

May 15, 2019

Safety Data Sheet

| | | Safety Data Sheet | | |
|------------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 1. IDENTIFICATI | ON OF THE SUBSTAN | ICE/PREPARATION AND THE COMPANY/UNDERTAKING | | |
| Product na | ame SaraFluor 600-1 | NHS | | |
| Product co | de ST1006-10, ST1 | 006-11, ST1006-15 | | |
| Company | name GORYO Chemic | eal, Inc. | | |
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| 2. HAZARDS IDE | NTIFICATION | | | |
| GHS class | ification | | | |
| Classificat | ion of the substance or mi | xture | | |
| PHYSICA | AL HAZARDS | Classification not possible | | |
| HEALTH | HAZARDS | Classification not possible | | |
| ENVIRO | NMENTAL HAZARDS | Classification not possible | | |
| Label elem | ients | | | |
| Pictogram | ns or hazard symbols | None | | |
| Signal wo | ord | No signal word | | |
| Hazard st | atements | None | | |
| Precautio | nary statements | None | | |
| 3. COMPOSITION | /INFORMATION ON I | NGREDIENTS | | |
| Substance | or Mixture Subst | ance | | |
| Compound | name SaraF | 'luor 600-NHS | | |
| Percent | $\geq 90\%$ | 6 (LC) | | |
| 4. FIRST AID MEA | ASURES | | | |
| Skin conta | ct | | | |
| | • Wash off immediately w | ith plenty of water. If symptoms persist, call a physician. | | |
| | If skin stimulates or ras | h appears, call a physician. | | |
| Eye contac | t | | | |
| | • 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 phy | rsician. | | |
| Ingestion | | | | |
| | • Rinse out mouth thoroughly with water. | | | |
| | • If feeling bad, call a phy | rsician. | | |
| Protection | of first-aiders | | | |
| | • A rescuer should wear p | ersonal protective equipment, such as rubber gloves and airtight goggles. | | |
| 5. FIRE-FIGHTIN | G MEASURES | | | |
| Suitable es | tinguishing media | Water spray, Alcohol resistance, Powder, Carbon dioxide | | |
| Specificall | y dangerous hazards | Thermal decomposition can lead to release of irritating and toxic gases and vapors. | | |
| Extinguish | ing 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

in the surroundings: Remove movable containers if safe to do so. Use personal protective equipment as required

Protection of fire-fighters 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.
- $\boldsymbol{\cdot}$ Avoid contact with skin, eyes and clothing.
- \cdot 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. |
| TTOT | OAT AND OTTEN/TOAT DOODED/01 | TRO |

9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical state (color/form) | Dark blue/hygroscopic solid |
|------------------------------|------------------------------|
| 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 | Dimethyl sulfoxide, Methanol |
| | |

| Firing point No | data available | | | | |
|-----------------------------------|------------------------------------------------------|--|--|--|--|
| · · | 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 Produc | | | | | |
| 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 | | | | |
| Reproductive cell mutagenicity | No data available | | | | |
| Carcinogenicity | No data available | | | | |
| Reproductive toxicity | No data available | | | | |
| STOT-single exposure | No data available | | | | |
| STOT-repeated exposure | No data available | | | | |
| Aspiration hazard | No data available | | | | |
| 12. ECOLOGICAL INFORMATION | N. C. and S. and I. I. | | | | |
| Ecotoxicity effects | No information available No information available | | | | |
| Mobility Bis do rece do tion | No information available | | | | |
| Biodegradation Bioaccumulation | No information available | | | | |
| Hazard to the ozone layer | No information available | | | | |
| 13. DISPOSAL CONSIDERATIONS | | | | | |
| Chemical materials | | | | | |
| | nce with local regulations. | | | | |
| Polluted vessels and package | ice with local regulations. | | | | |
| | nce with local regulations. | | | | |
| 14. TRANSPORT INFORMATION | ice with focul regulations. | | | | |
| 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 | - | | | | |
| UN number | - 3 / 4 | | | | |

Proper shipping name UN classification Subsidiary hazard class Packing group Environmentally Hazardous No informa Substance

No information available

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.