

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 04/08/2014 Revision date: 02/05/2016 Version: 2.1

# **SECTION 1: Identification**

## Identification

Product form : Mixture Product name : 3-30-0-4 (S)

### Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Fertilizer

### Details of the supplier of the safety data sheet

Power-Line Products 20504 4th Street - Acequia Rupert, ID. 83350 - USA T 208-531-4100 - F 208-531-4069 www.powerlineproducts.com

### **Emergency telephone number**

Emergency number 24 Hour Emergency HAZMAT Response (800) 229-5252; EPA National Response Center

(800) 424-8802

# **SECTION 2: Hazard(s) identification**

# Classification of the substance or mixture

### Classification (GHS-US)

Serious eye H318

damage/eye irritation

Category 1

Carcinogenicity H350

Category 1A

Full text of H statements : see section 16

#### Label elements 22

## **GHS-US** labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US) : Danger

Contains sulfuric acid, conc=93-99.5%; Monocarbamide dihydrogen sulfate; phosphoric acid, conc=75%,

aqueous solution

GHS05

H318 - Causes serious eye damage Hazard statements (GHS-US)

H350 - May cause cancer

Precautionary statements (GHS-US) P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P280 - Wear eye protection, protective clothing, protective gloves

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing P308+P313 - If exposed or concerned: Get medical advice/attention

P310 - Immediately call a doctor, a POISON CENTER

P405 - Store locked up

P501 - Dispose of contents/container to comply with local, state, and federal regulations

# Other hazards

No additional information available

# **Unknown acute toxicity (GHS US)**

Not applicable

# SECTION 3: Composition/information on ingredients

### **Substance**

Not applicable

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### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
phosphoric acid, conc=75%, aqueous solution	(CAS No) 7664-38-2	50 - 60	Skin Corr. 1A, H314
Monocarbamide dihydrogen sulfate	(CAS No) 21351-39-3	16 - 18	Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
sulfuric acid, conc=93-99.5%	(CAS No) 7664-93-9	<= 2	Skin Corr. 1A, H314 Carc. 1A, H350

Full text of H-phrases: see section 16

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

First-aid measures general : IN ALL CASES CONSULT A DOCTOR!. Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a

physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Causes severe skin burns and eye damage. May cause cancer.

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Burns.

Symptoms/injuries after eye contact : Serious damage to eyes.

Symptoms/injuries after ingestion : Burns.

# 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

# **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

# 5.2. Special hazards arising from the substance or mixture

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

### 6.1.1. For non-emergency personnel

Emergency procedures : Do not breathe mist or spray. Only qualified personnel equipped with suitable protective

equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.

# 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8 Exposure controls/personal protection" ".

# 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

# 6.4. Reference to other sections

For further information refer to section 8: Exposure-controls/personal protection"".

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# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Do not breathe spray or mist. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Provide local exhaust or general room ventilation. Wear personal protective equipment. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/spray.

Hygiene measures

Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

# SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

sulfuric acid, conc=93-99.5% (7664-93-9)		
ACGIH	ACGIH TWA (mg/m³)	0.2 mg/m³
ACGIH	Remark (ACGIH)	Pulm func
OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³

# Monocarbamide dihydrogen sulfate (21351-39-3)

Not applicable

phosphoric acid, conc=75%, aqueous solution (7664-38-2)		
ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
ACGIH	ACGIH STEL (mg/m³)	3 mg/m³

## 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves. Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear respiratory protection.

Environmental exposure controls : Avoid release to the environment.

# SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : dark green.

Color : Mixture contains one or more component(s) which have the following colour(s):

Colourless to brown Colourless

Odor : There may be no odour warning properties, odour is subjective and inadequate to warn of

overexposure.

Mixture contains one or more component(s) which have the following odour(s):

Odourless

Odor threshold : No data available

pH : ≈ 2

Melting point : Not applicable

Freezing point : -15 °F

Boiling point : 220 - 230 °F

Flash point : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Flammability (solid, gas) : No data available

Explosion limits : No data available

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Explosive properties : No data available
Oxidizing properties : No data available
Vapor pressure : No data available

Relative density : 1.44

Relative vapor density at 20 °C No data available Solubility : No data available Log Pow : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available No data available Viscosity Viscosity, kinematic No data available Viscosity, dynamic : No data available

# 9.2. Other information

No additional information available

# **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

No additional information available

# 10.6. Hazardous decomposition products

No additional information available

# **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

sulfuric acid, conc=93-99.5% (7664-93-9)	
LD50 oral rat	2140 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value)
ATE US (oral)	2140.000 mg/kg body weight

Monocarbamide dihydrogen sulfate (21351-39-3)	
LD50 oral rat	355 mg/kg
LD50 dermal rat	>= 2000 mg/kg
LD50 dermal rabbit	May be corrosive to skin
ATE US (oral)	355.000 mg/kg body weight

phosphoric acid, conc=75%, aqueous solution (7664-38-2)	
LD50 oral rat	4400 mg/kg (Rat)
LD50 dermal rabbit	2470 mg/kg
LC50 inhalation rat (ppm)	100 ppm
ATE US (oral)	4400.000 mg/kg body weight
ATE US (dermal)	2470.000 mg/kg body weight

Skin corrosion/irritation : Not classified

pH: ≈ 2

Serious eye damage/irritation : Causes serious eye damage.

pH: ≈ 2

Respiratory or skin sensitization : Not classified

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Germ cell mutagenicity : Not classified Carcinogenicity : May cause cancer.

sulfuric acid, conc=93-99.5% (7664-93-9)	
IARC group	1 - Carcinogenic to Humans
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens

: Not classified Reproductive toxicity Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Burns.

Symptoms/injuries after eye contact : Serious damage to eyes.

Symptoms/injuries after ingestion : Burns.

# **SECTION 12: Ecological information**

#### 12.1. **Toxicity**

sulfuric acid, conc=93-99.5% (7664-93-9)	
LC50 fish 1	> mg/l >16 - <28,96 h; Lepomis macrochirus
EC50 Daphnia 1	> 100 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	> 100 mg/l (72 h; Desmodesmus subspicatus)

Monocarbamide dihydrogen sulfate (21351-39-3)	
LC50 fish 1	≈ 80 mg/l Gasterosueus Aculeatus
EC50 Daphnia 1	433 a/l

phosphoric acid, conc=75%, aqueous solution (7664-38-2)	
LC50 fish 1	138 mg/l (96 h; Pisces; Pure substance)
LC50 other aquatic organisms 1	240 mg/l (96 h; Protozoa; Pure substance)
LC50 fish 2	100 - 1000 mg/l (Pisces; Pure substance)
LC50 other aquatic organisms 2	100 - 1000 mg/l (Pure substance)
TLM fish 1	138 ppm (24 h; Gambusia affinis; Pure substance)
Threshold limit other aquatic organisms 1	240 mg/l (96 h; Protozoa; Pure substance)
Threshold limit other aquatic organisms 2	100 - 1000,Pure substance

#### Persistence and degradability 12.2.

sulfuric acid, conc=93-99.5% (7664-93-9)	
Persistence and degradability	Biodegradability: not applicable. Hydrolysis in water. Biodegradability in soil: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

phosphoric acid, conc=75%, aqueous solution (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

#### 12.3. **Bioaccumulative potential**

sulfuric acid, conc=93-99.5% (7664-	sulfuric acid, conc=93-99.5% (7664-93-9)		
Bioaccumulative potential	Bioaccumulation: not applicable.		
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phosphoric acid, conc=75%, aqueous solution	osphoric acid, conc=75%, aqueous solution (7664-38-2)	
Log Pow	-0.77 (Estimated value)	
Bioaccumulative potential	Bioaccumulation: not applicable.	

#### 12.4. **Mobility in soil**

No additional information available

#### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

# **SECTION 13: Disposal considerations**

## Waste treatment methods

Sewage disposal recommendations : Prevent liquid from entering sewers, watercourses, underground or low areas. Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

# **SECTION 14: Transport information**

### **Department of Transportation (DOT)**

In accordance with DOT

Transport document description : UN1760 (sulfuric acid, phosphoric acid), 8, III

UN-No.(DOT)

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) 8 - Corrosive



Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203 DOT Packaging Bulk (49 CFR 173.xxx) · 241

**DOT Symbols** : G - Identifies PSN requiring a technical name DOT Special Provisions (49 CFR 172.102)

: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672)

T7 - 4 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the

**MAWP** 

DOT Packaging Exceptions (49 CFR 173.xxx) : 154 DOT Quantity Limitations Passenger aircraft/rail : 5 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 60 L

CFR 175.75)

**DOT Vessel Stowage Location** : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel

**DOT Vessel Stowage Other** : 40 - Stow "clear of living quarters" Other information : No supplementary information available.

**TDG** 

No additional information available

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### Transport by sea

No additional information available

### Air transport

No additional information available

# **SECTION 15: Regulatory information**

# 15.1. US Federal regulations

sulfuric acid, conc=93-99.5% (7664-93-9)	cid, conc=93-99.5% (7664-93-9)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not listed on SARA Section 313 (Specific toxic chemical listings) Listed on SARA Section 313 (Specific toxic chemical listings)			
CERCLA RQ	1000 lb		
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb		

# Monocarbamide dihydrogen sulfate (21351-39-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### phosphoric acid, conc=75%, aqueous solution (7664-38-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Not listed on SARA Section 313 (Specific toxic chemical listings)

CERCLA RQ 5000 lb

# 15.2. International regulations

### **CANADA**

No additional information available

### **EU-Regulations**

No additional information available

### **National regulations**

# sulfuric acid, conc=93-99.5% (7664-93-9)

Listed on IARC (International Agency for Research on Cancer) Listed as carcinogen on NTP (National Toxicology Program)

# 15.3. US State regulations

# sulfuric acid, conc=93-99.5% (7664-93-9)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

# phosphoric acid, conc=75%, aqueous solution (7664-38-2)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

# **SECTION 16: Other information**

Revision date : 02/05/2016

# Full text of H-phrases:

At of 11-prillases.		
	H302	Harmful if swallowed
	H314	Causes severe skin burns and eye damage
	H318	Causes serious eye damage
	H350	May cause cancer

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NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was

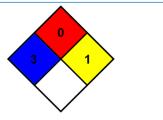
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NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity

i 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with

some release of energy, but not violently.



SDS US (GHS HazCom 2012)

All information contained in this Safety Data Sheet is furnished free of charge and is intended for your evaluation. In our opinion the is, as of the date of this Safety Data Sheet, reliable, however, it is your responsibility to determine the suitability of the information for your use. You are advised not to construe the informatio as absolutely complete since additional information may be necessary or desirable when particular, exceptional or variable conditions or circumstances exist or because of applicable laws or governament regulations. Theerefore you should use this information only as a supplement to other information gathered by you, and you must make independent determinations of the suitability and completeness of the information from all sources to assure both proper use of the material described herein and the safety and health of employees. Accordingly, no guarantee is expressed or implied as to the results to be obtained based upon your use of the information.

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