SECTION 1: Product and company identification

1.1. Product identifier
Name: Tracer R
CAS No: Trade Secret
Formula: Trade Secret

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: Industrial use. Use as directed.

1.3. Details of the supplier of the safety data sheet
Praxair, Inc.
39 Old Ridgebury Road
Danbury, CT 06810-5113 - USA
T 1-800-772-9247 (1-800-PRAXAIR) · F 1-716-879-2146
www.praxair.com

1.4. Emergency telephone number
Emergency number: Onsite Emergency: 1-800-645-4633
CHEMTREC, 24hr/day 7days/week — Within USA: 1-800-424-9300, Outside USA: 001-703-527-3887 (collect calls accepted, Contract 17729)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (GHS-US)

2.2. Label elements
GHS-US labeling
No labeling applicable

2.3. Other hazards
Other hazards not contributing to the classification: MAY BE HARMFUL IF SWALLOWED
Liquid or vapor may irritate skin, eyes, and respiratory tract.
Toxic and corrosive vapors will form if exposed to flames or glowing hot surfaces.

2.4. Unknown acute toxicity (GHS US)
No data available

SECTION 3: Composition/information on ingredients

3.1. Substance
<table>
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<tr>
<th>Name</th>
<th>Product identifier</th>
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<tbody>
<tr>
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<td>(CAS No) Trade Secret</td>
<td>100</td>
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</tbody>
</table>

3.2. Mixture
Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures after inhalation: Immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, qualified personnel may give oxygen. Call a physician.
First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact: Rinse eyes with water as a precaution. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Contact an ophthalmologist immediately.

First-aid measures after ingestion: Do NOT induce vomiting. Get immediate medical attention. Give water to drink if victim completely conscious/alert. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries: Liquid or vapor may irritate the respiratory tract, skin and eyes. Swallowing liquid may cause discomfort and distention.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media: Does not burn. Use extinguishing media appropriate for surrounding fire.

5.2. Special hazards arising from the substance or mixture
Fire hazard: Not flammable.

5.3. Advice for firefighters
Protection during firefighting: Toxic and corrosive vapors will form if exposed to flames or glowing hot surfaces. Evacuate all personnel from the danger area. Use self-contained breathing apparatus (SCBA) and protective clothing. Immediately cool containers with water from maximum distance. Remove ignition sources if safe to do so. Remove containers from area of fire if safe to do so. On-site fire brigades must comply with OSHA 29 CFR 1910.156 and applicable standards under 29 CFR 1910 Subpart L—Fire Protection.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
General measures: Do not get on skin, in eyes, or on clothing. Use solid absorbent to pick up spilled material. Ventilate area of spill, or move leaking container to a well-ventilated area.

6.1.1. For non-emergency personnel
No additional information available

6.1.2. For emergency responders
No additional information available

6.2. Environmental precautions
Prevent waste from contaminating the surrounding environment. Prevent soil and water pollution. Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements.

6.3. Methods and material for containment and cleaning up
For containment: Use solid absorbent to pick up spilled material. Prevent runoff from contaminating surrounding environment.

6.4. Reference to other sections
No additional information available

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Precautions for safe handling: Do not get in eyes, on skin, or on clothing.

Hygiene measures: Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling.
### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, dry, well-ventilated area. Keep container closed when not in use and when empty.

### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

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<th>ACGIH</th>
<th>Not established</th>
<th>USA OSHA</th>
<th>Not established</th>
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</thead>
</table>

#### 8.2. Exposure controls

- **Appropriate engineering controls:** Use a local exhaust system with sufficient flow velocity to maintain an adequate supply of air in the worker's breathing zone. Mechanical (general): General exhaust ventilation may be acceptable if it can maintain an adequate supply of air.

- **Eye protection:** Chemical goggles or safety glasses. Select eye protection in accordance with OSHA 29 CFR 1910.133.

- **Skin and body protection:** Wear appropriate chemical gloves (e.g. neoprene, nitrile, etc.) when working with this product. Wear protective clothing where needed. Select per OSHA 29 CFR 1910.132, 1910.136, and 1910.138.

- **Respiratory protection:** When workplace conditions warrant respirator use, follow a respiratory protection program that meets OSHA 29 CFR 1910.134, ANSI Z88.2, or MSHA 30 CFR 72.710 (where applicable). Use an air-supplied or air-purifying cartridge if the action level is exceeded. Ensure that the respirator has the appropriate protection factor for the exposure level. If cartridge type respirators are used, the cartridge must be appropriate for the chemical exposure (e.g., an organic vapor cartridge). For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus (SCBA).

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

- **Physical state:** Liquid
- **Color:** Colorless
- **Odor:** Odorless.
- **Odor threshold:** No data available
- **pH:** No data available
- **Relative evaporation rate (butyl acetate=1):** No data available
- **Melting point:** No data available
- **Freezing point:** < 0 °C
- **Boiling point:** > 38 °C < 65°C
- **Flash point:** Not applicable.
- **Auto-ignition temperature:** No data available
- **Decomposition temperature:** No data available
- **Flammability (solid, gas):** Nonflammable
- **Vapor pressure:** > 400 mbar (at 25°C (77°F))
- **Relative vapor density at 20 °C:** > 2 (Air = 1) 77°F (25°C) and 1 atm [Calculated]
- **Relative density:** No data available
- **Solubility:** Water:
- **Log Pow:** No data available
- **Log Kow:** No data available
- **Viscosity, kinematic:** No data available
- **Viscosity, dynamic:** No data available
Explosive properties: No data available
Oxidizing properties: No data available
Explosion limits: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
May occur.

10.4. Conditions to avoid
Fire. Hot surfaces. Avoid temperature above 752°F (400°C).

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Not classified

<table>
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<tbody>
<tr>
<td>LD50 oral rat</td>
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<tr>
<td>LD50 dermal rabbit</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
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</tbody>
</table>

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified

SECTION 12: Ecological information

12.1. Toxicity
No additional information available

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

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12.5. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations: Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements.
Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT
Not regulated for transport

Additional information
Other information: No supplementary information available.

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations
Tracer R (Trade Secret)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA
Tracer R (Trade Secret)
Listed on the Canadian NDSL (Non-Domestic Substances List)

EU-Regulations
Tracer R (Trade Secret)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

15.2.2. National regulations
Tracer R (Trade Secret)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)

15.3. US State regulations
Tracer R(Trade Secret)

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Status</th>
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<tbody>
<tr>
<td>U.S. - California - Proposition 65 - Carcinogens List</td>
<td>No</td>
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<tr>
<td>U.S. - California - Proposition 65 - Developmental Toxicity</td>
<td>No</td>
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<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</td>
<td>No</td>
</tr>
<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</td>
<td>No</td>
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</table>
SECTION 16: Other information

Revision date: 3/20/2015 12:00:00 AM
Other information

When you mix two or more chemicals, you can create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an industrial hygienist or other trained person when you evaluate the end product. Before using any plastics, confirm their compatibility with this product.

Praxair asks users of this product to study this SDS and become aware of the product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents, and contractors of the information in this SDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.

The opinions expressed herein are those of qualified experts within Praxair, Inc. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and the conditions of use are not within the control of Praxair, Inc., it is the user's obligation to determine the conditions of safe use of the product.

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NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard: 0 - Materials that will not burn.
NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating
Health: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability: 0 Minimal Hazard
Physical: 0 Minimal Hazard

SDS US (GHS HazCom 2012) - Praxair

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.