SAFETY DATA SHEET

1. Identification

Product identifier  Insulgel 70CC FRNS Black - Part A

Other means of identification

SKU#  IE406R, IE420R

Recommended use  Not available.

Recommended restrictions  None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name  ITW Performance Polymers
Address  130 Commerce Drive
Montgomeryville, PA 18936
United States

Telephone  Customer Service 215-855-8450
Website  www.itwperformancepolymers.com
E-mail  Not available.
Contact person  EHS Department
Emergency phone number  CHEMTREC 800-424-9300
International  703-527-3887

2. Hazard(s) identification

Physical hazards  Not classified.

Health hazards

Skin corrosion/irritation  Category 2
Serious eye damage/eye irritation  Category 2A
Sensitization, skin  Category 1

Environmental hazards  Hazardous to the aquatic environment, long-term hazard

OSHA defined hazards  Not classified.

Label elements

Signal word  Warning

Hazard statement  Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention  Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.

Response  If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage.

Storage  Store away from incompatible materials.
Disposal  Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)  None known.

Supplemental information  33.86% of the mixture consists of component(s) of unknown acute oral toxicity. 98.04% of the mixture consists of component(s) of unknown acute dermal toxicity. 98.04% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumina Trihydrate</td>
<td>21645-51-2</td>
<td>60 - 100</td>
<td></td>
</tr>
<tr>
<td>Castor Oil</td>
<td>8001-79-4</td>
<td>10 - 30</td>
<td></td>
</tr>
<tr>
<td>Epoxy Resin:--reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)</td>
<td>25068-38-6</td>
<td>10 - 30</td>
<td></td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td>1 - 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation
Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion
Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media
Powder. Carbon dioxide (CO2).

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
Move containers from fire area if you can do so without risk.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions
Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage

Precautions for safe handling  Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities  Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits  The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components | Type | Value | Form
--- | --- | --- | ---
Alumina Trihydrate (CAS 21645-51-2) | TWA | 5 mg/m3 | Respirable fraction.
 | | 15 mg/m3 | Total dust.
 | | 50 mppcf | Total dust.
 | | 15 mppcf | Respirable fraction.

US. ACGIH Threshold Limit Values

Components | Type | Value | Form
--- | --- | --- | ---
Alumina Trihydrate (CAS 21645-51-2) | TWA | 1 mg/m3 | Respirable fraction.

Biological limit values  No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls  Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection  Face shield is recommended. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection  Wear appropriate chemical resistant gloves.

Other  Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection  In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards  Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations  Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance  Liquid. Viscous.

Physical state  Liquid.

Form  Liquid.

Color  Black.

Odor  Slight.

Odor threshold  Not available.

pH  Not available.

Melting point/freezing point  Not available.

Initial boiling point and boiling range  595.4 °F (313 °C) estimated

Flash point  > 201.0 °F (> 93.9 °C)

Evaporation rate  Not available.

Flammability (solid, gas)  Not applicable.
Upper/lower flammability or explosive limits
- Flammability limit - lower (%): Not available.
- Flammability limit - upper (%): Not available.
- Explosive limit - lower (%): Not available.
- Explosive limit - upper (%): Not available.
- Vapor pressure: Not available.
- Vapor density: Not available.
- Relative density: Not available.
- Solubility (water): Not available.
- Partition coefficient (n-octanol/water): Not available.
- Auto-ignition temperature: 840 °F (448.89 °C) estimated
- Decomposition temperature: Not available.
- Viscosity: Not available.
- Other information:
  - Density: 1.69 g/cm³
  - Explosive properties: Not explosive.
  - Flammability class: Combustible IIIB estimated
  - Oxidizing properties: Not oxidizing.
  - Specific gravity: 1.69

10. Stability and reactivity
- Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.
- Chemical stability: Material is stable under normal conditions.
- Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.
- Conditions to avoid: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
- Incompatible materials: Strong oxidizing agents.
- Hazardous decomposition products: No hazardous decomposition products are known.

11. Toxicological information
- Information on likely routes of exposure:
  - Inhalation: Prolonged inhalation may be harmful.
  - Skin contact: Causes skin irritation. May cause an allergic skin reaction.
  - Eye contact: Causes serious eye irritation.
  - Ingestion: Expected to be a low ingestion hazard.
- Symptoms related to the physical, chemical and toxicological characteristics:
  - Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.
- Information on toxicological effects:
  - Acute toxicity:
    - Components: Alumina Trihydrate (CAS 21645-51-2)
    - Species: Rat
    - Test Results: Oral LD50 > 5000 mg/kg
    - Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin sensitization
Not a respiratory sensitizer.

Respiratory sensitization
May cause an allergic skin reaction.

Skin sensitization
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Germ cell mutagenicity
Not classifiable as to carcinogenicity to humans.

Carcinogenicity
IARC Monographs. Overall Evaluation of Carcinogenicity
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens
Not listed.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not an aspiration hazard.

Chronic effects
Prolonged inhalation may be harmful.

12. Ecological information
Ecotoxicity
Toxic to aquatic life with long lasting effects.

Persistence and degradability
No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential
No data available.

Mobility in soil
No data.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations
Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information
DOT
Not regulated as dangerous goods.

IATA
UN number
UN3082

UN proper shipping name
Environmentally hazardous substance, liquid, n.o.s. (Epoxy Resin--reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin))

Transport hazard class(es)
Class
9
Subsidiary risk
-
Packing group
III
Environmental hazards
Yes
ERG Code
9L
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

Other information:
- Passenger and cargo aircraft: Allowed with restrictions.
- Cargo aircraft only: Allowed with restrictions.

IMDG
- UN number: UN3082
- UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin:--reaction Product Of Bisphenol A And Epichlorohydrin (refer To Epichlorohydrin)), MARINE POLLUTANT

Transport hazard class(es):
- Class: 9
- Subsidiary risk: -
- Packing group: III
- Environmental hazards: Marine pollutant: Yes
- EmS: F-A, S-F

Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

IMDG Regulated Marine Pollutant.

General information:

15. Regulatory information

US federal regulations:
- This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
  - Toxic Substances Control Act (TSCA)
    - TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
      Not regulated.
  - CERCLA Hazardous Substance List (40 CFR 302.4)
    Not listed.
  - SARA 304 Emergency release notification
    Not regulated.
    Not regulated.
Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Classified hazard categories
Skin corrosion or irritation
Serious eye damage or eye irritation
Respiratory or skin sensitization

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations
California Proposition 65
WARNING: This product can expose you to Epichlorhydrine, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance
Epichlorhydrine (CAS 106-89-8) Listed: October 1, 1987

California Proposition 65 - CRT: Listed date/Male reproductive toxin
Epichlorhydrine (CAS 106-89-8) Listed: September 1, 1996

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
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<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
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<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
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<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
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<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
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<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
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<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>Yes</td>
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<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date              07-07-2014
Revision date           02-01-2019
Version #               04
HMIS® ratings           Health: 2*
                         Flammability: 1
                         Physical hazard: 1
                         Personal protection: B
NFPA ratings
- Health: 2
- Flammability: 1
- Instability: 1

Disclaimer
ITW Performance Polymers cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

Revision information
This document has undergone significant changes and should be reviewed in its entirety.