Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name | **Sulfuric Acid 2-10%**

Synonyms | Aqueous Solution of Sulfuric Acid

Product Code | 70475

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

Relevant identified use(s) | Semiconductor Uses

1.3 Details of the supplier of the safety data sheet

Manufacturer | Air Liquide

2700 Post Oak Blvd.
Houston, TX 77056
United States
www.us.airliquide.com
sds@airliquide.com

Telephone (Technical) | 713-896-2896

Telephone (Technical) | 800-819-1704

1.4 Emergency telephone number

Manufacturer | 800-424-9300 - CHEMTREC

Manufacturer | +1 703-527-3887 - Outside United States

Section 2: Hazards Identification

EU/EEC

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP | Skin Irritation 2 - H315
Eye Irritation 2 - H319

DSD/DPD | Irritant (Xi)

R36/38

2.2 Label Elements

CLP

WARNING

Hazard statements | H315 - Causes skin irritation

H319 - Causes serious eye irritation

Precautionary statements

Prevention | P264 - Wash thoroughly after handling.
P280 - Wear protective gloves .
P280 - Wear eye/face protection , .

Response | P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P321 - Specific treatment, see supplemental first aid information.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.

DSD/DPD

Risk phrases | R36/38 - Irritating to eyes and skin.

Safety phrases | S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

2.3 Other Hazards

CLP | According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

DSD/DPD | This product is considered dangerous according to the European Directive 67/548/EEC.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012 | Skin Corrosion 1B - H314
Serious Eye Damage 1 - H318

2.2 Label elements

OSHA HCS 2012

DANGER

Hazard statements | Causes severe skin burns and eye damage. - H314
Causes serious eye damage - H318

Precautionary statements

Prevention | Do not breathe mist/vapours/spray. - P260
Wash thoroughly after handling. - P264
Wear protective gloves/protective clothing/eye protection/face protection. - P280

Response | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. - P304+P340
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. - P303+P361+P353
Specific treatment, see supplemental first aid information. - P321
Wash contaminated clothing before reuse. - P363
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. - P305+P351+P338
Immediately call a POISON CENTER or doctor/physician. - P310
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. - P301+P330+P331

Storage/Disposal | Store locked up. - P405
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

2.3 Other hazards

OSHA HCS 2012 | Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS | Very Toxic - D1A
Corrosive - E

2.2 Label elements

WHMIS

| Very Toxic - D1A
Corrosive - E

2.3 Other hazards

WHMIS | In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

2.4 Other information

NFPA

Section 3 - Composition/Information on Ingredients

3.1 Substances

Composition				
Chemical Name	**Identifiers**	**%**	**LD50/LC50**	**Classifications According to Regulation/Directive**
Sulfuric acid	**CAS:**7664-93-9 **EC Number:**231-639-5	2% TO 10%	Inhalation-Rat LC50 • 510 mg/m³ 2 Hour(s) Ingestion/Oral-Rat LD50 • 2140 mg/kg	**EU DSD/DPD:** EU CLP, Annex VI, Table 3.2: C, R35 **EU CLP:** EU CLP, Annex VI, Table 3.1: Skin Corr. 1A, H314 **OSHA HCS 2012:** Eye Dam. 1, Skin Corr. 1A

3.2 Mixtures

| Material does not meet the criteria of a mixture in accordance with Regulation (EC) No

1272/2008.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation | Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim 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.

Skin | For minor skin contact, avoid spreading material on unaffected skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing.

Eye | In case of contact with substance, immediately flush eyes with running water for at least 20 minutes.

Ingestion | If swallowed, rinse mouth with water (only if the person is conscious) Do NOT induce vomiting. Do not use mouth-to-mouth method if victim ingested the substance. Obtain medical attention immediately if ingested.

4.2 Most important symptoms and effects, both acute and delayed

| Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician | All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media | LARGE FIRES: Dry chemical, CO2, alcohol-resistant foam or water spray.
SMALL FIRES: Dry chemical, CO2 or water spray.

Unsuitable Extinguishing Media | No data available

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards | Containers may explode when heated.
Acid reacts with most metals to release hydrogen gas, which can form explosive mixtures with air.

Hazardous Combustion Products | Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive fumes.

5.3 Advice for firefighters

| Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
Wear positive pressure self-contained breathing apparatus (SCBA).
SMALL FIRES: Move containers from fire area if you can do it without risk.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions | Ventilate enclosed areas. Do not walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear appropriate personal protective equipment, avoid direct contact.

Emergency Procedures | ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Do not get water inside container.

6.2 Environmental precautions

| Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures | Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Dike to collect large liquid spills.

6.4 Reference to other sections

| Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling | Handle and open container with care. Use only with adequate ventilation. Use caution when combining with water; DO NOT add water to corrosive liquid, ALWAYS add corrosive liquid to water while stirring to prevent release of heat, steam and fumes. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist, vapours, spray. Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage | Keep container tightly closed. Store in a cool, dry, well-ventilated place. Keep away from incompatible materials.

7.3 Specific end use(s)

| Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	**ACGIH**	**Canada Ontario**	**Canada Quebec**	**China**	**France**
Sulfuric acid (7664-93-9)	STELs	Not established	Not established	3 mg/m3 STEV	2 mg/m3 STEL	3 mg/m3 STEL [VLCT]
	TWAs	0.2 mg/m3 TWA (thoracic fraction)	0.2 mg/m3 TWA (thoracic)	1 mg/m3 TWAEV	1 mg/m3 TWA	0.05 mg/m3 TWA [VME]

Exposure Limits/Guidelines (Con't.)						
	Result	**Germany DFG**	**Germany TRGS**	**Ireland**	**Israel**	**NIOSH**
Sulfuric acid (7664-93-9)	TWAs	Not established	0.1 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed, inhalable fraction, exposure factor 1)	1 mg/m3 TWA	0.3 mg/m3 TWA (thoracic fraction)	1 mg/m3 TWA
	Ceilings	0.1 mg/m3 Peak (inhalable fraction)	Not established	Not established	Not established	Not established

	MAKs	0.1 mg/m3 TWA MAK (inhalable fraction)	Not established	Not established	Not established	Not established

Exposure Limits/Guidelines (Con't.)						
	Result	**OSHA**	**OSHA Vacated**	**Portugal**	**Spain**	**Sweden**
Sulfuric acid (7664-93-9)	TWAs	1 mg/m3 TWA	1 mg/m3 TWA	0.2 mg/m3 TWA [VLE-MP] (thoracic fraction)	0.05 mg/m3 TWA [VLA-ED] (indicative limit value; it is prohibited the partial or complete commercialization or use of this substance as a phytosanitary or biocide compound; limitations and interferences can arise from other Sulfur compounds, mist)	0.1 mg/m3 LLV
	STELs	Not established	Not established	Not established	Not established	0.2 mg/m3 STV

Exposure Control Notations

Portugal

•Sulfuric acid (7664-93-9): **Carcinogens:** (A2 - Suspected Human Carcinogen (present in strong inorganic acid mixtures))

Sweden

•Sulfuric acid (7664-93-9): **Carcinogens:** (Carcinogen)

Germany DFG

•Sulfuric acid (7664-93-9): **Carcinogens:** (Category 4 (no significant contribution to human cancer)) | **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to)

8.2 Exposure controls

Engineering Measures/Controls | Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal Protective Equipment

Respiratory | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face | Wear chemical splash safety goggles.

Skin/Body | Wear appropriate gloves.

Environmental Exposure Controls | Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

LLV = Limit Level Value is the exposure limit for 8-hour work day

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWAEV = Time-Weighted Average Exposure Value

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Colorless liquid with no odor.
Color	Colorless	Odor	Odorless
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	Data lacking	pH	1.2 (0.1 N)
Specific Gravity/Relative Density	1.008 to 1.04 Water=1	Water Solubility	Soluble
Viscosity	Data lacking	Explosive Properties	Data lacking.
Oxidizing Properties:	Data lacking.		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Not flammable.		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Excess heat.

10.5 Incompatible materials

- Sulfuric Acid reacts vigorously, violently or explosively with many organic and inorganic chemicals including water, acrylonitrile, alkali solutions, carbides, chlorates, fulminates, nitrates, perchlorates, permanganates, picrates, powdered metals, metal acetylides or carbides, epichlorohydrin, aniline, ethylenediamine, alcohols with strong hydrogen peroxide, chlorosulfonic acid, cyclopentadiene, hydrofluoric acid, nitromethane, 4-nitrotoluene, phosphorus (III) oxide, potassium, sodium, ethylene glycol, isoprene, styrene. Acetaldehyde and allyl chloride may polymerize violently in the presence of Sulfuric Acid. Hazardous gases, such as hydrogen, hydrogen cyanide, hydrogen sulfide and acetylene, are evolved on contact with chemicals such as metals, cyanides, sulfides and mercaptans and carbides respectively. Sulfuric Acid is corrosive to many metals including aluminum alloys, ferritic grades of stainless steel, austenitic stainless steels, some carbon steel, cast iron, 3% nickel cast iron, nickel, nickel-base-alloys , copper, and copper alloys, bronze, silicon bronze, aluminum bronze, copper nickels, brass, naval brass, admiralty brass, unalloyed titanium (all concentrations except very dilute solutions) and zirconium. Resistance of

alloys to concentrated sulfuric acid corrosion increases with increasing chromium, molybdenum, and silicon content. The corrosiveness of sulfuric acid solutions is highly dependent on concentration, temperature, acid velocity, and impurities. Sulfuric Acid is attacks many plastics including nylon, polyvinylidene chloride, acrylonitrile-butadiene-styrene, styrene acrylonitrile, polyurethane (rigid), polyetherether ketone, polyethylene terephthalate (PET), high-density polyethylene (HDPE), thermoset polyester bisphenol A fumarate, thermoset polyester isophathalic acid, polystyrene and ethylene vinyl acetate (EVA). Many other elastomers, and coatings are also attacked; contact manufacturer for more information.

10.6 Hazardous decomposition products

Decomposes at 340°C (644°F) into sulfur trioxide and water.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Sulfuric acid (2% TO 10%)	7664-93-9	**Acute Toxicity:** Ingestion/Oral-Rat LD50 • 2140 mg/kg; Inhalation-Rat LC50 • 510 mg/m³; **Irritation:** Eye-Rabbit • 5 mg 30 Second(s)-Rinse • Severe irritation; **Reproductive:** Inhalation-Rabbit TCLo • 20 mg/m³ 7 Hour(s)(6-18D preg); *Reproductive Effects:Specific Developmental Abnormalities*:**Musculoskeletal system**

GHS Properties	Classification
Acute toxicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Aspiration Hazard	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Carcinogenicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Germ Cell Mutagenicity	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Skin corrosion/Irritation	**EU/CLP** • Skin Irritation 2 **OSHA HCS 2012** • Skin Corrosion 1B
Skin sensitization	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
STOT-RE	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
STOT-SE	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Toxicity for Reproduction	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Respiratory sensitization	**EU/CLP** • Classification criteria not met **OSHA HCS 2012** • Classification criteria not met
Serious eye damage/Irritation	**EU/CLP** • Eye Irritation 2 **OSHA HCS 2012** • Serious Eye Damage 1

Potential Health Effects

Inhalation

Acute (Immediate) May cause corrosive burns - irreversible damage.

Chronic (Delayed) | Repeated or prolonged exposure to corrosive fumes may cause bronchial irritation with chronic cough.

Skin

Acute (Immediate) | Causes severe skin burns and eye damage.

Chronic (Delayed) | Repeated or prolonged exposure to corrosive materials will cause dermatitis.

Eye

Acute (Immediate) | Causes serious eye damage.

Chronic (Delayed) | Repeated or prolonged exposure to corrosive materials or fumes may cause conjunctivitis.

Ingestion

Acute (Immediate) | May cause irreversible damage to mucous membranes.

Chronic (Delayed) | Repeated or prolonged exposure to corrosive materials or fumes may cause gastrointestinal distrubances.

Carcinogenic Effects | This material does contain a component that may cause cancer, however based on regulatory criteria this material is not classified as a carcinogen.

Carcinogenic Effects		
	CAS	**IARC**
Sulfuric acid	7664-93-9	Group 1-Carcinogenic

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

Section 12 - Ecological Information

12.1 Toxicity

| Material data lacking.

12.2 Persistence and degradability

| Material data lacking.

12.3 Bioaccumulative potential

| Material data lacking.

12.4 Mobility in Soil

| Material data lacking.

12.5 Results of PBT and vPvB assessment

| No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

| No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN2796	Sulfuric acid	8	II	NDA
TDG	UN2796	SULFURIC ACID	8	II	NDA
IMO/IMDG	UN2796	SULFURIC ACID	8	II	NDA
IATA/ICAO	UN2796	Sulfuric acid	8	II	NDA

14.6 Special precautions for user | None known.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | Not relevant.

14.8 Other information

DOT | Sulfuric acid has a reportable quantity of 1000 lbs (454 kg) as listed in Appendix A to 49 CFR 172.101.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications | Acute

State Right To Know				
Component	**CAS**	**MA**	**NJ**	**PA**
Sulfuric acid	7664-93-9	Yes	Yes	Yes

Inventory						
Component	**CAS**	**Canada DSL**	**Canada NDSL**	**China**	**EU EINECS**	**EU ELNICS**
Sulfuric acid	7664-93-9	Yes	No	Yes	Yes	No

Inventory (Con't.)		
Component	**CAS**	**TSCA**
Sulfuric acid	7664-93-9	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Sulfuric acid	7664-93-9	D1A, E (including >51%, <=51%)

Canada - WHMIS - Ingredient Disclosure List

• Sulfuric acid	7664-93-9	1 %

Environment

Canada - CEPA - Priority Substances List

• Sulfuric acid	7664-93-9	Not Listed

China

Environment

China - Ozone Depleting Substances - First Schedule		
• Sulfuric acid	7664-93-9	Not Listed
China - Ozone Depleting Substances - Second Schedule		
• Sulfuric acid	7664-93-9	Not Listed
China - Ozone Depleting Substances - Third Schedule		
• Sulfuric acid	7664-93-9	Not Listed

Other

China - Annex I & II - Controlled Chemicals Lists		
• Sulfuric acid	7664-93-9	Not Listed
China - Dangerous Goods List		
• Sulfuric acid	7664-93-9	(including Sulphuric acid, spent; with >51% acid; with not >51% acid)
China - Export Control List - Part I Chemicals		
• Sulfuric acid	7664-93-9	Not Listed

Europe

Other

EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification		
• Sulfuric acid	7664-93-9	C; R35
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits		
• Sulfuric acid	7664-93-9	15%<=C: C; R:35 5% <=C<15%: Xi; R:36/38
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling		
• Sulfuric acid	7664-93-9	C R:35 S:(1/2)-26-30-45
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations		
• Sulfuric acid	7664-93-9	B
EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases		
• Sulfuric acid	7664-93-9	S:(1/2)-26-30-45

Germany

Environment

Germany - TA Luft - Types and Classes		
• Sulfuric acid	7664-93-9	Not Listed
Germany - Water Classification (VwVwS) - Annex 1		
• Sulfuric acid	7664-93-9	Not Listed
Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes		
• Sulfuric acid	7664-93-9	ID Number 182, hazard class 1 - low hazard to waters (footnote 8)

Germany - Water Classification (VwVwS) - Annex 3

• Sulfuric acid	7664-93-9	Not Listed

Other

Germany - Specifically Regulated Chemicals in TRGS

• Sulfuric acid	7664-93-9	Not Listed

Portugal

Other

Portugal - Prohibited Substances

• Sulfuric acid	7664-93-9	Not Listed

United Kingdom

Environment

United Kingdom - Pollution Inventory - Schedule 1 - Thresholds for Releases to Air

• Sulfuric acid	7664-93-9	Not Listed

Other

United Kingdom - Workplace Exposure Limits (WELs) - Substances in Review

• Sulfuric acid	7664-93-9	Not Listed

United Kingdom - List of Dangerous Substances in Water

• Sulfuric acid	7664-93-9	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Sulfuric acid	7664-93-9	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Sulfuric acid	7664-93-9	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Sulfuric acid	7664-93-9	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Sulfuric acid	7664-93-9	1000 lb final RQ; 454 kg final RQ

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Sulfuric acid	7664-93-9	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Sulfuric acid	7664-93-9	1000 lb EPCRA RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Sulfuric acid	7664-93-9	1000 lb TPQ

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

		1.0 % de minimis concentration (acid aerosols

• Sulfuric acid	7664-93-9	including mists, vapors, gas, fog, and other airborne forms of any particle size)

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Sulfuric acid	7664-93-9	Not Listed

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

• Sulfuric acid	7664-93-9	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Sulfuric acid	7664-93-9	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Sulfuric acid	7664-93-9	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Sulfuric acid	7664-93-9	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Sulfuric acid	7664-93-9	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Sulfuric acid	7664-93-9	Not Listed

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

• Sulfuric acid	7664-93-9	

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

• Sulfuric acid	7664-93-9	Not Listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Last Revision Date 23/December/2014

Preparation Date 23/December/2014

Disclaimer/Statement of Liability To the best of Air Liquide's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this gas mixture is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.

Key to abbreviations

NDA = No data available