ACID)	8	II

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	3264	LIQUIDO CORROSIVO, ACIDO, INORGANICO, N.E.P. (PHOSPHORIC ACID, SULFURIC ACID)	8	II

***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.	NICKEL LEAD CADMIUM ARSENIC SULFURIC ACID
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.	MERCURY CADMIUM LEAD

SARA Hazard Classification
Acute Health Hazard
Chronic Health Hazard

SARA 313 Component(s)

SULFURIC ACID	2.35 %
HYDROFLUORIC ACID	1.60 %

New Jersey RTK Label Information

WATER	7732-18-5
PHOSPHORIC ACID	7664-38-2
SULFURIC ACID	7664-93-9
SURFACTANT	
HYDROFLUORIC ACID	7664-39-3

Pennsylvania RTK Label Information

WATER	7732-18-5
PHOSPHORIC ACID	7664-38-2
SULFURIC ACID	7664-93-9
HYDROFLUORIC ACID	7664-39-3

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	n (Negative 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)	6250 lbs

Reportable quantity-Components

HYDROFLUORIC ACID	7664-39-3	100 lbs

	HMIS	NFPA
Health	3	3
Flammability	0	0

	HMIS	NFPA
Physical hazards	0	
Instability		0
Specific Hazard	--	--

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).