

GRAFTON
-induced Graft Polymerization Technology

SAFETY DATA SHEET

Date: March 1, 2022

1. IDENTIFICATION

Product Name: LLST - 100
Reference Number: GA - 0120220301
SDS Number: LLST_100_1
Recommendation and restriction of use:
Recommendation of use: Deodorant
Supplier Information: GRAFTON INC.
3F, 4-11-14, Yoga, Setagaya-Ku, Tokyo, Japan
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Taisuke Shindo

2. HAZARDS IDENTIFICATION

GHS Classification, GHS Labelling Factor:
GHS Classification:
Not classified and not applicable to all categories.
GHS Label Factor:
No Pictograph and no warning statement required.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: The mixture.
Composition and ingredients:

Components	CAS No.	Content (%)	Official Gazette Ref. Number
Pyrrolidine Compounds	N/D	< 60.0	N/D
Additive	N/D	< 1.0	N/D
Pure Water	7732-18-5	< 60.0	—

Remarks: Above are not product specification values.

Hazardous Components: Not applicable to following regulations and laws;
*Poisonous and Deleterious Substances Control Law.

GRAFTON

-induced Graft Polymerization Technology

*Industrial Safety and Health Act.

*Act on Confirmation, etc. of Release Amounts of Specific Chemical substances in the Environment and Promotion of improvement to the management thereof.

4. EMERGENCY MEASURES

Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if necessary.
Eye:	Rinse cautiously with water for at least 15 minutes. Remove contact lenses if it is easy to do so and continue rinsing. If eye irritation persists, get medical advice/attention.
Skin:	Gently wash with plenty of soap and water. If skin irritation or rash occurs, get medical advice/attention.
Ingestion	Rinse mouth well with clean water and get medical advice/attention immediately.

5. ACCIDENTAL RELEASE MEASURES (FIRE)

The specific fire extinguishing steps:

The product is not inflammable, however, the dry matter, after the evaporation of the water, becomes flammable. Avoid any combustion promotion and extinguish with the proper extinguishing agent.

The extinguishing agent: A water, the Foam Fire-Extinguisher and the Powder Fire-Extinguisher are effective.

The notice to the extinguishing person:

Lead unconcerned people to safe place.
Must use protective wear and musk for safety.

6. ACCIDENTAL RELEASE MEASURES (LEAKAGE)

Personal Precaution: Use personal protective equipment and avoid any direct contact with skin.

GRAFTON **-induced Graft Polymerization Technology**

Environment Precaution: Prevent any outflow or spill out to the public water area, river and lake region. Report immediately to related and responsible organizations and/or offices in case of any spill outs.

Removal Process: Clean off by the proper fabrics in case of leakage in small quantity. In case of large quantity, collect such leakages in airtight container, and then, collect the remains by Inactive Adsorption Materials such as Mud, Sand, Diatom-Earth and etc.

7. HANDLING AND STORING

Handling

Technical measures:

(Prevention of Revelation)

Prevent the inhalation of mist, vapor and spray.

(Precaution)

Proper protection of eyes.

Safe handling instructions:

Use in outdoor or in well ventilated spaces only.

Use designated protective equipment.

Safe handling instructions: Data not available

Contact prevention: Data not available

Sanitation measure:

Prevent any direct touch to eyes and cloths.

Prevent eating and smoking while using.

Wash hands well after handling.

Storage

Safety storage condition:

Seal the container tightly and store at well ventilated space.

Store at cool space and avoid direct sun light.

Safe container and packing materials: Data not available.

GRAFTON
-induced Graft Polymerization Technology

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Occupational Exposure Limits:	It is recommended to handle partly or totally in ventilated area.
Controlled and Permissible Concentrations:	No specific guidelines.
Personal protective equipment:	
Respiratory protection:	Dust respirator in accordance with local and national regulations.
Eye protection:	Goggles if there is a dust formation.
Hand protection:	Protective gloves.
Body protection:	Light protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Condition:	Liquid
Color:	Pale Yellow Transparent
Odor:	Odorless
pH:	< 2.0 - 3.0
Melting/Freezing points:	Data not available
Boiling/Initial boiling points:	Data not available
Boiling point range:	Data not available
Flammability	
(Gas, Liquid and solid matter):	Do not combust
Lower/Higher explosion limit/ explosion limit:	Not applicable
Flash point:	Not applicable
Autoignition point:	Not applicable
Vapor Pressure:	Data not available
Relative gas density (Air=1):	Data not available
Density and/or relative density:	Data not available
Dissolubility:	
Solubility (Water):	Soluble
(Solvent):	Data not available
n-Octanol/water partition:	Data not available
Particle Properties:	Not applicable

GRAFTON
-induced Graft Polymerization Technology

10. STABILITY AND REACTIVITY

Reactivity	Data not available
Chemical stability	Stable in the normal conditions
Hazardous reactivity	Data not available
Condition to be avoided	Data not available
Reactive chemical substance	Data not available
Hazardous decomposition	
Products	Data not available

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Acute skin irritation	Data not available
Acute eye irritation	Data not available
Respiratory/skin sensitizations:	Data not available
Reproductive cell accidental abiogenesis:	Data not available
Carcinogenicity (IARC, NTP):	Data not available
Reproduction toxicity:	Data not available

12. ENVIRONMENT AFFECT INFORMATION

Ecotoxicity

Aquatic environment toxicity Short period (Acute)
[Japan publication ground data]
(Sodium Metasilicate)
Fish (Zebra Fish) LC50=210mg/L/96hr (IUCLID. 2000)

Aqueous Solubility

(Sodium Metasilicate)
20g/100ml (IUCLID, 2000)

Persistency/Degradability	Data not available
Bio-Accumulative	Data not available
Migration in soil	Data not available
Other hazardous affects	
Ozone layer	Data not available

GRAFTON
-induced Graft Polymerization Technology

13. NOTICE FOR DISPOSAL

Processing method of waste

Dispose contents/containers in accordance with Government regulations.

Dispose at authorized waste disposal site.

Do not dispose in water, ground and sewer.

Contaminated container and packages

Use up content completely and dispose containers.

14. TRANSPORTATION INFORMATION

UN number, Classification

UN number or ID: Not applicable

Official transportation: Not applicable

Classification or category: Not applicable

Container classification: Not applicable

IMDG Code (International marine dangerous material rule)

Not applicable

IATA aviation dangerous materials prospectus

Not applicable

MARPOL Treaty Annex III - Prevention of pollution caused by individual hazardous item/substance.

Marine pollution materials (applicable/not applicable):

Special safety measures

Special safety measures

Data not available

Bulk transportation (MARPOL Treaty annex II Revision of hazardous liquid materials and IBC Code

Not applicable

Regularity information if domestic regulation is enforced.

Ship Safety Law

Not applicable

Aviation Law

Not applicable

GRAFTON

-induced Graft Polymerization Technology

15. Applicable Law.

Regulations and Laws concerning referenced product (Safety, Health and Environment)

Toxic and deleterious substances control law:	Not applicable
Industrial safety and health act:	Not applicable
Law for promotion of chemical management:	Not applicable
Fire protection law:	Not applicable
Chemical substance control law:	Not applicable

16. Other Information.

Reference Literatures

Globally Harmonized System of classification and labelling of chemicals, (7th edition, 2017), UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN

IMDG Code, 2018 Edition (Incorporating Amendment 39-18)

IATA aviation dangerous materials prospectus 61 edit 2020

Classification, labelling and packaging of substances and mixtures (Table 3 ECNO6182012)

2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2020 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/ENG/Classification/index.php>

JIS Z 7252: 2019

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Supplier's data/information

GESTIS-Stoffdatenbank

Pub Chem (OPEN CHEMISTRY DATABASE)

Above information is made based on our present state of knowledge on presently available references and information data, and it is subject to be revised upon available of new information.

Remarks listed aforesaid are based on the case of normal handling, therefore, it is recommended to take an adequate safety measures in case of having the special handlings.

The indicated GHS classification/category were calculated based on presently available Japanese publication data (NITE 2019 edit.)