



Safety Data Sheet

Product Name: Stop Solution Sulfuric Acid (2N, 15 x 6 mL)

Reviewed on: 19 January 2012

1. Identification of Substance:

- **Other means of identification: Catalog Number: DY994**
Components: Stop Solution (contains Sulfuric acid)
- **GHS product identifier:** Stop Solution Sulfuric Acid (2N, 15 x 6 mL)
- **Application of the substance / the preparation:** For Research Use Only
- **Manufacturer/Supplier:**
R&D Systems Inc.
614 McKinley Place N.E.
Minneapolis, MN 55413
USA
- **For product related questions call:** 1-800-343-7475 or 1-612-379-2956, In Europe call: +44(0)1235-529449.
- **Emergency information:** In case of a chemical emergency, spill, leak, fire, or accident, call **CHEMTREC** at 1-800-424-9300 (USA or Canada). Outside USA or Canada: +1 703-527-3887 (collect calls accepted)

2. Hazard Identification:

- **Classification: Regulation (EC) No. 1272/2008 [CLP/GHS]**
Stop Solution contains Sulfuric Acid: Skin Irrit. Class 2
Eye Irrit. Class 2
- **Signal Word:** WARNING
- **Hazard statements:** Causes skin irritation. Causes serious eye irritation.
- **Precautionary statements:** Wash hands thoroughly after handling. Wear protective gloves, clothing and eye and face protection.
Response:
IF ON SKIN (or hair): Immediately remove contaminated clothing and wash before re-use. Wash skin immediately with soap and water. Get medical attention if irritation persists after washing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.
- **Classification according to Directive 67/548/EEC:** Irritating to eyes and skin.
- **Hazard Symbol / R-Phrase / S-Phrase:** Xi, Irritant / R36/38, Irritating to eyes and skin. / S26, In case of contact with eyes, rinse immediately with plenty of water and see medical advice.
- **Other hazards:** none



3. Information on Ingredients:

Description: Sulfuric Acid, Formula: H₂SO₄.

Contains	CAS No.	EC-No.	Index-No.	Content
Water	7732-18-5	231-791-2	NA	~90.2%
Sulfuric Acid	7664-93-9	231-639-5	016-020-00-8	~ 9.8%

4. First Aid Measures:

- **IF IN EYES:** Rinse thoroughly with water for at least 15 minutes and immediately consult a physician.
- **IF ON SKIN (or hair):** Immediately take off contaminated clothing or shoes. Wash with plenty of soap and water. Consult a physician.
- **IF INHALED:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
- **IF SWALLOWED:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Immediately consult a physician.
- **Potential acute / delayed health effects:**
Eye contact: Causes serious eye irritation / causes burns
Skin contact: Causes skin irritation / causes burns
Inhalation: Harmful if inhaled. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion: Harmful if swallowed. Irritating to mouth, throat and stomach. / Causes burns
- **Notes to physician:** Consult a physician. Show this safety data sheet to the doctor in attendance.



Safety Data Sheet

Product Name: Stop Solution Sulfuric Acid (2N, 15 x 6 mL)

Reviewed on: 19 January 2012

5. Fire Fighting Measures:

- **Suitable extinguishing agents:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- **Hazards from the substance or mixture:** In case of fire, toxic and corrosive gases may be formed.
- **Special precautions for fire-fighters:** Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental Release Measures:

- **Person-related safety precautions:** Use appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.
- **Measures for environmental protection:** Keep away from drains.
- **Measures for containment and cleaning:** Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. Handling and Storage:

- **Precautions for safe handling:** Avoid inhalation of vapour or mist. Use normal measures for preventive fire protection.
- **Conditions for safe storage:** Store in a cool, dry place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. Exposure Controls and Personal Protection:

- **Control parameters:** Contains no substances with occupational exposure limit values
- **Appropriate engineering controls:** Use with adequate ventilation including local extraction. Ensure that eyewash stations and safety showers are close to the workstation location.
- **Individual protection measures:** Wash hands thoroughly after handling chemical products and before eating, smoking or using the toilet. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
 - **Eye/face protection:** Wear approved safety goggles.
 - **Skin/hand protection:** Handle with protective gloves, plastic or rubber. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
 - **Body protection:** Wear suitable protective clothing as protection against splashing or contamination.
 - **Other skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.
 - **Respiratory protection:** In case of inadequate ventilation, use a suitable respirator. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. Physical and Chemical Properties:

- | | |
|---|--|
| ▪ Appearance: Colorless Liquid | Upper/lower flammability or explosive limits: Not available |
| ▪ Odor: pungent | Vapor density : Not available |
| ▪ Odor threshold: Not available | Vapor pressure: Not available |
| ▪ pH: ~1 | Relative density: Not available |
| ▪ Melting point/freezing point: Not available. | Solubility in/Miscibility with Water: Soluble |
| ▪ Boiling point/Boiling range: Not available | Partition coefficient: octanol/water: Not available |
| ▪ Flash point: Not available | Auto igniting: Not available |
| ▪ Evaporation rate: Not available | Decomposition temperature: Not available |
| ▪ Flammability (solid, gas): Not available | Viscosity: Not available |



Safety Data Sheet

Product Name: Stop Solution Sulfuric Acid (2N, 15 x 6 mL)

Reviewed on: 19 January 2012

10. Stability and Reactivity:

- **Reactivity:** Contact with metals produces highly flammable hydrogen gas. Addition of water liberates excessive heat.
- **Chemical Stability:** Stable under recommended storage conditions.
- **Possibility of hazardous reactions:** Under normal conditions of storage and use, hazardous reactions will not occur.
- **Conditions to avoid:** Bases, Halides, Metals, Alkalis, Acetonitrile.
- **Incompatible materials:** Most metals, oxidizers, reducers, bases, metal carbonates, cyanides, sulphides, carbides, oxides, metal acetylides, hydrides, halogens, organic or combustible materials, perchlorates, acetonitrile, permanganates, alcohols, picrates.
- **Hazardous decomposition products:** Products formed under fire conditions: Oxides of Sulphur, Hydrogen gas.

11. Toxicological Information:

- **Acute toxicity:** Can cause severe burns upon contact while the vapours or mist are corrosive and can cause severe irritation or damage to the nose, throat and lungs. Ingestion of this product causes pain, nausea and vomiting and may be fatal if large doses are ingested.
- **Skin corrosion/irritation:** Can cause severe burns
- **Serious eye damage/irritation:** Can cause severe burns
- **Respiratory or skin sensitization:** No data available
- **Germ cell mutagenicity:** No data available
- **Carcinogenicity:** No data available
- **Reproductive toxicity:** No data available
- **Specific target organ toxicity (STOT) -single exposure:** No data available
- **Specific target organ toxicity (STOT) -repeated exposure:** No data available
- **Aspiration hazard:** Can cause severe burns
- **Information on likely routes of exposure:** Routes of entry anticipated; oral, dermal, inhalation.
- **Symptoms related to the physical, chemical and toxicological characteristics:**
 - **Inhalation:** May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
 - **Ingestion:** May be harmful if swallowed. Causes burns.
 - **Skin contact:** May be harmful if absorbed through skin. Causes burns.
 - **Eye contact:** Causes eye burns.
- **Delayed and immediate effects and also chronic effects from short and long term exposure:**
 - **Short term exposure: Potential immediate effects:** Not available. **Potential delayed effects:** Not available.
 - **Long term exposure: Potential immediate effects:** Not available. **Potential delayed effects:** Not available.
- **Effects of chronic exposure:** Repeated skin contact with this product may lead to dermatitis while repeated inhalation may cause bronchitis, conjunctivitis, respiratory infections, emphysema and digestive disturbances. May cause erosion and discoloration of the teeth.
- **Numerical measures of toxicity:** Not available
- **Other Information:** NA

12. Ecological Information:

- **Ecotoxicity:** This product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.
- **Biodegradability:** No data available.
- **Bioaccumulative potential:** No data available.
- **Mobility in soil:** No data available.
- **Other adverse effects:** No data available.

13. Disposal Considerations:

- **Disposal methods:** Dispose of waste in accordance to applicable national, regional, or local regulations.
- **Contaminated packaging:** Dispose in the same manner as unused product.
- **Special precautions:** Dispose of small amounts of spilled material as described in section 6. Large spills must be dealt with separately by qualified disposal personnel. Avoid dispersal of spilt material to soil, waterways, drains and sewers.



Safety Data Sheet

Product Name: Stop Solution Sulfuric Acid (2N, 15 x 6 mL)

Reviewed on: 19 January 2012

14. Transport Information:

▪ **ADR/RID ADN/ADNR IMDG IATA/DOT**

ADR/DOT/: UN Number: UN 2796
RID Proper Shipping Name: Sulphuric Acid
Hazard class: 8
Packing group: II

IATA: UN Number: UN 2796
Proper Shipping Name: Sulphuric Acid
Hazard class: 8
Packing group: II

IMDG: UN Number: UN 2796
Proper Shipping Name: Sulphuric Acid
Hazard class: 8
Packing group: II
EmS Number: F-A, S-B
Marine Pollutant: No

15. Regulations:

▪ **EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV:**

List of substances subject to authorization Substances of very high concern: None of the components are listed.

Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: Not applicable.

▪ **US. Toxic Substances Control Act:** On TSCA Inventory

SARA 313 Components: Not listed

SARA 311/312 Hazards: Acute Health Hazard

CERCLA Reportable Quantity: 1,000 lbs

California Prop. 65: Not listed.

16. Other Information:

▪ **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 see medical advice.

▪ **Notice to reader:** To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.