1. Identification of the substance & the company

Chemical name: Tetrabromobisphenol A diglycidyl ether
Chemical formula: C21H20Br4O4
Chemical family: Brominated epoxy resin
Molecular weight: 700-760
Type of product and use: A flame retardant additive for thermoplastic and thermoset polymers
Supplier: ICL-IP America Inc.
622 Emerson Road - Suite 500
St Louis, Missouri 63141, USA
Tel: (314) 983-7884 Fax: (314) 983-7607
Emergency Telephone: Chemtrec (800) 424-9300

2. Hazards identification

Emergency overview: Off-white crystalline powder which is not hazardous

3. Composition / information on ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrabromobisphenol A diglycidyl ether</td>
<td>3072-84-2</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

4. First-aid measures

Eye contact: Holding the eyelids apart, flush eyes promptly with copious flowing water for at least 20 minutes. Get medical attention immediately.
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Skin contact     Remove contaminated clothing. Wash skin thoroughly with mild soap and plenty of water for at least 15 minutes. Wash clothing before re-use. Get medical attention if irritation occurs and persists.

Inhalation       In case of dust inhalation or breathing fumes released from heated material, remove person to fresh air. Keep him quiet and warm. Apply artificial respiration if necessary and get medical attention immediately.

Ingestion        If swallowed, wash mouth thoroughly with plenty of water. Get medical attention immediately.

5.  Fire - fighting measures

Suitable extinguishing media Material is not combustible. Use extinguishing media appropriate to surrounding fire conditions.

Fire fighting procedure Cool containers with water spray. In closed stores, provide fire-fighters with self-contained breathing apparatus in positive pressure mode.

Unusual fire and explosion hazards When heated to decomposition, may release poisonous fumes of HBr.

6.  Accidental release measures

Personal precautions Wear respirator, chemical safety goggles, rubber gloves and boots

Methods for cleaning up Sweep up, place in a bag and hold for waste disposal or possible re-use. Ventilate area and wash spill site after material pickup is complete.

7.  Handling and storage

Handling         Avoid bodily contact. Keep containers tightly closed.
Storage
Store in a dry, cool, well-ventilated area. Avoid from incompatible materials (see "materials to avoid"). Do not store under direct sunlight, even for short periods.

8. Exposure controls / personal protection

Exposure Limits:

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH-TLV Data</th>
<th>OSHA (PEL) Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrabromobisphenol A diglycidyl ether 3072-84-2</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

Ventilation requirements
Provide adequate ventilation.

Personal protective equipment:
- Respiratory protection: Approved respirator
- Hand protection: Protective gloves
- Eye protection: Chemical safety goggles
- Skin and body protection: Body covering clothes and boots

Hygiene measures
Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Safety shower and eye bath should be provided.

9. Physical and chemical properties

Appearance: White to off-white crystalline powder, odourless
Boiling point/range: Not applicable (decomposes)
Softening point/range: 112°C
Flash point: >250°C (ASTM D93 PMOC)
Flammable/Explosion limits: Not flammable
Auto-ignition temperature: Not self-ignitable
Vapour pressure: Not applicable under standard conditions
Evaporation rate (ether=1): Not applicable under standard conditions
Vapor density: Not applicable under standard conditions
Viscosity: Not applicable
Solubility:
- Solubility in water: Insoluble
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<tr>
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</table>

### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility in other solvents</td>
<td>Soluble in DMF, methyl cellulose, toluene, dimethylacetamide</td>
</tr>
<tr>
<td></td>
<td>Toluene: 123.5 g/100g at 25°C</td>
</tr>
<tr>
<td></td>
<td>Ethyl benzene: 45.7 g/100g at 25°C</td>
</tr>
<tr>
<td>Bulk density</td>
<td>1 g/cc</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.9</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>326°C</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not available</td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

- **Stability**: Stable under normal conditions
- **Materials to avoid**: Acid anhydride, strong mineral acid, strong bases and oxidizing agents.
- **Conditions to avoid**: Heating above decomposition temperature
- **Hazardous decomposition products**: Hydrogen bromide
- **Hazardous polymerization**: Will not occur

### 11. Toxicological information

- **Acute toxicity**:
  - Rat oral LD50: >2000 mg/kg
  - Eye irritation (rabbit): Not irritant
  - Dermal irritation (rabbit): Not irritant
- **Skin corrosion/irritation**: Not irritant
- **Dermal sensitization**: Not a sensitizer
- **Chronic toxicity**: No information available
- **Mutagenicity**: Mutagenic in the Salmonella typhimurium reverse mutation assay
- **Carcinogenicity**: Not classified by IARC
- **Reproductive toxicity**: Not determined
- **Not included in NTP 12th Report on Carcinogens**
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</table>

## 12. Ecological information

<table>
<thead>
<tr>
<th>Information on ecological effects</th>
<th>No information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic toxicity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

## 13. Disposal considerations

Waste disposal: Observe all federal, state and local environmental regulations when disposing of this material.

## 14. Transportation information

- **DOT**: Not regulated
- **IMO**: Not regulated
- **ICAO/IATA**: Not regulated

## 15. Regulatory information

- **USA**: Reported in the EPA TSCA Inventory.
- **Canada**: Listed in NDSL
- **EU**: Reported in EINECS
- **Japan**: ENCS no. (4)-211  
  ISHL no. (4)-211
- **China inventory**: Listed in IECSC
- **Korea**: Listed in ECL (KE-23980)
# 16. Other information

Product is not subject to classification according to GHS. No label elements required.

This data sheet contains changes from the previous version in section(s)
2, 3 (not ANSI), 4, 7, 10, 11

## Health, Safety & Environment Policy

We will strive to ensure that our operations and products meet the needs of the present global community without compromising the ability of future generations to meet their needs.

We accept that the success of our business is dependent on the supply of products and services that will benefit society whilst ensuring human safety and protection of the environment and natural resources.

Within the framework of our commitment to the Responsible Care program, we will provide a healthy and safe work environment for employees and will responsibly manage our products at all stages of their life cycle in order to protect human health and the environment whilst maintaining high production standards of operation.

TO MEET THIS COMMITMENT WE WILL:

- Comply with or exceed applicable national and international regulatory requirements and other requirements to which we subscribe.
- Communicate openly and actively encourage dialogue with employees, customers and community concerning our products and operations.
- Implement documented management systems consistent with and for promotion of the Responsible Care ethics.
- Develop and supply products that can be manufactured, transported, used and disposed of safely whilst best meeting the needs of our customers.
- Regularly assess, continually improve and responsibly manage health, safety and environmental risks associated with products and processes throughout their life-cycles.
- Share knowledge and expertise with others and seek to learn from and incorporate improved practices into our own operations.
- Educate and train employees, contractors and customers to improve their HSE performance.
- Communicate up-to-date information to enable our workers, customers and other interested parties to handle our products in a safe and environmentally responsible manner.
- Endeavor to work with customers, suppliers, distributors and contractors to foster the safe use, transport and disposal of our chemicals.
- Support Product Stewardship programs in cooperation with customers, distributors and transporters.
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*In an event of discrepancy between the contents of this MSDS and the English version of it, the English version shall prevail.*

**Prepared by**

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 telefax: +972-8-6297832  
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End of safety data sheet