

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 3/9/2017 Revision date: 3/16/2017 Supersedes: 3/16/2017 Version: 2.2

# **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture Trade name Magnum Product code 1008

#### 1.2. Recommended use and restrictions on use

Recommended use : Acidic cleaner

#### 1.3. Supplier

Synthetic Labs 24 Victory Lane Dracut, MA, 01826 **United States** T 800.255.4050 - F 978.957.5122 www.syntecpro.com

#### 1.4. Emergency telephone number

**Emergency number** : Infotrac 24 Hour Medical Emergency Number: 1-800-535-5053

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

# 2.1. Classification of the substance or mixture

#### **GHS US classification**

Skin corrosion/irritation Category 1A Serious eye damage/eye irritation Category 1 Causes severe skin burns and eye damage

Causes serious eye damage

# 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)



Signal word (GHS US) Danger

Hazard statements (GHS US) Causes severe skin burns and eye damage

Causes serious eye damage

Precautionary statements (GHS US) : Do not breathe dust/fume/gas/mist/vapors/spray.

Wash hands, forearms and face thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

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.

Specific treatment (see supplemental first aid instruction on this label).

Wash contaminated clothing before reuse.

Store locked up.

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Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

No additional information available

# 2.4. Unknown acute toxicity (GHS US)

No additional information available

### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Sulfuric Acid	CAS-No.: 7664-93-9	1 – 5	Met. Corr. 1, H290 Acute Tox. 1 (Inhalation:vapour), H330 Skin Corr. 1A, H314 Carc. 1A, H350
Phosphoric Acid	CAS-No.: 7664-38-2	1 – 5	Met. Corr. 1, H290 Skin Corr. 1, H314 Eye Dam. 1, H318

Full text of hazard classes and H-statements : see section 16

# **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : 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 (acute and delayed)

Symptoms/effects after skin contact : Burns.

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

Symptoms/effects after ingestion : Burns.

# 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

# **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

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

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# 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Special protective equipment and precautions for fire-fighters

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 : Ventilate spillage area. Avoid contact with skin and eyes. 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.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

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

# 6.4. Reference to other sections

For further information refer to section 13.

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe

dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.

Hygiene measures : 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

Magnum

No additional information available

#### **Sulfuric Acid (7664-93-9)**

#### **USA - ACGIH - Occupational Exposure Limits**

Local name Sulfuric acid

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Sulfuric Acid (7664-93-9)		
0.2 mg/m³		
Pulm func		
Sulfuric acid		
1 mg/m³		
Phosphoric Acid (7664-38-2)		
USA - ACGIH - Occupational Exposure Limits		
Phosphoric acid		
1 mg/m³		
3 mg/m³		
URT, eye, & skin irr		
USA - OSHA - Occupational Exposure Limits		
Phosphoric acid		
1 mg/m³		

# 8.2. Appropriate engineering controls

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

Environmental exposure controls : Avoid release to the environment.

# 8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

# Personal protective equipment symbol(s):







# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Color : clear

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Odor : acidic

Odor threshold : No data available

pH : 1 (7-8) Melting point : Not applicable

Freezing point : 32 °F

Boiling point : No data available Flash point : No data available Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not applicable. Vapor pressure : No data available Relative vapor density at 20°C : No data available Relative density : No data available

Density : 1.07 g/m<sup>3</sup> Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity, kinematic : No data available Viscosity, dynamic No data available **Explosion limits** No data available Explosive properties No data available Oxidizing properties 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

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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Sulfuric Acid (7664-93-9)	
LD50 oral rat	≈ 2140 mg/kg
LC50 Inhalation - Rat	0.38 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (mixture of vapour and aerosol), 14 day(s))
LC50 Inhalation - Rat (Vapours)	≈ 510 mg/l/4h
ATE US (vapors)	0.38 mg/l/4h
ATE US (dust, mist)	0.38 mg/l/4h
Skin corrosion/irritation	: Causes severe skin burns. pH: 1 (7 – 8)
<b>Sulfuric Acid (7664-93-9)</b>	
рН	No data available in the literature
Phosphoric Acid (7664-38-2)	
рН	≈ 1
Serious eye damage/irritation	: Causes serious eye damage. pH: 1 (7 – 8)
<b>Sulfuric Acid (7664-93-9)</b>	
рН	No data available in the literature
Phosphoric Acid (7664-38-2)	
рН	≈ 1
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Sulfuric Acid (7664-93-9)	
National Toxicity Program (NTP) Status	Known Human Carcinogens
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Sulfuric Acid (7664-93-9)	
Viscosity, kinematic	No data available in the literature
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.
SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: Before neutralisation, the product may represent a danger to aquatic organisms.
Sulfuric Acid (7664-93-9)	
LC50 - Fish [1]	16 – 28 mg/l (96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Lethal)
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Sulfuric Acid (7664-93-9)	
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate)

# 12.2. Persistence and degradability

Sulfuric Acid (7664-93-9)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
Phosphoric Acid (7664-38-2)		
Persistence and degradability	Biodegradability: not applicable.	

# 12.3. Bioaccumulative potential

Sulfuric Acid (7664-93-9)		
Bioaccumulative potential	Not bioaccumulative.	
Phosphoric Acid (7664-38-2)		
Bioaccumulative potential	No test data of component(s) available.	

# 12.4. Mobility in soil

Sulfuric Acid (7664-93-9)		
Surface tension	No data available in the literature	
Ecology - soil	No (test)data on mobility of the substance available.	
Phosphoric Acid (7664-38-2)		
Ecology - soil	Highly mobile in soil.	

# 12.5. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

# 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

# **SECTION 14: Transport information**

# 14.1. UN number

DOT NA No : UN1760 UN-No. (TDG) : Not applicable UN-No. (IMDG) : 1760

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UN-No. (IATA) : 1760

# 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Corrosive liquids, n.o.s.

Proper Shipping Name (TDG) : Not applicable

Proper Shipping Name (IMDG) : CORROSIVE LIQUID, N.O.S.
Proper Shipping Name (IATA) : Corrosive liquid, n.o.s.

# 14.3. Transport hazard class(es)

#### DOT

Transport hazard class(es) (DOT) : 8
Hazard labels (DOT) : 8



**TDG** 

Transport hazard class(es) (TDG) : Not applicable

**IMDG** 

Transport hazard class(es) (IMDG) : 8
Hazard labels (IMDG) : 8



IATA

Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8



# 14.4. Packing group

Packing group (DOT) : I

Packing group (TDG) : Not applicable

Packing group (IMDG) : II
Packing group (IATA) : II

### 14.5. Environmental hazards

Other information : No supplementary information available.

# 14.6. Special precautions for user

DOT

UN-No.(DOT) : UN1760

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DOT Special Provisions (49 CFR 172.102)

: B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.

IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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.

T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 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 Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Quantity Limitations Passenger aircraft/rail (49 : 1 L

CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49

CFR 175.75)

DOT Vessel Stowage Location

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

TDG

Emergency Response Guide (ERG) Number : 154

**IMDG** 

Special provision (IMDG) : 274
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T11
Tank special provisions (IMDG) : TP2, TP27

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES

: 30 L

Stowage category (IMDG) : B
Stowage and handling (IMDG) : SW2

Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

**IATA** 

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y840 PCA limited quantity max net quantity (IATA) 0.5L PCA packing instructions (IATA) 851 PCA max net quantity (IATA) 1L 855 CAO packing instructions (IATA) CAO max net quantity (IATA) 30L Special provision (IATA) A3 ERG code (IATA) 8L

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# 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

# **SECTION 15: Regulatory information**

# 15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Sulfuric Acid	7664-93-9	Present	Active	
Phosphoric Acid	7664-38-2	Present	Active	

Sulfuric Acid (7664-93-9)	
Not subject to reporting requirements of the United States SARA Section 313 Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1000 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb

Phosphoric Acid (7664-38-2)	
Not subject to reporting requirements of the United States SARA Section 313	
CERCLA RQ	5000 lb

# 15.2. International regulations

#### **CANADA**

#### **Sulfuric Acid (7664-93-9)**

Listed on the Canadian DSL (Domestic Substances List)

# Phosphoric Acid (7664-38-2)

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available

# **National regulations**

# **Sulfuric Acid (7664-93-9)**

Listed as carcinogen on NTP (National Toxicology Program)

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# 15.3. US State regulations

Component	State or local regulations
Sulfuric Acid(7664-93-9)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
Phosphoric Acid(7664-38-2)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List

# **SECTION 16: Other information**

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Hazard Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.