

HEXAFLUOROISOPROPANOL

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**Product identifier**

| | |
|---------------|-----------------------|
| Chemical Name | HEXAFLUOROISOPROPANOL |
| CAS No. | 920-66-1 |
| Trade Name | HFIP |
| Product Code | None |

Relevant identified uses of the substance or mixture and uses advised against

| | |
|----------------------|--|
| Identified Use(s) | Chemical Intermediate and Chemical Reagent |
| Uses Advised Against | For industrial use only. |

Identity of manufacturer/importer and other suppliers

| | |
|---------------------------|---|
| Company Identification | Halocarbon Life Sciences, LLC 6525 The Corners Parkway; Suite 200 Peachtree Corners, GA 20092 |
| Telephone | (470) 419-6363 |
| E-Mail (competent person) | sds@halocarbon.com |

Emergency telephone number

| | |
|---------------------|---|
| Emergency Phone No. | CHEMTREC 24 hr. 1-800-424-9300 / 1 (703) 527-3887 (Collect calls accepted) |
|---------------------|---|

SECTION 2: HAZARDS IDENTIFICATION**Classification of the substance or mixture**

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Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; STOT SE 3

Label elements

Hazard Symbol

**DANGER**

Signal Word(s)

Hazard Statement(s)

H331: Toxic if inhaled.
H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.

Precautionary Statement(s)

P260: Do not breathe mist/vapours/spray.
P271: Use only outdoors or in a well-ventilated area.
P264: Wash (hands and exposed skin) thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P314: Get medical advice/attention if you feel

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unwell.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P315: Get immediate medical advice/attention. P363: Wash contaminated clothing before reuse.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P315: Get immediate medical advice/attention. P363: Wash contaminated clothing before reuse.

P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P315: Get immediate medical advice/attention.

P403+P235: Store in a well-ventilated place. Keep cool. P405: Store locked up.

P501: Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

Other hazards

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredients | % wt. | CAS No. |
|-----------------------|-------|----------|
| Hexafluoroisopropanol | > 99 | 920-66-1 |

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Inhalation

Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is laboured, administer oxygen. Get medical advice/attention if you feel unwell.

Skin Contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Get immediate medical attention. Wash contaminated clothing before reuse.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

Ingestion

Do not give anything by mouth to an unconscious person. Rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention.

Most important symptoms and effects, both acute and delayed

Toxic if inhaled. Causes severe skin burns and eye damage. May cause delayed skin necrosis. In cases of severe exposure, delayed pulmonary oedema may develop.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable Extinguishing Media

Non-flammable /Non-combustible. Water spray should be used to cool containers.

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| -Unsuitable Extinguishing Media | None known. |
| Special hazards arising from the substance or mixture | Heating may cause an explosion. |
| Advice for fire-fighters | Fire fighters should wear complete protective clothing including self-contained breathing apparatus. |
| Hazardous decomposition product(s) | Thermal decomposition products include: Carbon monoxide, Carbon dioxide, Hydrogen Fluoride |

SECTION 6: ACCIDENTAL RELEASE MEASURES

| | |
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| Personal precautions, protective equipment and emergency procedures | Enter closed rooms only if they are sufficiently ventilated. Ensure full personal protection (including respiratory protection) during removal of spillages. Wear protective clothing as per section 8. |
| Environmental precautions | Prevent liquid entering sewers, basements and any watercourses. Avoid release to the environment. |
| Methods and material for containment and cleaning up | Contain effluent and prevent effluent from entering sewers and waterways. Absorb spillage in inert material and shovel up. |
| Reference to other sections | See Section: 8 |
| Additional Information | None |

SECTION 7: HANDLING AND STORAGE

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| Precautions for safe handling | Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. |
| Hygiene Measures | Wash hands and exposed skin thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse. |
| Environmental Exposure Controls | Avoid release to the environment. Keep containers properly sealed when not in use. Avoid run off to waterways and sewers. |
| Conditions for safe storage, including any incompatibilities | |
| -Storage temperature | Store at room temperature. Protect from sunlight and store in well-ventilated place. |
| -Incompatible materials | Strong oxidising agents. |
| Specific end use(s) | Intermediate |

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

| SUBSTANCE. | CAS No. | (8hr TWA) | | STEL | | Note: |
|------------|---------|------------|-------------|------------|-------------|-------|
| | | PEL (OSHA) | TLV (ACGIH) | PEL (OSHA) | TLV (ACGIH) | |
| None | ----- | ----- | ----- | ----- | ----- | ----- |

Recommended monitoring method None known.

Exposure controls

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Appropriate engineering controls

Use only with adequate ventilation or closed system ventilation. Use only at a place, which is equipped with a safety shower.

Personal protection equipment

Eye/face protection



Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)



Wear suitable protective clothing and gloves (Neoprene). Check with protective equipment manufacturer's data.

Respiratory protection



In case of inadequate ventilation wear respiratory protection. Check with protective equipment manufacturer's data.

Environmental Exposure Controls

Disposal should be in accordance with local, state or national legislation.

Additional Information

None

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | |
|--|---------------------------|
| Appearance | Liquid |
| Color. | Colorless |
| Odor | Not available |
| Odor Threshold (ppm) | Not available |
| pH (Value) | Not applicable |
| Melting Point (°C) / Freezing Point (°C) | -2 (28.4 °F) |
| Boiling point/boiling range (°C): | 59 (138.2 °F) |
| Flash Point (°C) | > 59 (> 138.2 °F) |
| Evaporation Rate | Not available |
| Flammability (solid, gas) | Not available |
| Explosive Limit Ranges | Not available |
| Vapour pressure (kPa) | 15.06 (113 mm/Hg) @ 25 °C |
| Vapour Density (Air=1) | >1 |
| Density (g/ml) | 1.46 |
| Solubility (Water) | 0.176 |
| Solubility (Other) | Not available |
| Partition Coefficient (n-Octanol/water) | Log Pow = 1.5 @ 25 °C |
| Auto Ignition Point (°C) | >550 (>1022 °F) |
| Decomposition Temperature (°C) | Not available |
| Kinematic Viscosity (cSt) | < 20.5 @ 40 °C |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| Other information | Not available |

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Stable

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| Chemical stability | Considered stable under normal conditions. |
| Possibility of hazardous reactions | None known. |
| Conditions to avoid: | Heat and direct sunlight. Incompatible materials. |
| Incompatible materials | Strong oxidising agents. |
| Hazardous decomposition product(s) | Thermal decomposition products include: Carbon monoxide, Carbon dioxide, Hydrogen Fluoride |

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

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|-------------------------------|--|
| Acute toxicity | Oral: Highly corrosive Inhalation: LC50, 4-hr = 1974 ppm (rat) - In cases of severe exposure, delayed pulmonary oedema may develop. Dermal: Highly corrosive |
| Irritation/Corrosivity | Causes severe skin burns and eye damage. May cause delayed skin necrosis. |
| Sensitization | Not to be expected. |
| Repeated dose toxicity | Not to be expected. |
| Carcinogenicity | No data. |

| NTP | IARC | ACGIH | OSHA |
|-----|------|-------|------|
| No. | No. | No. | No. |

| | |
|------------------------------|---------------------|
| Mutagenicity | Not to be expected. |
| Reproductive toxicity | Not to be expected. |

SECTION 12: ECOLOGICAL INFORMATION

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| Ecotoxicity | |
| Short term | EC50 (48 hour): > 100 mg/L (<i>Daphnia magna</i>) EC50 (72 hour): > 100 mg/L (<i>Pseudokirchneriella subcapitata</i>) |
| Long Term | Not to be expected. |
| Persistence and degradability | Not readily biodegradable. |
| Bioaccumulative potential | The substance has no potential for bioaccumulation. |
| Mobility in soil | The substance has high mobility in soil. |
| Results of PBT and vPvB assessment | Not classified as PBT or vPvB. |
| Other adverse effects | None known. |

SECTION 13: DISPOSAL CONSIDERATIONS

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|--------------------------------|--|
| Waste treatment methods | Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice. |
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SECTION 14: TRANSPORT INFORMATION

| | Land transport (DOT) | Sea transport (IMDG) | Air transport (ICAO/IATA) |
|-----------------------------|--|-------------------------|------------------------------|
| UN number | UN 2922 | UN 2922 | UN 2922 |
| Proper Shipping Name | CORROSIVE LIQUID, TOXIC, N.O.S. (Hexafluorisopropanol) | | |



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|------------------------------|------------------|------------------|------------------|
| Transport hazard class(es) | 8(6.1) | 8(6.1) | 8(6.1) |
| Packing group | II | II | II |
| Hazard label(s) | Corrosive, Toxic | Corrosive, Toxic | Corrosive, Toxic |
| Environmental hazards | No. | No. | No. |
| Special precautions for user | None assigned | None assigned | None assigned |

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed and active.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

| Chemical Name | CAS No. | Typical %wt. | RQ (Pounds) |
|---------------|---------|--------------|-------------|
| None | ---- | ---- | ---- |

SARA 311/312 - Hazard Categories: See SECTION 2 - HAZARDS IDENTIFICATION

SARA 313 - Toxic Chemicals (40 CFR 372):

| Chemical Name | CAS No. | Typical %wt. |
|---------------|---------|--------------|
| None | ---- | ---- |

SARA 302 - Extremely Hazardous Substances(40 CFR 355):

| Chemical Name | CAS No. | Typical %wt. | TPQ (pounds) |
|---------------|---------|--------------|--------------|
| None | ---- | ---- | ---- |

California Proposition 65 List:

| Chemical Name | CAS No. | Type of Toxicity |
|---------------|---------|------------------|
| None | ---- | ---- |

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1, 14.

Date of preparation: January 23, 2020

Additional Information: None

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