1 Identification

- **Product identifier**
  - **Trade name:** Cargille Immersion Liquid Code S50 Approximate nD=1.402
  - **Product code:** 19176, 19252, 19253, 19253-BXS
  - **CAS Number:** Trade Secret

- **Recommended use and restriction on use**
  - **Recommended use:**
    This SDS or an accurate copy is an integral part of using Immersion Liquid Code S50. Only use Immersion Liquid Code S50 if the SDS is present. Conditions prevailing in this document, unless otherwise noted: Temperature = 23°C (73°F), Pressure = 1013.25 hPa (760 mm Hg)

For Professional and R&D use only. Conditions of Intended Use: (ABBRE. C.I.U.) As an Optical Immersion Liquid at normal room pressure 101.32 kPa (760 mm Hg), temperature -7°C to 65°C (20°F to 150°F) in a non misted / non airborne state in a room having normal air changes (2) / HR., in a trained and supervised laboratory / industrial setting using standard Good Laboratory/Good Manufacturing procedures.

Note: Product normally sold in 1 oz (30cc), 4 oz (120cc), 16 oz (480cc), and gallon (3.84L) quantities. Used in single drop to a few cubic centimeters per application. See requisitioner for specific quantities involved.

- **Restrictions on use:** Contact manufacturer/supplier

- **Details of the supplier of the Safety Data Sheet**
  - **Manufacturer/Supplier:**
    Cargille Laboratories
    55 Commerce Road
    Cedar Grove, NJ 07009-1289 USA
    973-239-6633
    www.cargille.com

  - **Emergency telephone number:**
    ChemTel Inc.
    (800)255-3924, +1 (813)248-0585

2 Hazard(s) identification

- **Classification of the substance or mixture**
  - The substance is not classified as hazardous according to the Globally Harmonized System (GHS).

- **Label elements**
  - **GHS label elements** This product does not have a classification according to the GHS regulation.
  - **Hazard pictograms:** Not regulated.
  - **Signal word:** Not regulated.
  - **Hazard statements:** Not regulated.
  - **Precautionary statements:** Not regulated.

- **Other hazards** There are no other hazards not otherwise classified that have been identified.

(Cont'd. on page 2)
3 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description
  Trade Secret
- Additional information:
  For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

4 First-aid measures

- Description of first aid measures
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact:
    Immediately wash with water and soap and rinse thoroughly.
    If skin irritation is experienced, consult a doctor.
  - After eye contact:
    Protect unharmed eye.
    Remove contact lenses if worn.
    Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - After swallowing:
    Rinse out mouth and then drink plenty of water.
    Do not induce vomiting; immediately call for medical help.
- Most important symptoms and effects, both acute and delayed:
  May cause gastro-intestinal irritation if ingested.
- Indication of any immediate medical attention and special treatment needed:
  No relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents:
  Alcohol resistant foam
  Fire-extinguishing powder
  Carbon dioxide
  Gaseous extinguishing agents
  For safety reasons unsuitable extinguishing agents: Water stream.
- Special hazards arising from the substance or mixture
  Formation of toxic gases is possible during heating or in case of fire.
- Advice for firefighters
- Protective equipment:
  Wear self-contained respiratory protective device.
  Wear fully protective suit.
6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  Ensure adequate ventilation.
  For large spills, wear protective clothing.
- **Environmental precautions**
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Methods and material for containment and cleaning up**
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Send for recovery or disposal in suitable receptacles.
- **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:** Avoid splashes or spray in enclosed areas.
  - **Information about protection against explosions and fires:**
    Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
  - **Storage**
  - **Requirements to be met by storerooms and receptacles:**
    Avoid storage near extreme heat, ignition sources or open flame.
  - **Information about storage in one common storage facility:**
    Store away from foodstuffs.
    Store away from oxidizing agents.
- **Further information about storage conditions:**
  - Storage Temperatures : 39 - 104 °F / 4 - 40 °C.
  - Keep containers tightly sealed.
- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**
  - Components with limit values that require monitoring at the workplace: Not required.
- **Exposure controls**
  - **Engineering measures** Provide adequate ventilation.
  - **Personal protective equipment:**
  - **General protective and hygienic measures:**
    The usual precautionary measures for handling chemicals should be followed.
    Keep away from foodstuffs, beverages and feed.
    Wash hands before breaks and at the end of work.
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- Engineering controls: No relevant information available.  
- Breathing equipment: 
  Not required under normal conditions of use.  
  For large spills, respiratory protection may be advisable. 
- Protection of hands:  
  Protective gloves 
  Gloves are advised for repeated or prolonged contact.  
  Wear protective gloves to handle contents of damaged or leaking units. 
  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. 
- Eye protection:  
  Safety glasses 
  Follow relevant national guidelines concerning the use of protective eyewear. 
- Body protection: 
  Not required under normal conditions of use. 
  Protection may be required for spills. 
- Limitation and supervision of exposure into the environment 
  Avoid release to the environment. 
- Risk management measures No special requirements.

9 Physical and chemical properties

- Information on basic physical and chemical properties
  - Appearance:  
    Form: Liquid  
    Color: Colorless  
    Odor: Nearly odorless  
    Odor threshold: Not determined. 
  - pH-value: Not determined.  
  - Melting point/Melting range: -70 °C (-94 °F)  
  - Boiling point/Boiling range: Not determined.  
  - Flash point: >285 °C (>545 °F)  
  - Flammability (solid, gaseous): Not applicable.  
  - Auto-ignition temperature: Not determined.  
  - Decomposition temperature: Not determined.  
  - Danger of explosion: Product does not present an explosion hazard.  
  - Explosion limits 
    Lower: Not determined.  

(Cont'd. of page 5)
Trade name: Cargille Immersion Liquid Code S50 Approximate nD=1.402

- Upper: Not determined.
- Vapor pressure: Not determined.
- Density:
  - Relative density: 0.98 (water = 1)
  - Vapor density: >1 (Air = 1)
  - Evaporation rate: <1 (water = 1)
- Solubility in / Miscibility with Water: <0.1 %
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- Other information No relevant information available.

10 Stability and reactivity

- Reactivity: No relevant information available.
- Chemical stability:
- Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.
- Possibility of hazardous reactions
  Reacts with strong oxidizing agents.
  Reacts with strong alkali.
- Conditions to avoid: No relevant information available.
- Incompatible materials: Oxidizers
- Hazardous decomposition products: Carbon monoxide and carbon dioxide
  Silicon Oxides.

11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
  - LD/LC50 values that are relevant for classification: None.
  - Primary irritant effect:
  - On the skin: Based on available data, the classification criteria are not met.
  - On the eye: Based on available data, the classification criteria are not met.
  - Sensitization: No sensitizing effects known.
- IARC (International Agency for Research on Cancer):
  Substance is not listed.
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- **NTP (National Toxicology Program):**
  Substance is not listed.

- **OSHA-Ca (Occupational Safety & Health Administration):**
  Substance is not listed.

  - **Probable route(s) of exposure:**
    - Ingestion.
    - Inhalation.
    - Eye contact.
    - Skin contact.
  - **Acute effects (acute toxicity, irritation and corrosivity)**: From product as supplied: None.
  - **Repeated dose toxicity**: From product as supplied: None.
  - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
    - **Germ cell mutagenicity**: Based on available data, the classification criteria are not met.
    - **Carcinogenicity**: Based on available data, the classification criteria are not met.
    - **Reproductive toxicity**: Based on available data, the classification criteria are not met.
    - **STOT-single exposure**: Based on available data, the classification criteria are not met.
    - **STOT-repeated exposure**: Based on available data, the classification criteria are not met.
  - **Aspiration hazard**: Based on available data, the classification criteria are not met.

12 **Ecological information**

- **Toxicity**
  - **Aquatic toxicity** No relevant information available.
  - **Persistence and degradability** No relevant information available.
  - **Bioaccumulative potential**: No relevant information available.
  - **Mobility in soil**: No relevant information available.
  - **Additional ecological information**
  - **General notes:**
    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 relevant information available.

13 **Disposal considerations**

- **Waste treatment methods**
  - **Recommendation:**
    The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
### Trade name: Cargille Immersion Liquid Code S50 Approximate nD=1.402

- Uncleaned packagings
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>UN-Number</strong></td>
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<tr>
<td>DOT, ADR, IMDG, IATA</td>
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<tr>
<td><strong>UN proper shipping name</strong></td>
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<td><strong>Transport hazard class(es)</strong></td>
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<tr>
<td>Class</td>
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<tr>
<td><strong>Packing group</strong></td>
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<tr>
<td>DOT, ADR, IMDG, IATA</td>
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<tr>
<td><strong>Environmental hazards</strong></td>
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<tr>
<td>Marine pollutant:</td>
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<tr>
<td><strong>Special precautions for user</strong></td>
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<td></td>
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<tr>
<td><strong>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</strong></td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture:
  - United States (USA)
  - SARA
  - Section 302 (extremely hazardous substances):
    - Substance is not listed.
  - Section 355 (extremely hazardous substances):
    - Substance is not listed.
  - Section 313 (Specific toxic chemical listings):
    - Substance is not listed.
  - **TSCA (Toxic Substances Control Act)**
    - Substance is listed.
  - **Proposition 65 (California)**
    - **Chemicals known to cause cancer:**
      - Substance is not listed.
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- Chemicals known to cause reproductive toxicity for females:
  Substance is not listed.
- Chemicals known to cause reproductive toxicity for males:
  Substance is not listed.
- Chemicals known to cause developmental toxicity:
  Substance is not listed.
- Carcinogenic categories
  - EPA (Environmental Protection Agency):
    Substance is not listed.
  - IARC (International Agency for Research on Cancer):
    Substance is not listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health):
    Substance is not listed.
  - Canadian Domestic Substances List (DSL):
    Substance is listed.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Date of preparation / last revision 01/06/2017 / -
- Abbreviations and acronyms:
  ADR: 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
  GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  DNEL: Derived No-Effect Level (REACH)
  PNEC: Predicted No-Effect Concentration (REACH)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  SVHC: Substances of Very High Concern
  vPvB: very Persistent and very Bioaccumulative
  LDLo: Lowest Lethal Dose Observed

(Cont'd. on page 9)
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Sources (Cont'd. of page 8)
Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Safety Data Sheets, Individual Manufacturers
SDS Prepared by:
ChemTel Inc.
1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtelinc.com