

SAFETY DATA SHEET

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: **RhizoPlate N**
Product number: **F-0048**

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

Recommended Use: Laboratory cellular assay to collect phenotypic data for nitrogen-fixing microbes.
Uses advised against: Product is not intended for in vitro diagnostic use.

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier: Biolog Inc.
21124 Cabot Blvd.
Hayward, CA 94545
United States of America
Telephone: +1-510-785-2564
Information department: Technical Applications and Services (TAS) tech@biolog.com

1.4. Emergency telephone number

Emergency telephone: +1-510-785-2564 or +1-800-284-4949
Opening hours: 8am – 5pm PST, Monday through Friday

Chemtrec US: 800-424-9300
Chemtrec EU: 001 (202) 483-7616

Section 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 (CLP)

Hazards: This article contains no constituents classified as hazardous according to classification measures defined in Annex I of 1272/2008/EC.
This article contains no components considered to be either persistent, bioaccumulative and toxic, or very persistent and very bioaccumulative at levels of 0.1% or higher.

2.2. Label elements Not a hazardous substance or mixture.

2.3. Other hazards None.

Section 3: Composition/Information on ingredients

3.2. Mixtures

Components: Article comprised of Dow Polystyrene (CAS# 9003-53-6) with minute amounts of chemicals that do not meet classification measures dried on the surface of the 96 wells (chambers).

Section 4: First aid measures

4.1. Description of first aid measures

General information No special measures required.
After inhalation Seek medical treatment in case of complaints.
After skin contact Immediately wash with water and soap and rinse thoroughly.
After eye contact Rinse opened eye for several minutes under running water as a precaution.

After ingestion Rinse mouth with water.
Self protection of first-aider No data available regarding any special protection needed.

4.2. Most important symptoms and effects, both acute and delayed

None reasonably foreseeable.

4.3. Indication of any immediate medical attention and special treatment needed

None reasonably foreseeable.

Section 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: CO₂, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.

Unsuitable extinguishing media: No information available.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Carbon oxides (CO, CO₂) and soot.
Autoignition temperature of polystyrene: 427 °C (800.6 °F)

5.3. Advice for firefighters

Protective equipment: Wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Ensure adequate ventilation.

6.2. Environmental precautions

No special measures required.

6.3. Methods and material for containment and cleaning up

6.3.1. For containment: No special measures required.

6.3.2. For cleaning up: Wipe up with damp sponge or mop spills.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

Section 7: Handling and storage

7.1. Precautions for safe handling

Information on safe handling: No special measures required.

Information about protection against explosions and fires: No special measures required.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Keep containers tightly closed in a cool, dark space.

7.3. Specific end uses

Use in laboratories for research use only

Section 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits: Contains no substances with occupational exposure limit values.

Biological limit values: Does not contain any hazardous materials with biological limits established by region-specific regulatory bodies.

Monitoring methods: None required.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Engineering measures: Use standard precautionary measures for handling chemicals.

8.2.2. Personal protective equipment

Eye protection Safety glasses recommended.
Hand protection Wear chemical resistant gloves.
Glove material: nitrile rubber. See manufacturer's recommendations for breakthrough time. Glove thickness: 4 to 8 mil.
Skin and body protection Wear long-sleeve protective work clothing (lab coat).
Respiratory protection None required.

8.3. Environmental exposure controls

None required. In the event of a spill, refer to Section 6.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid polystyrene microplate containing <2 mg dried chemicals
Color Clear microplate. Wells (chambers) may show white or colored film
Odor Odorless
Melting point 270 °C
Boiling point Not applicable (Solid)
Flammability Easily ignited
Explosion limits Not applicable (Solid)
Flash point Not applicable (Solid)
Auto-ignition temperature Not applicable (Solid)
Decomposition temperature Not applicable (Not self-reactive)
pH Not applicable (Solid)
Viscosity Not applicable (Solid)
Solubility Chemicals in wells (chambers) soluble. Microplate is not.
Partition coefficient n-octanol/water No data available
Vapor pressure Not applicable (Solid)
Density/Specific gravity 1.04 g/cm³
Relative vapor density Not applicable (Solid)
Particle characteristics Not applicable (Solid one-piece article)

9.2. Other information No data available.

Section 10: Stability and reactivity

10.1. Reactivity Not applicable. (Inert polystyrene plastic microplate.)

10.2. Chemical stability Stable under normal ambient conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization Will not occur.
Hazardous reactions None under normal processing.

10.4. Conditions to avoid Excess heat.

10.5. Incompatible materials Acetone.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂) and soot in the case of fire.

Section 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product information	
Acute toxicity	Classification criteria not met.
Skin corrosion/irritation	Reconstituted chemicals may cause minor irritation.
Serious eye damage/irritation	Reconstituted chemicals may cause minor irritation.
Respiratory or skin sensitization	No sensitizing effects known.
Germ cell mutagenicity	No known toxicity.
Carcinogenicity	No known toxicity.
Reproductive toxicity	No known toxicity.
STOT-single exposure	No known toxicity.
STOT-repeated exposure	No known toxicity.
Aspiration hazard	No data available.

11.2. Information on other hazards

Endocrine disrupting properties	This product does not contain any known or suspected endocrine disruptors.
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Section 12: Ecological information

12.1. Toxicity	No data available.
12.2. Persistence and degradability	No data available.
12.3. Bioaccumulative potential	No data available.
12.4. Mobility in soil	No data available. This product is a solid polystyrene microplate.
12.5. Results of PBT and vPvB assessment	No data available.
12.6. Endocrine disrupting properties	This product does not contain any known or suspected endocrine disruptors.
12.7. Other adverse effects	
Persistent organic pollutant	This product does not contain any known or suspected substance.

Section 13: Disposal considerations

13.1. Waste treatment methods

13.1.1 Product/packaging disposal

Product	Can be disposed of with solid waste. Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements. This product is not considered RCRA hazardous waste.
Contaminated packaging	Disposal must be made according to local state and federal regulations.
European Waste Catalogue	According to the European Waste Catalog, Waste Codes are not product specific, but application specific.

Section 14: Transport information

DOT (US)	Not dangerous good.
IMDG	Not dangerous good.
IATA	Not dangerous good.

Section 15: Regulatory information

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

Regulation (EC) 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable.

National Regulations

United States regulatory information

SARA Listed No

Canada regulatory information

WHMIS classification Classified in accordance with the hazard criteria of the CPR, and the SDS contains all information required by the CPR.

DSL No

NDSL No

California Proposition 65 – Chemicals known to cause cancer

Exposure to styrene fumes may increase the risk of cancer.

California Proposition 65 - Chemicals known to cause reproductive toxicity

None of the ingredients listed.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

Section 16: Other information

Full text of H-statements referred to under sections 2 and 3

No H-statements referenced.

CAS – Chemical Abstracts Service

LC50 – Lethal Concentration 50%

LD 50 – Lethal Dose 50%

EC50 – Effective Concentration 50%

NOEC – No Observed Effect Concentration

WEL – Workplace Exposure Limit

PBT – Persistent, Bioaccumulative, Toxic

vPvB – very Persistent, very Bioaccumulative

IMO/IMDG – International Maritime Organization/International Maritime Dangerous Goods Code

DOT (US) – Department of Transportation (United States of America)

IATA – International Civil Aviation Organization/International Air Transport Association

Key information reference and source of data

<https://echa.europa.eu/information-on-chemicals/>

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Creation Date 29 MAR 2025

Revision Date 29 MAR 2025

Revision Summary New product release.

MS F-0048 - RhizoPlate N

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