

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

1.1 Identification:

Product Name: RiFerm-NPG

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

No additional information available

1.3 Details of the supplier of the safety data sheet:

Manufacturer: The Garden of Naturalsolution Co., Ltd.

12-24, Gajangsaneopseo-ro, Osan-si, Gyeonggi-do, 18103,
Republic of Korea

1.4 Emergency telephone number: +82-31-374-5240

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture:

Classification (GHS-US) not classified.

2.2 Label elements: No labeling applicable

2.3 Other Hazards: No additional information available

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances: Not applicable

3.2 Mixtures:

INCI Name	CAS Number	EINECS Number	%
Saccharomyces/Rice Ferment Filtrate	-	-	90
Pentylene Glycol ¹⁾	5343-92-0	226-285-3 (I)	10

¹⁾Pentylene Glycol in this product is naturally sourced

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

First-aid measures after Eye Contact:

- Wash well-open eyes immediately, abundantly and thoroughly with soap and water for at least 20 minutes.

First-aid measures after Skin Contact:

- Immerse or wash off the affected area with plenty of cold water if the material is hot.
- Get immediate medical advice/attention.

- In case of minor skin contact: Prevent from spreading of polluted area.
- If skin irritation or rash occurs: Get medical advice/attention.
- Take off the polluted clothes and wash before reuse.

First-aid measures after Inhalation:

- Move to fresh area.
- In case of difficulty in breathing: Provide oxygen to him/her.
- Keep a person warm and at rest.

First-aid measures after Ingestion:

- Get immediate medical advice/attention.

SECTION 5: FIREFIGHTING MEASURES

5.1 Suitable extinguishers: Carbon dioxide, dry powder, water

5.2 Unsuitable extinguishers: None

5.3 Specific hazards: None

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: None

6.2 Environmental precautions: Do not let product enter drains or sewers.

6.3 Methods for cleaning up: Use liquid binding materials.

SECTION 7: HANDLING AND STORAGE

7.1 Handling advice: None

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Protect from light. Store in tightly sealed containers.

Storage temperature: 1 ~ 30°C

Incompatible materials: Strong bases, strong acids

Packaging materials: Original packaging

Shelf life: Before opening_2 years / After opening_6 months

SECTION 8: Exposure controls/personal protection

Hand protection: Wear protective gloves.

Eye protection: Wear safety goggles.

Respiratory protection: None

General protection: Apply general industrial hygiene measures.

Environmental exposure controls: Avoid release to the environment.

Other information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- 1) **Appearance:** Liquid
- 2) **Color:** Colorless ~ light yellow
- 3) **Odor:** Characteristic
- 4) **pH:** 5.0 ~ 8.0
- 5) **Specific Gravity:** d_{20}^{20} 0.98 ~ 1.04
- 6) **Heavy metal:** Not more than 10 ppm
- 7) **Arsenic:** Not more than 2 ppm
- 8) **Microbes:** Not more than 100 CFU/mL
- 9) **Flash point:** > 104°C
- 10) **Boiling point/range:** Approx. 100°C
- 11) **Preservative:** None

SECTION 10: STABILITY AND REACTIVITY

10.1 Chemical Stability: Stable under normal conditions of use

10.2 Conditions to avoid: None

10.3 Materials to avoid: Dangerous reactions are not to be expected and known,
if used as directed.

10.4 Hazardous decomposition products: None

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity (oral): No data available

Acute toxicity (inhalation): No data available

Acute toxicity (dermal): No data available

Irritation/Corrosion of the skin: No potential for dermal irritation or allergic contact sensitization (RIPT Test), Has an expected *in vivo* dermal irritancy potential in the non-irritating range (The MatTek Corporation EpiDerm™ Skin Model *In Vitro* Toxicity Testing System)

Serious Eye damage/eye irritation: No ocular irritation potential (HET-CAM Test)

Respiratory/Skin sensitization: No data available

CMR assessment

Carcinogenicity: No data available

Mutagenicity: No detectable genotoxic activity (Ames Test)

Teratogenicity: No data available

Toxicity to reproduction: No data available

Specific Target Organ Toxicity: No data available

Repeated exposure: No data available

Aspiration hazard: No data available

Other information: Phototoxicity: Induced no response indicative of a phototoxic reaction(Clinical Evaluation of Phototoxicity Potential)

Proper use provided, no adverse health effects have been observed or have been come to our knowledge.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Ecology-general: No environmental hazard

Ecology-air: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).

12.2 Persistence and degradability

Persistence:

- Pentylene Glycol: Low persistency (log Kow is less than 4 estimated.) (log Kow = 0.06) (25°C)

- SaccharomycesRice Ferment Filtrate: Not available

Degradability: Not available

12.3 Bioaccumulative potential

Bioaccumulation:

- Pentylene Glycol: Bioaccumulation is expected to be low according to the BCF < 500 (=3.162) (estimated)

- SaccharomycesRice Ferment Filtrate: Not available

Biodegradation:

- Pentylene Glycol: As well-biodegraded, it is expected to have low accumulation potential in living organisms (73% biodegradation was observed after 28 days) (DOC removal)

- SaccharomycesRice Ferment Filtrate: Readily biodegradable in aerobic conditions (OECD Guideline 310)

12.4 Mobility in soil: No data available

12.5 Other adverse effects: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

- 1) Remove to an authorized incinerator with energy recovery. Dispose in a safe manner in accordance with local/national regulations.
- 2) Ecology-waste materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

Not dangerous according to transport regulations.

International Regulations:

Land:

- Rail/road (RID/ADR): Not restricted
- Road (DOT 49 CFR): Not restricted
- Rail (TDG): Not restricted

Sea (IMO/IMDG): Not restricted

Air (ICAO-IATA): Not restricted

Note: The above regulatory prescriptions are those valid at the date of publication of this sheet.

SECTION 15: REGULATORY INFORMATION

US Federal regulations: Not listed on the United States TSCA (Toxic Substances Control Act) Inventory

SECTION 16: OTHER INFORMATION

16.1 Application: Cosmetics

16.2 Other information: Please contact The Garden of Naturalsolution Co., Ltd. for more Information. (www.naturalsolution.co.kr)

16.3 Revision date: 2021.12.20