

ASHLAND
SAFETY DATA SHEET

Page: 1
Revision Date: 01/25/2008
Print Date: 8/31/2009
MSDS Number: R0357579
Version: 1.2

MILLSPERSE® 954 CORROSION
INHIBITOR 67111

**I. 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	MILLSPERSE® 954 CORROSION INHIBITOR
Product code	67111
Product Use Description	No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid

**DANGER! MAY BE HARMFUL. MAY CAUSE SEVERE BURNS OF
RESPIRATORY AND DIGESTIVE TRACTS. CAUSES SEVERE BURNS OF THE
EYES AND SKIN.**

Potential Health Effects

Routes of exposure

Inhalation, Skin contact

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.

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.

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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.

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: irritation (nose, throat, airways)

Target Organs

No data

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).

Reproductive hazard

Based on the available information, risk to the fetus from maternal exposure to this material cannot be assessed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
PHOSPHORIC ACID	7664-38-2	>=30-<40%
ZINC CHLORIDE	7646-85-7	>=20-<30%

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

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exposure, immediately move individual away from exposure and into fresh air before flushing as recommended above. Seek immediate medical attention.

Skin

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: No information available.
Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media

Water

Hazardous combustion products

May form: Phosphorus compounds, zinc oxide

Precautions for fire-fighting

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Water spray can be used to reduce intensity of flames and to dilute spills to nonflammable mixture.

6. ACCIDENTAL RELEASE MEASURES

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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 is completed. Stop spill at source. Dike to prevent spreading. Pump to salvage tank. Cover the contaminated surface with sodium bicarbonate or a soda ash/flaked lime mixture (50-50). Mix and add water if necessary to form a slurry. Scoop up slurry and wash site with soda ash solution. Proper mixing procedures are essential. Trained personnel should conduct this procedure. Untrained personnel should be removed from the spill area.

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, away from incompatible substances.

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

ZINC CHLORIDE

7646-85-7

ACGIH	time weighted average	1 mg/m3	Fume.
ACGIH	Short term exposure limit	2 mg/m3	Fume.
NIOSH	Recommended exposure limit	1 mg/m3	Fume.

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	(REL):		
NIOSH	Short term exposure limit	2 mg/m3	Fume.
OSHA Z1	Permissible exposure limit	1 mg/m3	Fume.
OSHA Z1A	time weighted average	1 mg/m3	Fume.
OSHA Z1A	Short term exposure limit	2 mg/m3	Fume.
US CA OEL	Time Weighted Average (TWA)	1 mg/m3	Fume.
	Permissible Exposure Limit (PEL):		
US CA OEL	Short term exposure limit	2 mg/m3	Fume.

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 and face shield (8" min.) in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. (Consult your industrial hygienist.)

Skin and body protection

To prevent skin contact, wear impervious clothing and boots.
Wear resistant gloves such as:
Neoprene

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

Physical state
Form

liquid
No data

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Colour	No data
Odour	No data
Boiling point/boiling range	100.00 °C / 212 °F @ 1,013.33 hPa
Melting point/range	20 °F / -7 °C
pH	1.8
Flash point	No data
Evaporation rate	> 1 (Ethyl Ether)
Explosion limits	No data
Vapour pressure	23.33 hPa @ 68 °F / 20 °C
Vapour density	(>) 1 (AIR=1)
Density	1.575 g/cm ³ @ 77 °F / 25 °C 13.100 lb/gal @ 77 °F / 25 °C
Solubility	No data
Partition coefficient: n-octanol/water	No data
Autoignition temperature	No data

10. STABILITY AND REACTIVITY

Stability

Stable.

Conditions to avoid

Avoid contact with:

Incompatible products

Avoid contact with: strong alkalis

Hazardous decomposition products

May form: Phosphorus compounds, zinc oxide

Hazardous reactions

Product will not undergo hazardous polymerization., Acid reacts with most metals to release hydrogen gas which can form explosive mixtures with air.

Thermal decomposition

No data

11. TOXICOLOGICAL INFORMATION

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Acute oral toxicity

PHOSPHORIC ACID LD 50 Rat: 1,530 mg/kg

ZINC CHLORIDE LD 50 Rat: 350 mg/kg

Acute inhalation toxicity

Acute dermal toxicity

PHOSPHORIC ACID LD 50 Rabbit: 2,740 mg/kg

12. ECOLOGICAL INFORMATION

Aquatic toxicity

Acute and Prolonged Toxicity to Fish

96 h LC 50 *Oncorhynchus mykiss* (rainbow trout), static test: 10.1 mg/l

96 h LC 50 *Pimephales promelas* (fathead minnow), static test: 3.30 mg/l

Acute Toxicity to Aquatic Invertebrates

48 h LC 50 *Daphnia magna* (Water flea), static test: 4.59 mg/l

Environmental fate and pathways

BOD: 100 mg/l

: 11,150 mg/l

13. DISPOSAL CONSIDERATIONS

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Waste disposal methods

Collect and add slowly to large volume of agitated solution of soda ash and slaked lime. Add neutralized solution to excess running water in accordance with applicable 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. 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:

UN3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, ZINC CHLORIDE) 8, III

IATA_P:

UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID, ZINC CHLORIDE) 8, III

IATA_C:

UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID, ZINC CHLORIDE) 8, III

CFR_ROAD:

UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID, ZINC CHLORIDE) 8, III

CFR_RAIL:

UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID, ZINC CHLORIDE) 8, III

CFR_INWTR:

UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (PHOSPHORIC ACID, ZINC CHLORIDE) 8, III

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

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

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cancer.
NICKEL
LEAD
ARSENIC

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

LEAD
MERCURY

SARA Hazard Classification Acute Health Hazard

SARA 313 Component(s)

ZINC CHLORIDE 7646-85-7 25.65%

	Health	Flammability	Reactivity	Other
HMIS	3*	0	1	
NFPA	3	0	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 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).