



Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name HPF
Product code SK3001-02

Company name GORYO Chemical, Inc.

Address EAREE Bldg. 5F, Kita 8 Nishi 18-35-100 Chuo-ku, Sapporo 060-0008, Japan

Department Product Development Div.

Tel +81-11-624-5860 Fax +81-11-351-1822

E-mail <u>info@goryochemical.com</u>

2. HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

PHYSICAL HAZARDS Classification not possible
HEALTH HAZARDS Classification not possible
ENVIRONMENTAL HAZARDS Classification not possible

Label elements

Pictograms or hazard symbols None

Signal word No signal word

Hazard statements None
Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Mixture Substance Compound name HPF Percent $\geq 98\%$ (LC)

4. FIRST AID MEASURES

Skin contact

- · Wash off immediately with plenty of water. If symptoms persist, call a physician.
- · If skin stimulates or rash appears, call a physician.

Eye contact

- Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, consult a physician.
- · Take off your contact lens when wash with water.

Inhalation

- Remove to fresh air immediately, give a rest and keep warm covering the body with blanket, and obtain medical attention.
- · If feeling bad, call a physician.

Ingestion

- · Rinse out mouth thoroughly with water.
- · If feeling bad, call a physician.

Protection of first-aiders

· A rescuer should wear personal protective equipment, such as rubber gloves and airtight goggles.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Water spray, Alcohol resistance, Powder, Carbon dioxide

Specifically dangerous hazards Thermal decomposition can lead to release of irritating and toxic gases

and vapors.

Extinguishing method Fire-extinguishing work is done from the windward and the suitable

fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire

Use personal protective equipment as required

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

- · Go to the windward, and wearing protective clothing during procedures is imperative.
- · Keep away the people under lee and seal off by roping spill site.
- · Keep away near inflammables swiftly and prepare fire-fighting equipment.

Environmental precautions

· Prevent product from entering drains.

Methods and materials for containment and cleaning up

• Do not touch spilled material without suitable protection. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

7. HANDLING AND STORAGE

Handling

Technical measures

- · Handling is performed in a well-ventilated place.
- · Avoid contact with skin, eyes and clothing.
- · Wear suitable protective equipment.
- · Wash hands and face thoroughly after handling.
- · Use a local exhaust if dust or aerosol will be generated.

Advice on safe handling

- · Handle in accordance with good industrial hygiene and safety practice.
- · Vessel shouldn't be treated violently, such as rolling, shocking or dragging.

Storage

Storage conditions

- · Keep container tightly closed. Store in a dark place under -20 degrees Celsius.
- · Avoid long storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls Install a closed system or local exhaust.

Install safety shower and eye bath.

Control parameters Not set up

Personal protective equipment

Respiratory protection Dust respirator
Hand protection Protective gloves
Eye protection Safety glasses

Skin and body protection Protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (color/form) Yellow/powder
Odor Odorless

pH No data available
Melting point/freezing point No data available
Boiling Point/Range No data available
Flash Point No data available
Explosive limits No data available
Vapor pressure No data available
Vapor density No data available
Density No data available

Solubility(ies)

[Water] No data available

[Other solvents]

Soluble Dimethylsulfoxide, N,N-Dimethylformamide

Firing point No data available
Decomposition temperature No data available

10. STABILITY AND REACTIVITY

Stability Stable under proper conditions.

Reactivity None under normal processing.

Incompatible materials Strong oxidizing agents, reducing agents

Hazardous Decomposition Products None under normal use.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity No data available Skin corrosion/irritation No data available Serious eye damage/irritation No data available Respiratory sensitization No data available Skin sensitization No data available No data available Reproductive cell mutagenicity No data available Carcinogenicity No data available Reproductive toxicity STOT-single exposure No data available No data available STOT-repeated exposure Aspiration hazard No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

No information available
Mobility

No information available
Biodegradation

No information available
Bioaccumulation

No information available
Hazard to the ozone layer

No information available

13. DISPOSAL CONSIDERATIONS

Chemical materials

· Dispose of in accordance with local regulations.

Polluted vessels and package

· Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

ADR/RID Not regulated

UN number -

Proper shipping name UN classification Subsidiary hazard class

Packing group

Marine pollutant No information available

IMDG Not regulated

UN number

Proper shipping name UN classification Subsidiary hazard class

Packing group

Marine pollutant (Sea) No information available
Transport in bulk according to No information available

Annex II of MARPOL 73/78 and

the IBC Code

IATA Not regulated

UN number -

Proper shipping name UN classification Subsidiary hazard class Packing group

Environmentally Hazardous No information available

Substance

15. REGULATORY INFORMATION

Not applicable

16. OTHER INFORMATION

- · International Chemical Safety Card (ICSC) database in Japanese (National Institute of Health Sciences)
- This MSDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity.
- Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used.
- · Some new information or amendments may be added afterwards.
- If the products are to be used far behind the expected time of use or if you have any questions, please feel free to contact us.