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29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Millsperser™ MS7000
 CORROSION INHIBITOR
 ™ Trademark, Solenis or its subsidiaries or affiliates,
 registered in various countries

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet Solenis LLC 500 Hercules Road Wilmington, Delaware 19808 United States of America RegulatoryRequestsNA@solenis.com	Emergency telephone number 1-844-SOLENIS (844-765-3647) / 606-329-5705 Product Information 1-844-SOLENIS (844-765-3647)
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SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation : Category 2

Serious eye damage : Category 1


GHS Label element

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : Causes skin irritation.
 Causes serious eye damage.

Precautionary Statements : **Prevention:**
 Wash skin thoroughly after handling.

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Wear eye protection/ face protection.
Wear protective gloves.

Response:

IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
If skin irritation occurs: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Chemical nature : Defatter

Hazardous components


Chemical Name	CAS-No.	Classification	Concentration (%)
PHOSPHORIC ACID	7664-38-2	Skin Corr. 1; H314 Eye Dam. 1; H318	>= 70.00 - < 80.00

Trade Secret Composition - conceal concentration

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Move to fresh air.
If breathed in, move person into fresh air.
Keep patient warm and at rest.
If unconscious place in recovery position and seek medical advice.


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If symptoms persist, call a physician.

- In case of skin contact : If on skin, rinse well with water.
Wash contaminated clothing before re-use.
- In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
- If swallowed : Get medical attention immediately.
Do NOT induce vomiting.
Rinse mouth with water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Pulmonary edema may be delayed.
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
lung edema (fluid buildup in the lung tissue)
Causes skin irritation.
Causes serious eye damage.
- Notes to physician : No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam
Carbon dioxide (CO2)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

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- Hazardous combustion products : Oxides of phosphorus
- Specific extinguishing methods :
Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe vapours/dust.
When diluting, always add the product to water. Never add water to the product.
Container hazardous when empty.
Avoid contact with skin and eyes.
Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.

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Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
PHOSPHORIC ACID	7664-38-2	TWA	1 mg/m3	ACGIH
		STEL	3 mg/m3	ACGIH
		REL	1 mg/m3	NIOSH/GUID E
		STEL	3 mg/m3	NIOSH/GUID E
		PEL	1 mg/m3	OSHA_TRANS
		TWA	1 mg/m3	TN OEL
		STEL	3 mg/m3	TN OEL

Engineering measures : 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.

Personal protective equipment

Hand protection


Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

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 as appropriate:
impervious clothing
Chemical resistant apron
Safety shoes
Choose body protection according to the amount and

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concentration of the dangerous substance at the work place.
Discard gloves that show tears, pinholes, or signs of wear.
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.
When using do not eat or drink.
Ensure that eyewash stations and safety showers are close to the workstation location.
When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : light yellow

Odour : none

Odour Threshold : No data available

pH : < 2, 10% aqueous solution

Melting point/freezing point : -112 °F / -80 °C

Boiling point/boiling range : 232 °F / 111 °C
(1013 hPa)

Flash point : does not flash

Evaporation rate : > 1
Ethyl Ether


Flammability (solid, gas) : No data available

Flammability (liquids) :
Flammability (liquids) : Static Accumulating liquid

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : 15 mmHg (40 °C)

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Relative vapour density : No data available

Relative density : 1.58 (15.6 °C)

Density : 1.58 g/cm³ (15.56 °C)

Solubility(ies)
Water solubility : completely miscible

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity
Viscosity, dynamic :
No data available

Viscosity, kinematic : No data available

Oxidizing properties : No data available

Molecular weight : 98 g/mol

SECTION 10. STABILITY AND REACTIVITY


Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Conditions to avoid : excessive heat
Exposure to moisture

Incompatible materials : Fluorine
Metals
nitromethane
strong alkalis

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Strong oxidizing agents
strong reducing agents
Sulphides
sulphites

Hazardous decomposition
products

Oxides of phosphorus

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity :
Remarks: Corrosive by Ingestion

Acute inhalation toxicity : Remarks: Severe respiratory irritant

Components:

PHOSPHORIC ACID:

Acute oral toxicity : LD 50 (Rat): ca. 2,600 mg/kg

Acute inhalation toxicity : Remarks: Corrosive to respiratory system.

Acute dermal toxicity : LD 50 (Rabbit): 2,740 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Product:

Result: Corrosive to skin

Remarks: Causes severe skin burns and eye damage.


Components:

PHOSPHORIC ACID:

Result: Corrosive to skin

Serious eye damage/eye irritation

Causes serious eye damage.

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Product:

Result: Corrosive to eyes

Remarks: May cause irreversible eye damage.

Components:

PHOSPHORIC ACID:

Result: Corrosive to eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No data available

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

- Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC0 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
- Toxicity to algae : ErC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- General advice : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
- Dispose of in accordance with all applicable local, state and federal regulations.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

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SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

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

U.S. DOT - ROAD

UN 1805	Phosphoric acid solution	8		III	
---------	--------------------------	---	--	-----	--

U.S. DOT - RAIL

UN 1805	Phosphoric acid solution	8		III	
---------	--------------------------	---	--	-----	--

U.S. DOT - INLAND WATERWAYS

UN 1805	Phosphoric acid solution	8		III	
---------	--------------------------	---	--	-----	--

TRANSPORT CANADA - ROAD

UN 1805	PHOSPHORIC ACID, LIQUID	8		III	
---------	-------------------------	---	--	-----	--

TRANSPORT CANADA - RAIL

UN 1805	PHOSPHORIC ACID, LIQUID	8		III	
---------	-------------------------	---	--	-----	--

TRANSPORT CANADA - INLAND WATERWAYS

UN 1805	PHOSPHORIC ACID, LIQUID	8		III	
---------	-------------------------	---	--	-----	--

INTERNATIONAL MARITIME DANGEROUS GOODS

UN 1805	PHOSPHORIC ACID SOLUTION	8		III	
---------	--------------------------	---	--	-----	--


INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN 1805	Phosphoric acid, solution	8		III	
---------	---------------------------	---	--	-----	--

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN 1805	Phosphoric acid, solution	8		III	
---------	---------------------------	---	--	-----	--

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

 SOLENIS <small>Strong bonds. Trusted solutions.</small>		Page: 12
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UN	1805	ACIDO FOSFORICO EN SOLUCION	8	III
----	------	-----------------------------	---	-----

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
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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.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
PHOSPHORIC ACID	7664-38-2	5000	6584.318786

SARA 311/312 Hazards : Acute Health Hazard

US State Regulations

Pennsylvania Right To Know

PHOSPHORIC ACID 7664-38-2 0.00 - 0.00

Trade Secret Composition - conceal concentration

WATER 7732-18-5 0.00 - 0.00

New Jersey Right To Know


PHOSPHORIC ACID 7664-38-2 0.00 - 0.00

Trade Secret Composition - conceal concentration

WATER 7732-18-5 0.00 - 0.00

California Prop 65

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

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ARSENIC

7440-38-2

The components of this product are reported in the following inventories:

- TSCA : On TSCA Inventory
- DSL : On the inventory, or in compliance with the inventory
- CH INV : Not in compliance with the inventory
- AUSTR : On the inventory, or in compliance with the inventory
- EINECS : On the inventory, or in compliance with the inventory
- ENCS : On the inventory, or in compliance with the inventory
- KECL : On the inventory, or in compliance with the inventory
- PHIL : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information


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Full text of H-Statements referred to under sections 2 and 3.

- H290 May be corrosive to metals.
- H303 May be harmful if swallowed.

Further information

Sources of key data used to compile the Safety Data Sheet
Key literature references and sources of data
SOLENIS Internal data
SOLENIS internal data including own and sponsored test reports
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.


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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 the Solenis Environmental Health and Safety Department.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists
BEI : Biological Exposure Index
CAS : Chemical Abstracts Service (Division of the American Chemical Society).
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction
FG : Food grade
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.
H-statement : Hazard Statement
IATA : International Air Transport Association.
IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO : International Civil Aviation Organization
ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"
IMDG : International Maritime Code for Dangerous Goods
ISO : International Organization for Standardization
logPow : octanol-water partition coefficient
LCxx : Lethal Concentration, for xx percent of test population
LDxx : Lethal Dose, for xx percent of test population.
ICxx : Inhibitory Concentration for xx of a substance
Ecxx : Effective Concentration of xx
N.O.S.: Not Otherwise Specified
OECD : Organization for Economic Co-operation and Development
OEL : Occupational Exposure Limit
P-Statement : Precautionary Statement
PBT : Persistent , Bioaccumulative and Toxic
PPE : Personal Protective Equipment
STEL : Short-term exposure limit
STOT : Specific Target Organ Toxicity
TLV : Threshold Limit Value
TWA : Time-weighted average
vPvB : Very Persistent and Very Bioaccumulative
WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act
DOT : Department of Transportation
FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act
HMIRC : Hazardous Materials Information Review Commission
HMIS : Hazardous Materials Identification System
NFPA : National Fire Protection Association
NIOSH : National Institute for Occupational Safety and Health
OSHA : Occupational Safety and Health Administration
PMRA : Health Canada Pest Management Regulatory Agency
RTK : Right to Know

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WHMIS : Workplace Hazardous Materials Information System