

# SAFETY DATA SHEET

According to 29 CFR 1910.1200 Hazard Communication Standard 2012 (HazCom 2012)

#### SECTION 1: Identification

**Product identifier** 

Product name Sulfuric Acid .6N

Product number R-0736; R-0736BR; R-0736BR-PL; R-0736G; R-0736G-PL; R-0736O-PL

Recommended use and

restrictions

To be used in accordance with manufacturer instructions or under the direct guidance of the

manufacturer.

Manufacturer Taylor Technologies, Inc.

31 Loveton Circle Sparks, MD 21152 Phone: (410) 472-4340

Emergency phone: (800) 837-8548

## SECTION 2: Hazard(s) identification

Physical hazardsCorrosive to metalsCategory 1Health hazardsEye damage/irritationCategory 1Skin corrosion/irritationCategory 1B

**Environmental hazards** 

Label elements

Hazard pictograms



No data available

Signal word Danger

Hazard statements May be corrosive to metals. Causes severe skin burns and eye damage.

Precautionary statements

Prevention Keep only in original container. Do not breathe dusts or mists. Wash skin thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection if contact is likely to occur.

Response Absorb spillage to prevent material damage. IF SWALLOWED: Rinse mouth. Do NOT induce

vomiting. IF ON SKIN (OR HAIR): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a physician or poison control center. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing. Immediately call a physician or poison control center.

Storage Store in corrosive-resistant container with a corrosive-resistant inner liner. Keep tightly capped.

Store out of direct sunlight between 36°F-85°F. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazards not otherwise

classified

No data available

# SECTION 3: Composition/information on ingredients

Mixture					
Chemical name	Common name and synonyms	CAS number	%		
Water	Dihydrogen oxide	7732-18-5	95–99		
Sulfuric acid	Hydrogen sulfate	7664-93-9	0.1–5		

## SECTION 4: First-aid measures

## If inhaled

Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. Give oxygen or artificial respiration if needed.

SDS US

#### In case of skin contact

Immediately flush skin with plenty of water for at least 20 minutes. If clothing comes in contact with the product, the clothing should be removed and laundered before reuse. Seek medical attention if irritation develops. Chemical burns must be treated by a physician.

#### In case of eye contact

Immediately flush eyes with plenty of water for at least 20 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

#### If swallowed

Call a physician or poison control center immediately. Rinse mouth. Never give anything by mouth to a person who is unconscious or is having convulsions. Do NOT induce vomiting unless directed by physician. If vomiting occurs, keep head low so that stomach content does not get into the lungs.

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

Refer to section 2 and/or section 11 of the SDS for the most important known symptoms and effects.

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

Provide general supportive measures and treat symptomatically.

Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep person under observation. Symptoms may be delayed.

#### **General information**

Ensure medical personnel are aware of the material(s) involved and take precautions to protect themselves.

## SECTION 5: Firefighting measures

#### **Extinguishing media**

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing

Do not use a heavy water stream. Use of heavy stream of water may spread fire.

media

# Specific hazards arising from the substance or mixture

Fire hazard Not flammable Explosion hazard Not explosive

Reactivity May be corrosive to metals

Hazardous combustion Sulfur

products

Sulfur oxides

Advice for firefighters

Precautionary measures Exercise caution when fighting any chemical fire; hazardous fumes will be present.

Firefighting Use water spray or fog for cooling exposed containers.

equipment/instructions

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Other information Refer to section 9 of the SDS for flammability properties.

## SECTION 6: Accidental release measures

## Personal precautions, protective equipment, and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protective equipment, refer to section 8 of the SDS.

## **Environmental precautions**

Avoid discharge into drains, watercourses, or onto the ground.

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

Dike the spilled material where this is possible. Stop leak if it can be done without risk. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth, and place into containers. Prevent entry into waterways, sewers, basements, or confined areas. Following product recovery, flush area with water. Small Spills: Absorb spillage with noncombustible, absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for reuse. Dilute acid with water and neutralize with dilute base. If not recoverable, dilute with water or flush to holding area and neutralize. Contaminated absorbent material may pose the same hazards as the spilled product. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

#### Reference to other sections

For exposure controls and personal protection, refer to section 8 of the SDS. For waste disposal, refer to section 13 of the SDS.

## SECTION 7: Handling and storage

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

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. For personal protective equipment, refer to section 8 of the SDS. Keep away from incompatibles. Observe good industrial hygiene practices. Label containers appropriately.

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

Store in corrosive-resistant container with a corrosive-resistant inner liner. Keep tightly capped. Store out of direct sunlight between 36°F-85°F. Store locked up. Store away from incompatible materials (refer to section 10 of the SDS).

## SECTION 8: Exposure controls/personal protection

#### Occupational exposure limits

#### **ACGIH Threshold Limit Values**

Components	Туре	Value	Form
Sulfuric acid (CAS 7664-93-9)	TWA	0.2 mg/m <sup>3</sup>	Thoracic function

#### **NIOSH: Pocket Guide to Chemical Hazards**

Components	Туре	Value	Form
Sulfuric acid (CAS 7664-93-9)	TWA	1 mg/m <sup>3</sup>	Not applicable

#### OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	Form
Sulfuric acid (CAS 7664-93-9)	PEL	1 mg/m <sup>3</sup>	Not applicable

**Biological limit values** 

No biological exposure limits noted for the ingredient(s)

**Exposure controls** 

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) 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. Eyewash facilities

and emergency shower must be available when handling this product.

Personal protective

equipment

Eye/face protection Wear appropriate chemical safety goggles if contact is likely to occur.

Skin protection Wear appropriate chemical-resistant gloves and clothing if contact is likely to occur.

Body protection Wear appropriate protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Use a NIOSH/MSHA

approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure

limits. Advice should be sought from respiratory protection suppliers.

#### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

Physical state Liquid Form Liquid

Color Clear, colorless or nearly colorless

Odor Odorless

Odor threshold No data available

pΗ 0.7

Evaporation rate No data available Melting point No data available Freezing point No data available **Boiling point** 212°F (100°C) No data available Flash point Auto-ignition temperature No data available No data available Decomposition temperature Flammability (solid, gas) No data available Vapor pressure 17 mm Hg

Relative vapor density 0.6

Solubility Soluble in all proportions Partition coefficient (n-octanol/water)

No data available

Viscosity No data available Explosive properties No data available Oxidizing properties No data available

SECTION 10: Stability and reactivity

Reactivity May be corrosive to metals

Chemical stability Stable under recommended handling and storage conditions (refer to section 7 of the SDS)

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use

Conditions to avoid Contact with incompatible materials. Do not use in areas without adequate ventilation.

Incompatible materials Metal compounds, nitromethane, oxidizing agents, sugars

## SECTION 11: Toxicological information

Information on toxicological

effects

Inhalation May cause irritation to the respiratory system

Skin contact Causes severe skin burns Eve contact Causes serious eye damage Ingestion Causes digestive tract burns

Most important

symptoms/effects, acute and

delayed

Direct skin contact may cause corrosive skin burns, deep ulcerations, and possibly permanent

scarring.

Direct contact with concentrated solutions may be corrosive to the eyes and may cause severe damage, including blindness. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision.

Inhalation of mists can cause severe respiratory irritation. Symptoms may include coughing, choking,

and wheezing. Inhalation could result in pulmonary edema (fluid accumulation). Symptoms of

pulmonary edema (chest pain, shortness of breath) may be delayed.

Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus, and possibly the digestive tract. Symptoms may include abdominal pain, vomiting, burns, perforations, bleeding.

**Acute toxicity** This product is not classified as an acute toxicity hazard. See below for individual ingredient acute

toxicity data.

**Species** Components **Test Results** 

Sulfuric acid (CAS 7664-93-9)

Acute

Inhalation

510 mg/m<sup>3</sup>, 2 hours LC<sub>50</sub> Rat

Oral

 $LD_{50}$ Rat 2140 mg/kg

Respiratory or skin

sensitization

No data available

No data available Germ cell mutagenicity Carcinogenicity No data available

Reproductive toxicity Specific target organ toxicity No data available

(single exposure)

No data available

Specific target organ toxicity No data available

(repeated exposure)

Aspiration hazard No data available

## SECTION 12: Ecological information

This product is not classified as environmentally hazardous; however, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

# SECTION 13: Disposal considerations

Collect and reclaim or dispose of in sealed containers at a licensed waste disposal site. Since emptied containers may retain product residue, follow label warnings even after container is emptied. This material and its container must be disposed of in a safe manner. Dispose of contents/container in accordance with local/regional/national/international regulations.

## **SECTION 14: Transport information**

DOT

UN number UN2796
UN proper shipping name Sulphuric acid

Transport hazard class(es)

Class 8

Subsidiary risk Not listed

Label(s) 8
Packing group II

Special precautions for user Read safety instructions, SDS, and emergency procedures before handling.

Special provisions A3, A7, B15, IB2, N6, N34, T8, TP2, TP12

Packaging exceptions 154
Packaging, non-bulk 202
Packaging, bulk 242

**IATA** 

UN number UN2796 UN proper shipping name Sulphuric acid

Transport hazard class(es)

Class

Subsidiary risk Not listed Packing group II Not listed Environmental hazards

ERG code 8L

Special precautions for user Read safety instructions, SDS, and emergency procedures before handling.

Other information

Passenger and cargo Allowed

aircraft

Cargo aircraft only Allowed

**IMDG** 

UN number UN2796 UN proper shipping name Sulphuric acid

Transport hazard class(es)

Class 8

Subsidiary risk Not listed

Packing group II

Environmental hazards

Marine pollutant Not listed EmS F-A. S-B

Special precautions for user Read safety instructions, SDS, and emergency procedures before handling.

This substance/mixture is not intended to be transported in bulk.

Transport in bulk according to Annex II of MARPOL 73/78

and the IBC Code

DOT



# IATA; IMDG

## SECTION 15: Regulatory information

U.S. federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**CERCLA Hazardous Substance (40 CFR 302.4)** 

Sulfuric acid (CAS 7664-93-9)

## **SARA 302 Extremely Hazardous Substance**

Sulfuric acid (CAS 7664-93-9)

## **SARA 304 Emergency Release Notification**

Sulfuric acid (CAS 7664-93-9)

#### **SARA 313 (TRI Reporting)**

Sulfuric acid (CAS 7664-93-9)

## U.S. state regulations

## Massachusetts Right-to-Know Act

Sulfuric acid (CAS 7664-93-9)

## New Jersey Worker and Community Right-to-Know Act

Sulfuric acid (CAS 7664-93-9)

## Pennsylvania Worker and Community Right-to-Know Act

Sulfuric acid (CAS 7664-93-9)

## Rhode Island Right-to-Know Act

Sulfuric acid (CAS 7664-93-9)

## SECTION 16: Other information

#### **NFPA** Rating

Health hazard 2
Fire hazard 0
Reactivity 1
Specific N/A

#### **Disclaimer**

The information in the Safety Data Sheet is offered for your consideration and guidance for safe handling, use, storage, transportation, disposal, and release of this product and is not considered a warranty or quality specification. Taylor Technologies, Inc., disclaims all expressed or implied warranties and assumes no responsibility for the accuracy of completeness of the data contained herein. The data in this SDS does not apply to use with any other product or in any other process.

License granted to make unlimited paper copies for internal use only. This Safety Data Sheet may not be altered in any way without the expressed knowledge and permission of Taylor Technologies, Inc. The information contained in this sheet is based on lab experience and the most current data available.

#### Issue date:

April 2015

#### Last revisions

July 2016