



# MATERIAL SAFETY DATA SHEET

**Product Trade Name:** SULFURIC ACID SOLUTION 5N (51331, 51332, 51333, 51334, 51335)

**Revision Date:** 19-Apr-2012

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Statement of Hazardous Nature** Hazardous according to the criteria of NOHSC, Dangerous Goods according to the criteria of ADG.

**Manufacturer/Supplier** Halliburton Australia Pty. Ltd.  
15 Marriott Road  
Jandakot  
WA 6164  
Australia

ACN Number: 009 000 775  
Telephone Number: 61 (08) 9455 8300  
Fax Number: 61 (08) 9455 5300

### Product Emergency Telephone

Australia: 08-64244950  
Papua New Guinea: 05 1 281 575 5000  
NewZealand: 06-7559274

### Fire, Police & Ambulance - Emergency Telephone

Australia: 000  
Papua New Guinea: 000  
New Zealand: 111

## Identification of Substances or Preparation

**Product Trade Name:** SULFURIC ACID SOLUTION 5N (51331, 51332, 51333, 51334, 51335)  
**Synonyms:** None  
**Chemical Family:** Inorganic acid  
**UN Number:** , UN2796  
**Dangerous Goods Class:** 8  
**Subsidiary Risk:** None  
**Hazchem Code:** 2P  
**Poisons Schedule:** None Allocated  
**Application:** Reagent

**Prepared By** Chemical Compliance  
Telephone: 1-580-251-4335  
e-mail: fdunexchem@halliburton.com

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	Australia NOHSC	New Zealand WES	ACGIH TLV-TWA
Sulfuric acid	7664-93-9	10 - 30%	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>

**Non-Hazardous Substance to Total of 100%**

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### 3. HAZARDS IDENTIFICATION

<b>Hazard Overview</b>	May cause eye and skin burns. May cause respiratory irritation. May be harmful if swallowed. Potential carcinogen.
<b>Risk Phrases</b>	R35 Causes severe burns.
<b>HSNO Classification</b>	Not Determined

### 4. FIRST AID MEASURES

<b>Inhalation</b>	If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
<b>Skin</b>	In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and laundry before reuse.
<b>Eyes</b>	In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
<b>Ingestion</b>	Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.
<b>Notes to Physician</b>	Not Applicable

### 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Water fog, carbon dioxide, foam, dry chemical.
<b>Extinguishing media which must not be used for safety reasons</b>	Water must not be used with open containers.
<b>Special Exposure Hazards</b>	Use water spray to cool fire exposed surfaces. Do not allow runoff to enter waterways. Decomposition in fire may produce toxic gases.
<b>Special Protective Equipment for Fire-Fighters</b>	Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautionary Measures</b>	Use appropriate protective equipment.
<b>Environmental Precautionary Measures</b>	Prevent from entering sewers, waterways, or low areas.
<b>Procedure for Cleaning / Absorption</b>	Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Neutralize with lime slurry, limestone, or soda ash. Scoop up and remove.

### 7. HANDLING AND STORAGE

<b>Handling Precautions</b>	Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.
<b>Storage Information</b>	Store away from alkalis. Store in a cool well ventilated area. Keep container closed when not in use.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls	Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.
Respiratory Protection	Acid gas respirator.
Hand Protection	Impervious rubber gloves.
Skin Protection	Rubber apron.
Eye Protection	Chemical goggles; also wear a face shield if splashing hazard exists.
Other Precautions	Eyewash fountains and safety showers must be easily accessible.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Clear colorless
Odor:	Odorless
pH:	1
Specific Gravity @ 20 C (Water=1):	Not Determined
Density @ 20 C (kg/l):	Not Determined
Bulk Density @ 20 C (kg/m <sup>3</sup> ):	Not Determined
Boiling Point/Range (C):	Not Determined
Freezing Point/Range (C):	Not Determined
Pour Point/Range (C):	Not Determined
Flash Point/Range (C):	Not Determined
Flash Point Method:	Not Determined
Autoignition Temperature (C):	Not Determined
Flammability Limits in Air - Lower (g/m <sup>3</sup> ):	Not Determined
Flammability Limits in Air - Lower (%):	Not Determined
Flammability Limits in Air - Upper (g/m <sup>3</sup> ):	Not Determined
Flammability Limits in Air - Upper (%):	Not Determined
Vapor Pressure @ 20 C (mmHg):	Not Determined
Vapor Density (Air=1):	Not Determined
Percent Volatiles:	Not Determined
Evaporation Rate (Butyl Acetate=1):	Not Determined
Solubility in Water (g/100ml):	Soluble
Solubility in Solvents (g/100ml):	Not Determined
VOCs (g/l):	Not Determined
Viscosity, Dynamic @ 20 C (centipoise):	Not Determined
Viscosity, Kinematic @ 20 C (centistokes):	Not Determined
Partition Coefficient/n-Octanol/Water:	Not Determined
Molecular Weight (g/mole):	Not Determined
Decomposition Temperature (C):	Not Determined

## 10. STABILITY AND REACTIVITY

Stability Data:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid	None anticipated
Incompatibility (Materials to Avoid)	Strong alkalis. Reducing agents. Alcohols. Aldehydes. Acrylates. Prolonged contact with aluminum, lead, or zinc may liberate flammable hydrogen.
Hazardous Decomposition Products	Oxides of sulfur. Toxic fumes.

**11. TOXICOLOGICAL INFORMATION**

**Principle Route of Exposure** Eye or skin contact, inhalation.

Symptoms related to exposure

**Inhalation** Causes severe respiratory irritation.

**Skin Contact** Causes severe burns.

**Eye Contact** Causes severe eye burns.

**Ingestion** Causes burns of the mouth, throat and stomach.

**Aggravated Medical Conditions** Skin disorders.

**Chronic Effects/Carcinogenicity** Contains sulfuric acid, a potential carcinogen. Prolonged, excessive exposure may cause erosion of the teeth.

**Other Information** None known.

**Toxicity Tests**

**Oral Toxicity:** Not determined

**Dermal Toxicity:** Not determined

**Inhalation Toxicity:** Not determined

**Primary Irritation Effect:** Not determined

**Carcinogenicity** Not determined

**Genotoxicity:** Not determined

**Reproductive /  
Developmental Toxicity:** Not determined

**12. ECOLOGICAL INFORMATION**

**Mobility (Water/Soil/Air)** Not determined

**Persistence/Degradability** Readily biodegradable

**Bio-accumulation** Not determined

**Ecotoxicological Information**

**Acute Fish Toxicity:** Not determined

**Acute Crustaceans Toxicity:** Not determined

**Acute Algae Toxicity:** Not determined

**Chemical Fate Information** Not determined

**Other Information** Not applicable

**13. DISPOSAL CONSIDERATIONS**

**Disposal Method** Disposal should be made in accordance with federal, state, and local regulations.

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**14. TRANSPORT INFORMATION****Land Transportation****ADR**

UN2796, Sulfuric Acid Solution, 8, II

**Air Transportation****ICAO/IATA**

UN2796, Sulfuric Acid Solution, 8, II

**Sea Transportation****IMDG**UN2796, Sulfuric Acid Solution, 8, II  
EmS F-A, S-B**Other Transportation Information**

Labels: Corrosive

**15. REGULATORY INFORMATION****Chemical Inventories****Australian AICS Inventory**  
**New Zealand Inventory of**  
**Chemicals**  
**US TSCA Inventory**  
**EINECS Inventory**All components listed on inventory or are exempt.  
All components listed on inventory or are exempt.  
All components listed on inventory or are exempt.  
This product, and all its components, complies with EINECS**Classification** C - Corrosive.**Risk Phrases** R35 Causes severe burns.**Safety Phrases** S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S30 Never add water to this product.  
S45 In case of accident or if you feel unwell, seek medical advice immediately.  
S1/2 Keep locked up and out of reach of children.**16. OTHER INFORMATION****The following sections have been revised since the last issue of this SDS**

Not applicable

## Contact

### Australian Poisons Information Centre

24 Hour Service: - 13 11 26

Police or Fire Brigade: - 000 (exchange): - 1100

### New Zealand National Poisons Centre

0800 764 766

### Additional Information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

### Disclaimer Statement

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

**\*\*\*END OF MSDS\*\*\***