SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 - Product Identifiers
Catalog Name: ICP-MS-IS-Y-1
Description: ICP-MS Internal Standard - Yttrium

1.2 - Relevant Identified Uses of the Substance or Mixture
Laboratory Chemical Reference Material

1.3 - Supplier Details
Company: AccuStandard, Inc.
125 Market St.
New Haven, CT 06513 USA
Telephone Number: 203-786-5290
Fax: 203-786-5287
Email: edocs@accustandard.com

1.4 - Emergency Telephone Number
Emergency Phone #: CHEMTREC
1-800-424-9300 (USA)
1-703-527-3887 (International)
24 hours / 7 days a week

SECTION 2 - HAZARDS IDENTIFICATION

2.1 - GHS Label Elements

Signal Word: Danger

Hazard Codes:
H302 - Harmful if swallowed. (Acute toxicity, oral, category 4)
H318 - Causes serious eye damage. (Eye damage/irritation, category 1)
H371 - May cause lung damage. (Specific target organ toxicity - single exposure, inhalation) Category 2

Precautionary Codes:
P202 - This product should only be used by persons trained in the safe handling of hazardous chemicals.
P262 - Do not get in eyes, on skin or clothing.
P264 - Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.
P280 - Protective gloves must be worn to prevent skin contact.
SECTION 2 - HAZARDS IDENTIFICATION - continued

2.1 - GHS Label Elements - continued

P284 - Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering and/or administrative controls should be implemented to reduce exposure.

P331 - Ingestion: Do NOT induce vomiting. Call a physician or poison control center immediately. Give victim a glass of water a little at a time. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, lower head below waist to prevent fluid from entering the lungs.

P338 - Eye contact: Immediately flush with plenty of water. After initial flushing, remove and contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

P340 - Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

P352 - Skin contact: Wash thoroughly with soap and water. Get medical attention if irritation develops or persists.

P404 - Store in a tightly closed container.

2.2 - Other Hazards

2.2.1 - Symptom of Exposure Health/Environment

Corrosive.

May cause lung damage. (Specific target organ toxicity - single exposure, inhalation) Category 2

Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue.

2.2.2 - Potential Health Effects

May be harmful if absorbed through the skin. (Acute toxicity, dermal, category 5)

Irritating to mucous membrane and upper respiratory system. (Specific target organ toxicity, single exposure; Respiratory tract irritation, category 3)

May be harmful if inhaled. (Acute toxicity, inhalation, category 5)

Harmful if swallowed. (Acute toxicity, oral, category 4)

Causes serious eye damage. (Eye damage/irritation, category 1)

2.2.3 - Routes of Entry

Inhalation, ingestion or skin contact.

2.2.4 - Carcinogenicity

This product is or contains a component that is not listed (ACGIH, IARC, NTP, OSHA) as a cancer causing agent.

SECTION 3 - COMPOSITION / ANALYTES DATA

Description: ICP-MS Internal Standard - Yttrium

Synonyms: N/A

Molecular Weight: N/A

Molecular Formula: N/A

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<th>CAS Number</th>
<th>% Concentration</th>
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</table>
SECTION 4 - FIRST AID MEASURES

4.1 - First Aid Procedures - General
Get medical assistance for all cases of overexposure.

4.2 - Eye Contact
Eye contact: Immediately flush with plenty of water. After initial flushing, remove and contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. (P338)

4.3 - Skin Contact
Skin contact: Wash thoroughly with soap and water. Get medical attention if irritation develops or persists. (P352)

4.4 - Inhalation
Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. (P340)

4.5 - Ingestion
Ingestion: Do NOT induce vomiting. Call a physician or poison control center immediately. Give victim a glass of water a little at a time. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, lower head below waist to prevent fluid from entering the lungs. (P331)

SECTION 5 - FIRE FIGHTING MEASURES

5.1 - Flammable Properties
During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

5.2 - Extinguishing Media
Use any extinguishing media suitable for adjacent material.

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

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 - Spill Response
Wear a self-contained breathing apparatus and appropriate Personal protection. Prevent contact with skin or eyes. Ventilate area. Stop leak if you can do so without risk. Absorb on sand or vermiculite, take up and containerize for proper disposal. Flush spill area with water. Comply with Federal, State, and local regulations.

SECTION 7 - HANDLING AND STORAGE

Store in a tightly closed container. (P404)
Store at controlled room temperature.
Avoid breathing vapors or mists.
Use with adequate ventilation. (P271)
Do not get in eyes, on skin or clothing. (P262)
Avoid prolonged or repeated exposure.
This product should only by used by persons trained in the safe handling of hazardous chemicals. (P202)
SECTION 8 - EXPOSURE CONTROLS

8.1 - Engineering Controls/PPE
Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available. (P264)

8.2 - General Hygiene Considerations
Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering and/or administrative controls should be implemented to reduce exposure.
Material should be handled or transferred in an approved fume hood or with adequate ventilation.
Protective gloves must be worn to prevent skin contact. (P280)
(Chloroprene or equivalent)
Safety glasses with side shields must be worn at all times.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES
Appearance: Clear liquid
Odor: N/A
Odor Threshold: N/A
pH: <2.0
Melting Point: N/A
Boiling Point: 83 °C (181 °F)
Flash Point: Noncombustible
Evaporation Rate (Butyl Acetate=1): N/A
Flammability Class: N/A
Lower Flammability Level: N/A
Upper Flammability Level: N/A
Vapor Pressure: 18.51 mmHg
Vapor Density (Air = 1): 0.62 g/L
Specific Gravity: 1.02 g/cm3
Solubility in Water: Soluble
Partition Coefficient: N/A
Autoignition Temperature: N/A
Decomposition Temperature: N/A
Viscosity: N/A
VOC Content: N/A
Percent Volatile: N/A

SECTION 10 - STABILITY AND REACTIVITY
Stability: Stable
Materials to Avoid: Oxidizers
Hazardous Decomposition: Nitrogen oxides
Hazardous Polymerization: Will not occur
SECTION 10 - STABILITY AND REACTIVITY - continued
Condition to Avoid: Extreme heat

SECTION 11 - TOXICOLOGICAL INFORMATION

Human Health Toxicity
See section 2 for specific toxicological information for the ingredients of this product.
No specific human health toxicity information is available for this product.
No other information related to the toxicological properties of this product is available at this time.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Toxicity
By complying with sections 6 and 7 there should be no release to the environment.
No specific environmental toxicity information is available for this product.
No other information related to the ecological properties of this product is available at this time.

SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle or incinerate at any EPA approved facility or dispose in compliance with Federal, State and local regulations. Empty containers must be triple-rinsed prior to disposal.

SECTION 14 - TRANSPORT INFORMATION

Transportation Information (DOT/IATA)
UN Number: UN3264
UN Shipping Class: 8
UN Packing Group: III
UN Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid)
Poison by Inhalation: No
Marine Pollutant:

SECTION 15 - REGULATORY INFORMATION

All components are listed on the TSCA Inventory.

For laboratory, research and development use only. Not for manufacturing or commercial purposes.

In addition to federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

SECTION 16 - OTHER INFORMATION

This document has been designed to meet the requirements of OSHA, ANSI, GHS and CHIPs regulations.

The statements contained herein are offered for informational purposes only and are based on technical data that we believe to be accurate. The manufacturer will not assume any liability for the accuracy and completeness of this information. Final determination of the suitability of the material is the responsibility of the user. Although certain hazards are described herein, the user should not presume that these are the only hazards that exist. Since conditions and manner of use are outside of the manufacturer's control, we make

NO WARRANTY OF MERCHANTABILITY, EXPRESSED OR IMPLIED, AND ASSUME NO LIABILITY RESULTING FROM ITS USE.
SECTION 16 - OTHER INFORMATION - continued

Legend:  N/A = Not Available   ND = Not Determined   NR = Not Regulated

Alteration of any information contained herein without written permission from the manufacturer is strictly prohibited.

HMIS/NFPA HAZARD INDEX

0 - Minimal
1 - Slight
2 - Moderate
3 - Serious
4 - Severe

* - Additional Hazard

GHS HAZARD INDEX

Category 1 - Most Severe
Category 5 - Least Severe

**** End of Document ****