1 Identification

- Product identifier
- Product Name: Indium Internal Standard Stock Solution, Part Number 8500-6946
- Part Number: 8500-6946
- Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.
- Application of the substance / the mixture
  Analytical Chemistry
  A 100mL Solution
- Details of the supplier of the safety data sheet
  Manufacturer/Supplier: Agilent Technologies Manufacturing GmbH & Co. KG
  Hewlett-Packard-Str. 8
  76337 Waldbronn
  Germany
  Information department: product safety department
  Emergency telephone number: CHEMTREC®: 1-800-815-308

2 Hazard(s) identification

- Classification of the substance or mixture
  Skin Irrit. 2 H315 Causes skin irritation.
  Eye Irrit. 2 H319 Causes serious eye irritation.

- Label elements
  GHS label elements: The product is classified and labeled according to the Globally Harmonized System (GHS).
  Hazard pictograms: GHS07

- Signal word: Warning
- Hazard statements
  Causes skin irritation.
  Causes serious eye irritation.
- Precautionary statements
  If medical advice is needed, have product container or label at hand.
  Keep out of reach of children.
  Read label before use.
  Wear protective gloves/protective clothing/eye protection/face protection.
  Wash thoroughly after handling.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Specific treatment (see on this label).
  If skin irritation occurs: Get medical advice/attention.
  If eye irritation persists: Get medical advice/attention.
- Other hazards
  Results of PBT and vPvB assessment
  PBT: Not applicable.
  vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.
4 First-aid measures

- **Description of first aid measures**
- After inhalation: In case of unconsciousness place patient stably in side position for transportaition.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- **Information for Doctor:**
- Most important symptoms and effects, both acute and delayed: No further relevant information available.
- Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture: No further relevant information available.
- **Advice for firefighters**
- Protective equipment: No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Ensure adequate ventilation.
- Reference to other sections
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- Precautions for safe handling:
  - Ensure good ventilation/exhaustion at the workplace.
  - Prevent formation of aerosols.
- Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- **Storage:**
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: Keep receptacle tightly sealed.
  - Specific end use(s): No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
Product Name: Indium Internal Standard Stock Solution, Part Number 8500-6946

- Control parameters
  - Components with limit values that require monitoring at the workplace:
    - 7697-37-2 nitric acid
      - PEL (Malaysia) Long-term value: 5.2 mg/m³, 2 ppm
  - Additional information: The lists that were valid during the creation were used as basis.

- Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      - Keep away from foodstuffs, beverages and feed.
      - Immediately remove all soiled and contaminated clothing.
      - Wash hands before breaks and at the end of work.
      - Avoid contact with the eyes and skin.
    - Breathing equipment:
      - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
    - Protection of hands:
      - Protective gloves
        - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
        - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
        - Selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
        - Penetration time of glove material
          - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
      - Eye protection:
        - Tightly sealed goggles

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Liquid
      - Color: Colorless
      - Odor: Odorless
      - Odour Threshold: Not applicable.
    - pH-value: <1
  - Change in condition
    - Melting point/Melting range: 0 °C (32°F)
    - Boiling point/Boiling range: 100 °C (212°F)
  - Flash point: Not applicable.
  - Flammability (solid, gaseous): Not applicable.
  - Ignition temperature:
    - Decomposition temperature: Not applicable.
### 4.2.4

- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - Lower: Not applicable.
  - Upper: Not applicable.
- **Vapor pressure at 20 °C:** 23 hPa
- **Density** 1.0 g/mL @ 20 °C
- **Relative density** Not applicable.
- **Vapour density** Not applicable.
- **Evaporation rate** Not applicable.
- **Solubility in / Miscibility with Water:** Miscible
- **Partition coefficient (n-octanol/water):** Not applicable.
- **Viscosity:**
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- **Solvent content:**
  - Organic solvents: 0.0 %
  - Water: 98.0 %
- **Other information** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
  - Primary irritant effect:
    - on the skin: Irritant to skin and mucous membranes.
    - on the eye: Irritating effect.
  - Sensitization: No sensitizing effects known.
- **Additional toxicological information:**
  The product shows the following dangers according to internally approved calculation methods for preparations:
  - Irritant

- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)** None of the ingredients is listed.
  - **NTP (National Toxicology Program)** None of the ingredients is listed.
  - **OSHA-Ca (Occupational Safety & Health Administration)** None of the ingredients is listed.
12 Ecological information

- **Toxicity**
- **Aquatic toxicity**: No further relevant information available.
- **Persistence and degradability**: No further relevant information available.
- **Behavior in environmental systems**:
- **Bioaccumulative potential**: No further relevant information available.
- **Mobility in soil**: No further relevant information available.
- **Additional ecological information**:
  - **General notes**: Water hazard class 1 (Self-assessment): slightly hazardous for water
  - **Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.**
- **Results of PBT and vPvB assessment**
  - **PBT**: Not applicable.
  - **vPvB**: Not applicable.
- **Other adverse effects**: No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings**:
  - **Recommendation**: Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
  - [DOT, ADR, IMDG, IATA] UN3264
- **UN proper shipping name**
  - **DOT** Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid solution)
  - **ADR** 3264 Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid solution)
  - **IMDG, IATA** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION)
- **Transport hazard class(es)**
  - **DOT**
    - **Class** 8 Corrosive substances
    - **Label** 8
  - **ADR, IMDG, IATA**
    - **Class** 8 Corrosive substances
    - **Label** 8
  - **Packing group**
    - **DOT, ADR, IMDG, IATA** III
  - **Environmental hazards**
    - **Marine pollutant**: No
  - **Special precautions for user** Warning: Corrosive substances
Product Name: Indium Internal Standard Stock Solution, Part Number 8500-6946

(Contd. of page 5)

- Danger code (Kemler): 80
- EMS Number: F-A,S-B
- Segregation groups: Acids
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.
- Transport/Additional information:
  - ADR
  - Excepted quantities (EQ): Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml
  - IMDG
  - Limited quantities (LQ): 5L
  - Excepted quantities (EQ): Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml
- UN "Model Regulation": UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID SOLUTION), 8, III, (E)

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Sara
    - Section 355 (extremely hazardous substances):
      7697-37-2 nitric acid
    - Section 313 (Specific toxic chemical listings):
      7697-37-2 nitric acid
  - TSCA (Toxic Substances Control Act):
    All ingredients are listed.
  - Proposition 65
    - Chemicals known to cause cancer:
      None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for females:
      None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for males:
      None of the ingredients is listed.
    - Chemicals known to cause developmental toxicity:
      None of the ingredients is listed.
  - Carcinogenic categories
    - EPA (Environmental Protection Agency)
      None of the ingredients is listed.
    - TLV (Threshold Limit Value established by ACGIH)
      None of the ingredients is listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.
  - GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms

GHS07

- Signal word Warning
- Hazard statements
  Causes skin irritation.
  Causes serious eye irritation.
- Precautionary statements
  If medical advice is needed, have product container or label at hand.
  Keep out of reach of children.
  Read label before use.
  Wear protective gloves/protective clothing/eye protection/face protection.
  Wash thoroughly after handling.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  Specific treatment (see on this label).
  If skin irritation occurs: Get medical advice/attention.
  If eye irritation persists: Get medical advice/attention.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Disclaimer: The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

- Department issuing SDS: product safety department
- Contact:
  Agilent Technologies Manufacturing GmbH & Co. KG
  0800 603 1000
  pdl-msds_author@agilent.com
- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  Ox. Liq. 3: Oxidising Liquids, Hazard Category 3
  Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
  Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
  Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2