# **Safety Data Sheet**

Issue Date: 29-Jan-2014 Revision Date: 04-Feb-2014 Version 1

# 1. IDENTIFICATION

Product Identifier

Product Name Nitrate Reagent

**Product Code** 60025, 300165, 60026, 300171

Other means of identification

**SDS #** GB-028

Synonyms Nitrate A Reagent Nitrate B Reagent.

UN/ID No UN2789

Recommended use of the chemical and restrictions on use

**Recommended Use** For laboratory use.

Details of the supplier of the safety data sheet

Manufacturer Address Gibson Bioscience 1040 Manchester Street Lexington, KY 40508

**Emergency Telephone Number** 

Company Phone Number Phone: (800) 477-4763

Fax: (859) 253-1476

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

# 2. HAZARDS IDENTIFICATION

Appearance Colorless liquid Physical State Liquid Odor Acetic acid odor Aromatic

#### Classification

Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

# **Hazards Not Otherwise Classified (HNOC)**

May be harmful if swallowed

Signal Word Danger

**Hazard Statements** 

Harmful in contact with skin Harmful if inhaled Causes severe skin burns and eye damage



#### **Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection

Use only outdoors or in a well-ventilated area

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

#### **Precautionary Statements - Response**

Immediately call a poison center or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a poison center or doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

Call a poison center or doctor/physician if you feel unwell

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a poison center or doctor/physician IF SWALLOWED: rinse mouth. Do NOT induce vomiting

#### **Precautionary Statements - Storage**

Store locked up

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

# **Other Hazards**

Harmful to aquatic life with long lasting effects

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms Nitrate A Reagent Nitrate B Reagent.

Chemical Name	CAS No	Weight-%
Acetic acid	64-19-7	>95
1-naphthol	90-15-3	0-5
Sulfanilic acid	Proprietary	0-1

<sup>\*\*</sup>If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*.

#### 4. FIRST-AID MEASURES

#### **First Aid Measures**

**General Advice** Provide this SDS to medical personnel for treatment.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

poison center or doctor/physician.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Call a poison center or

doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek

immediate medical attention/advice.

Ingestion IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Never give anything by mouth to

an unconscious person. If conscious give large amounts of water. Seek medical attention.

#### Most important symptoms and effects

**Symptoms** Causes severe skin burns and eye damage. May cause severe irritation with redness, pain,

and blurred vision. Harmful if inhaled. May be harmful if swallowed.

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

Notes to Physician Treat symptomatically.

# 5. FIRE-FIGHTING MEASURES

#### **Suitable Extinguishing Media**

Carbon dioxide (CO2). ABC multipurpose dry chemical. Water spray (fog). Foam.

Unsuitable Extinguishing Media Not determined.

#### Specific Hazards Arising from the Chemical

Non-flammable solution.

Hazardous Combustion Products No information available.

#### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# 6. ACCIDENTAL RELEASE MEASURES

# Personal precautions, protective equipment and emergency procedures

**Personal Precautions**Use personal protective equipment as required.

**Environmental Precautions** See Section 13: DISPOSAL CONSIDERATIONS. Prevent from entering into soil, ditches,

sewers, waterways and/or groundwater. See Section 12, Ecological Information.

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

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Flush area with water. Wipe up with damp sponge or mop. Transfer liquids to suitable

containers for recovery, reuse, or disposal.

# 7. HANDLING AND STORAGE

#### Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal

protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray.

Wash face, hands, and any exposed skin thoroughly after handling.

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

**Storage Conditions**Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Incompatible Materials Strong bases.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetic acid	STEL: 15 ppm	TWA: 10 ppm	IDLH: 50 ppm
64-19-7	TWA: 10 ppm	TWA: 25 mg/m <sup>3</sup> (vacated) TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m <sup>3</sup>
		(vacated) TWA: 25 mg/m <sup>3</sup>	STEL: 15 ppm STEL: 37 mg/m³

#### **Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Ventilation

systems. Eyewash stations. Showers.

## Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Chemical anti-splash safety goggles.

**Skin and Body Protection** Protective gloves. Protective work clothing (lab coat).

Respiratory Protection In cases of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved

respirator.

General Hygiene Considerations Wash contaminated clothing before reuse. Wash face, hands and any exposed skin

thoroughly after handling.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

## Information on basic physical and chemical properties

Physical State Liquid

Appearance Colorless liquid Odor Acetic acid odor Aromatic

Color Colorless Odor Threshold Not determined

Property Values Remarks • Method

Not determined Ha **Melting Point/Freezing Point** Not determined **Boiling Point/Boiling Range** Not determined Flash Point Non-flammable **Evaporation Rate** Not determined Flammability (Solid, Gas) n/a-liquid **Upper Flammability Limits** Not available **Lower Flammability Limit** Not available **Vapor Pressure** Not determined **Vapor Density** Not determined **Specific Gravity** Not determined **Water Solubility** Soluble in water Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined

Dynamic Viscosity

Explosive Properties

Oxidizing Properties

Not determined

Not determined

# 10. STABILITY AND REACTIVITY

# Reactivity

Not reactive under normal conditions.

# **Chemical Stability**

Stable under recommended storage conditions.

#### **Possibility of Hazardous Reactions**

None under normal processing.

#### **Conditions to Avoid**

Keep out of reach of children.

# **Incompatible Materials**

Strong bases.

# **Hazardous Decomposition Products**

No information available.

# 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

**Product Information** 

**Eye Contact** Causes severe eye damage.

**Skin Contact** Causes severe skin burns.

**Inhalation** Harmful if inhaled.

**Ingestion** May be harmful if swallowed.

#### **Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acetic acid 64-19-7	= 3310 mg/kg (Rat)	= 1060 mg/kg ( Rabbit )	= 11.4 mg/L (Rat) 4 h
1-naphthol 90-15-3	= 1870 mg/kg (Rat)	= 880 mg/kg (Rabbit)	> 420 mg/m <sup>3</sup> (Rat)1 h
Sulfanilic acid	> 90 mL/kg (Rat)	-	-

## Information on physical, chemical and toxicological effects

**Symptoms** Please see section 4 of this SDS for symptoms.

# Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA,

IARC or NTP.

# **Numerical measures of toxicity**

Not determined

# 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Harmful to aquatic life with long lasting effects.

# Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Acetic acid		79: 96 h Pimephales	EC50 = 8.8 mg/L 15 min	47: 24 h Daphnia magna
64-19-7		promelas mg/L LC50 static	EC50 = 8.8 mg/L 25 min	mg/L EC50 65: 48 h Daphnia
		75: 96 h Lepomis	EC50 = 8.8 mg/L 5 min	magna mg/L EC50 Static
		macrochirus mg/L LC50	_	
		static		
1-naphthol		3.57: 96 h Pimephales		
90-15-3		promelas mg/L LC50		
		flow-through 0.75: 96 h		
		Lepomis macrochirus mg/L		
		LC50 static		

# Persistence/Degradability

Not determined.

# **Bioaccumulation**

Not determined.

#### **Mobility**

Chemical Name	Partition Coefficient
Acetic acid 64-19-7	-0.31
1-naphthol 90-15-3	2.84

# **Other Adverse Effects**

Not determined

# 13. DISPOSAL CONSIDERATIONS

## **Waste Treatment Methods**

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and

regulations.

## California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Acetic acid	Toxic
64-19-7	Corrosive
	Ignitable

# 14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT

UN/ID No UN2789

Proper Shipping Name Acetic acid solution

Hazard Class 8
Packing Group II

<u>IATA</u>

UN2789

Proper Shipping Name Acetic acid solution

Hazard Class 8
Packing Group || |

**IMDG** 

UN/ID No UN2789

Proper Shipping Name Acetic acid solution

Hazard Class 8
Packing Group ||

Marine Pollutant This material may meet the definition of a marine pollutant

# 15. REGULATORY INFORMATION

#### International Inventories

Not determined

#### 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

## US Federal Regulations

## **CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Acetic acid	5000 lb		RQ 5000 lb final RQ
64-19-7			RQ 2270 kg final RQ

# **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

## **CWA (Clean Water Act)**

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Acetic acid 64-19-7 ( >95 )	5000 lb			X

#### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Acetic acid	X	X	X
64-19-7			

# **16. OTHER INFORMATION**

NFPAHealth HazardsFlammabilityInstabilitySpecial Hazards200Not determinedHMISHealth HazardsFlammabilityPhysical HazardsPersonal Protection20Not determined

Issue Date:29-Jan-2014Revision Date:04-Feb-2014Revision Note:New format

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**