



# Safety Data Sheet

Distributed by: PVS NOLWOOD CHEMICALS, INC. 10900 Harper Avenue Detroit, MI 48213 (313) 925-4300	
PVS ITEM #	PVS SDS #
CONTROLLED DOCUMENT IF STAMPED IN RED	

Revision Date Apr-30-2015

Item # 10752

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Sulfuric Acid 66 Degree / 1.835  
**UN/ID No.** UN1830  
**Synonyms** Sulphuric acid, Oil of vitriol,  
**Recommended Use** Reserved for industrial and professional use  
**Uses advised against** Consumer uses: Private households (= general public = consumers).

**Company Name**  
PVS Chemical Solutions Inc.  
10900 Harper Ave.  
Detroit, MI 48213  
313-921-1200

**24 Hour Emergency Phone Number** CHEMTREC 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
May be corrosive to metals	Category 1
Carcinogenicity	Category 1A

### Emergency Overview

<b>DANGER</b>	
<b>Hazard statements</b>	Fatal if inhaled Causes serious eye damage Causes severe skin burns and eye damage
<b>Physical hazards</b>	May cause cancer Corrosive Corrosive to metals

### Precautionary statements

#### Prevention

- Wear eye/face protection
- Wear protective gloves/protective clothing/eye protection/face protection
- Wear respiratory protection
- Do not breathe dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- Wash face, hands and any exposed skin thoroughly after handling
- Obtain special instructions before use

**Response**

- Specific treatment (see section 4 on this Safety Data Sheet)
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Wash contaminated clothing before reuse

**Storage**

- Store locked up
- Store in a well-ventilated place. Keep container tightly closed

**Disposal**

- Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None known.

**Other Information**

**Other hazards**

- May be harmful if swallowed

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS No.	EC No.	Weight-% *
Sulfuric acid	7664-93-9	231-639-5	93
Water	7732-18-5	231-791-2	7

\*The exact percentage (concentration) of composition has been withheld as a trade secret

**4. FIRST AID MEASURES**

**General advice**

Call 911 or emergency medical service Remove and isolate contaminated clothing and shoes

**Eye contact**

- Immediate medical attention is required
- Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a Poison Control Center or doctor for treatment advice.
- Do not rub affected area

**Skin Contact**

- Wash off immediately with plenty of water for at least 15 minutes
- Remove and isolate contaminated clothing and shoes
- Call a physician immediately

**Inhalation**

- Move victim to fresh air
- If breathing is irregular or stopped, administer artificial respiration
- Administer oxygen if breathing is difficult

**Ingestion**

- Immediate medical attention is required
- Do NOT induce vomiting
- Rinse mouth
- Drink 4 to 8 ounces (120-240 ml) of water or milk as soon as possible after ingestion.
- Call a physician or poison control center immediately

**Note to physician**

Keep victim warm and quiet. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

**Self-protection for first aid personnel**

Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media</b>	<ul style="list-style-type: none"><li>• Dry chemical or CO2</li><li>• Cool containers with flooding quantities of water until well after fire is out</li><li>• Move containers from fire area if you can do it without risk</li></ul>
<b>Unsuitable extinguishing media</b>	<ul style="list-style-type: none"><li>• MAY REACT VIOLENTLY WITH WATER</li><li>• Contact with water generates heat</li></ul>
<b>Specific hazards arising from the chemical</b>	<ul style="list-style-type: none"><li>• Containers may explode when heated or if contaminated with water</li><li>• Contact with metals may evolve flammable hydrogen gas</li><li>• Flammable/toxic gases may accumulate in confined areas (basements, tanks, hopper/tank cars etc.)</li><li>• May ignite combustibles (wood paper, oil, clothing, etc.)</li></ul>
<b>Protective equipment and precautions for firefighters</b>	<ul style="list-style-type: none"><li>• Substance will react with water (some violently), releasing corrosive and/or toxic gases</li><li>• When material is not involved in fire: do not use water on material itself</li><li>• Wear a self-contained breathing apparatus and chemical protective clothing</li></ul>
<b>Flammable properties</b>	<ul style="list-style-type: none"><li>• Not flammable</li></ul>
<b>Explosive properties</b>	<ul style="list-style-type: none"><li>• Contact with metals may evolve flammable hydrogen gas</li><li>• No information available</li></ul>

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	<ul style="list-style-type: none"><li>• Do not touch damaged containers or spilled material unless wearing appropriate protective clothing</li><li>• Stop leak if you can do it without risk</li><li>• Full encapsulating, vapor protective clothing should be worn for spills and leaks with no fire</li></ul>
<b>Environmental precautions</b>	<ul style="list-style-type: none"><li>• For small spills, absorb material with clay absorbent or other compatible material. Dispose of the waste material according to local, state and governmental requirements.</li><li>• For large spills, contain the material using barriers of absorbent pigs, clay absorbent or earth dams.</li></ul>
<b>Methods for cleaning up</b>	<ul style="list-style-type: none"><li>• Dike far ahead of liquid spill for later disposal</li><li>• Neutralize with soda ash or lime</li><li>• Pick up and transfer to properly labeled containers</li><li>• Soak up with inert absorbent material</li><li>• Clean contaminated surface thoroughly</li></ul>
<b>Other Information</b>	<ul style="list-style-type: none"><li>• Do not get water inside containers or in contact with substance</li><li>• Keep combustibles (wood, paper, oil, etc) away from spilled material</li><li>• Use water spray to reduce vapors; do not put water directly on leak, spill area or inside container</li></ul>

## 7. HANDLING AND STORAGE

<b>Advice on safe handling</b>	<ul style="list-style-type: none"><li>• Use personal protective equipment as required</li><li>• Avoid contact with skin, eyes or clothing</li><li>• Ensure adequate ventilation, especially in confined areas</li><li>• In case of insufficient ventilation, wear suitable respiratory equipment</li><li>• Use only with adequate ventilation and in closed systems</li></ul>
<b>Storage Conditions</b>	<ul style="list-style-type: none"><li>• Keep containers tightly closed in a dry, cool and well-ventilated place</li><li>• Keep in properly labeled containers</li><li>• Keep out of the reach of children</li></ul>
<b>Incompatible materials</b>	Reacts with many compounds, Bases, Water, Metals, Combustible material, Reducing agents, Contact with metals may evolve flammable hydrogen gas, Nitrogen containing compounds, Organics, Amines, Cyanide compounds, Styrene, Oxidizers, Incompatible with strong acids and bases, Incompatible with oxidizing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulfuric acid 7664-93-9	TWA: 0.2 mg/m <sup>3</sup> thoracic fraction	TWA: 1 mg/m <sup>3</sup>	IDLH: 15 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>

**Exposure Guidelines**

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**Engineering Controls**

Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment****Respiratory protection**

- A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant the use of a respirator.

**Eye/Face protection**

- Tight sealing safety goggles
- Face protection shield

**Skin and body protection**

- Wear suitable protective clothing
- Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact

**General Hygiene Considerations**

- When using do not eat, drink or smoke
- Wash contaminated clothing before reuse
- Keep away from food, drink and animal feeding stuffs
- Contaminated work clothing should not be allowed out of the workplace
- Regular cleaning of equipment, work area and clothing is recommended
- Avoid contact with skin, eyes or clothing
- Take off all contaminated clothing and wash it before reuse
- Wear suitable gloves and eye/face protection

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	clear oily Liquid
<b>Color</b>	colorless
<b>Odor</b>	Odorless slightly pungent characteristic
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	<1	
Melting point/Freezing Point	-35 °C / -31 °F	
Boiling point / boiling range	277 °C / 531 °F	(at 760 mm Hg)
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit (%)	No information available	
Lower flammability limit (%):	No information available	
Vapor pressure	<1 mm Hg	@ 40 °C
Vapor density	3.4	@ Air = 1
Specific Gravity	1.84	
Water solubility	completely soluble	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	21 mPa s	@ 25 °C

**Explosive properties** No information available  
**Oxidizing properties** No information available

Other Information

**Softening point °C** No information available  
**Molecular weight** 98.07  
**VOC Content (%)** No information available  
**Density** No information available  
**Bulk density** 15.3 Pounds per gallon (lb/gal)

**10. STABILITY AND REACTIVITY**

- Stability** • Stable under recommended storage conditions
- Conditions to avoid** • Water reactive  
 • Exposure to air or moisture over prolonged periods
- Incompatible materials** • Reacts with many compounds  
 • Bases  
 • Water  
 • Metals  
 • Combustible material  
 • Reducing agents  
 • Contact with metals may evolve flammable hydrogen gas  
 • Nitrogen containing compounds  
 • Organics  
 • Amines  
 • Cyanide compounds  
 • Styrene  
 • Oxidizers  
 • Incompatible with strong acids and bases  
 • Incompatible with oxidizing agents

**Hazardous Decomposition Products** • Thermal decomposition can lead to release of irritating and toxic gases and vapors

**Possibility of Hazardous Reactions** • None under normal processing and storage

**11. TOXICOLOGICAL INFORMATION**

Information on likely routes of exposure

**Principle Routes of Exposure** Inhalation, Skin Contact, Eye contact  
**Inhalation** May cause irritation of respiratory tract. Avoid breathing vapors or mists.  
**Ingestion** May be harmful if swallowed.  
**Skin Contact** May cause skin irritation and/or dermatitis.  
**Eye contact** Contact with eyes may cause irritation.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sulfuric acid 7664-93-9	= 2140 mg/kg ( Rat )	-	= 510 mg/m <sup>3</sup> ( Rat ) 2 h

Information on toxicological effects

**Symptoms** No information available  
**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA

**Item # 10752 Sulfuric Acid 66 Degree / 1.835**

Sulfuric acid 7664-93-9	A2	Group 1	Known	X
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ACGIH (American Conference of Governmental Industrial Hygienists)  
 A2 - Suspected Human Carcinogen  
 IARC (International Agency for Research on Cancer)  
 Group 1 - Carcinogenic to Humans  
 NTP (National Toxicology Program)  
 Known - Known Carcinogen  
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
 X - Present

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Chronic toxicity</b>	Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure.
<b>Target Organ Effects</b>	Possible risk of irreversible effects. Eyes, Respiratory system, Skin, Teeth.
<b>Aspiration hazard</b>	No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity** 0% of the mixture consists of ingredient(s) of unknown toxicity  
 The following values are calculated based on chapter 3.1 of the GHS document .

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sulfuric acid 7664-93-9	-	500: 96 h Brachydanio rerio mg/L LC50 static	-

**Persistence and degradability** No information available.  
**Bioaccumulation** No information available

**Other adverse effects** No information available

**13. DISPOSAL CONSIDERATIONS**

- Disposal of wastes** • This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261)
- Contaminated packaging** • Do not reuse container
- US EPA Waste Number** • D002

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Sulfuric acid 7664-93-9	Toxic Corrosive

**14. TRANSPORT INFORMATION**

**DOT**

<b>Proper shipping name</b>	SULFURIC ACID
<b>Hazard Class</b>	8
<b>UN/ID No.</b>	UN1830
<b>Packing Group</b>	II
<b>RQ as is (lbs)(wet)</b>	1073
<b>Technical Name Description</b>	WITH MORE THAN 51 PERCENT ACID
<b>Description</b>	UN1830, Sulfuric acid, 8, II

Item # 10752 Sulfuric Acid 66 Degree / 1.835

**Special Provisions** A3, A7, B3, B83, B84, IB2, N34, T8, TP2  
**Emergency Response Guide Number** 137

**IATA**

**UN/ID No.** UN1830  
**Proper shipping name** Sulphuric acid  
**Hazard Class** 8  
**Packing Group** II  
**ERG Code** 8L

**IMDG**

**UN/ID No.** UN1830  
**Proper shipping name** Sulphuric acid  
**Hazard Class** 8  
**Packing Group** II  
**EmS-No.** F-A, S-B

**15. REGULATORY INFORMATION**

**US Federal Regulations**

**SARA 311/312 Hazard Categories**

**Acute health hazard** Yes  
**Chronic Health Hazard** Yes  
**Fire hazard** No  
**Sudden release of pressure hazard** No  
**Reactive Hazard** Yes

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Sulfuric acid - 7664-93-9	1.0

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfuric acid 7664-93-9	1000 lb	-	-	X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ (lbs)(dry)
Sulfuric acid 7664-93-9	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

**US State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Sulfuric acid - 7664-93-9	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sulfuric acid 7664-93-9	X	X	X

**DEA List I, List II**

Chemical Name	U.S. - DEA - List I or Precursor Chemicals	U.S.- DEA - List II or Essential Chemicals

Item # 10752 Sulfuric Acid 66 Degree / 1.835

Sulfuric acid 7664-93-9	-	50 gallon, Export Volume
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**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards 3	Flammability 0	Instability 2	Physical and Chemical Properties W
<b>HMIS</b>	Health hazards 3	Flammability 0	Physical hazards 2	Personal protection D

Item #	10752
Safety Data Sheet	-
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Version	1
Revision Note	*** Updated value on SDS.

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**End of Safety Data Sheet**