

## SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**1.1. Product Identifier:**

**Product Name**                    π Code MicroDisc

**Product Code**                    20460-10K , 20460-20K , 20460-100K ( or 20460- series)  
20470-10K , 20470-20K, 20470-100K ( or 20470- series)

**Product type**                    Liquid

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

**Identified uses**                    For professional users only.

**1.3. Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:**    PlexBio Co., Ltd.  
6F-1, No. 351 Yangguang Street, Neihu District, Taipei 114 Taiwan, R.O.C.  
Tel: +886-2-2627-5878    Fax: +886-2-2627-5979

**1.4 Emergency telephone number**

**Emergency Phone #**            Tel: +886-2-2627-5878

**Email**                                service@plexbio.com

## SECTION 2: HAZARD IDENTIFICATION

**2.1 Classification of the substance or mixture**

The product is a kit consisting of individual ingredients listed in section 3.  
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008 or 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

**2.2 GHS Label elements, including precautionary statements:**

GHS label elements

Signal word                    : No signal word.  
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention                    : Not applicable.  
Response                     : Not applicable.  
Storage                        : Not applicable.  
Disposal                      : Not applicable.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

Substance/mixture            : Mixture  
Other means of identification : Not available.

CAS number/other identifiers

CAS number                    : Not applicable.

Ingredient name	%	CAS number
Glycerol	45-55	56-81-5

**Any concentration shown as a range is to protect confidentiality or is due to batch variation.**

There is no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or environment and hence require reporting in this section.

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### SECTION 4: FIRST AID MEASURES

##### 4.1 Description of first aid measures

**General information:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Eye Contact** : Flush eyes with water as a precaution. Remove contact lenses. Consult a physician.

**Skin Contact** : Wash off with soap and plenty of water. Consult a physician.

**Inhalation** : If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

**Ingestion** : Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in section 2, section 3 and/or in section 11

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

No data available

#### SECTION 5: FIRE AND EXPLOSION DATA

##### 5.1 Extinguishing media

Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

##### 5.2 Special hazards arising from the substance or mixture

Not flammable or combustible.

##### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

##### 5.4 Further information

Hazardous decomposition products formed under fire conditions: Sodium oxides.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

##### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For handling and storage refer to section 7. For personal protection see section 8.

##### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

##### 6.3 Methods and materials for containment and cleaning up

Take up mechanically and collect in suitable container for disposal.

##### 6.4 Reference to other sections

For handling and storage refer to section 7. For personal protection see section 8. For disposal see section 13.

#### SECTION 7: HANDLING AND STORAGE

##### 7.1 – Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

##### 7.2 – Conditions for safe storage, including anything that is incompatible

Keep container tightly closed in a dry and well-ventilated place. Refer to product label.

**7.3 – Specific end use(s)**

Refer to section 1.2

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

**8.1 Control parameters**

**United States of America**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Glycerol		(Vacated) TWA: 10 mg/m <sup>3</sup> (Vacated) TWA: 5 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	

*ACGIH - American Conference of Governmental Industrial Hygienists*

*OSHA - Occupational Safety and Health Administration*

*NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health*

**European Union**

Component	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Glycerol	56-81-5	AGW (Inhalable fraction) TWA	200 mg/m <sup>3</sup>  10 mg/m <sup>3</sup>	DE TRGS 900  TLV-ACGIH

**8.2 Exposure controls**

- Appropriate engineering controls** : No special ventilation requirements.
- Personal protective equipment** : Not required under normal conditions of use.
- Eye Protection** : Not required under normal conditions of use.
- Hand Protection** : Not required under normal conditions of use.
- Skin and body protection** : Not required under normal conditions of use.
- Respiratory protection** : Not required under normal conditions of use.
- Environmental exposure controls** : No special measures required.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**9.1 Information on basic physical and chemical properties**

<b>Physical State and Appearance:</b>	Liquid.	<b>Vapor Pressure:</b>	Not available.
<b>Odor:</b>	Not available.	<b>Vapor Density:</b>	Not available.
<b>Taste:</b>	Not available.	<b>Volatility:</b>	Not available.
<b>pH (1% soln/water):</b>	Not available.	<b>Odor Threshold:</b>	Not available.
<b>Boiling Point:</b>	Not available.	<b>Water/Oil Dist. Coeff.:</b>	Not available.
<b>Melting Point:</b>	Not available.	<b>Ionicity (in Water):</b>	Not available.
<b>Critical Temperature:</b>	Not available.	<b>Dispersion Properties:</b>	Not available.
<b>Specific Gravity:</b>	Not available.	<b>Solubility:</b>	Not available.

**9.2 Other safety information**

Not available

## SECTION 10: STABILITY AND REACTIVITY DATA

<b>10.1 Reactivity:</b>	The product is stable under recommended shipping and storage conditions.
<b>10.2 Chemical Stability:</b>	The product is stable under recommended shipping and storage conditions.
<b>10.3 Possibility of hazardous reactions</b>	Will not occur.
<b>10.4 Conditions to Avoid</b>	Excess heat
<b>10.5 Incompatible materials</b>	Strong acids/alkalis, strong oxidizing/reducing agents.
<b>10.6 Hazardous decomposition products</b>	Not available.

## SECTION 11: TOXICOLOGICAL INFORMATION

<b>11.1 Information on toxicological effects</b>	
<b>Acute toxicity:</b> Glycerol	Not classified based on available information. Acute toxicity LD50 Oral - Rat - 12600 mg/kg LD50 Dermal - Rabbit - > 10000 mg/kg
<b>Eye Contact:</b>	May cause eye irritation.
<b>Skin Contact:</b>	May cause skin irritation.
<b>Inhalation:</b>	May cause irritation of respiratory tract.
<b>Ingestion:</b>	May be harmful if swallowed.
<b>Carcinogenic Effects:</b>	Not available.
<b>Mutagenic Effects:</b>	Not available.
<b>Reproduction Toxicity:</b>	Not available.
<b>Sensitization:</b>	Not available.
<b>STOT - Single exposure</b>	Not determined
<b>STOT - Repeated exposure</b>	Not determined
<b>Additional Information:</b>	RTECS: VY8050000; MA8050000; TR7400000

## SECTION 12: ECOLOGICAL INFORMATION

<b>12.1 Toxicity:</b>	Not classified based on available information.
<b>12.2 Persistence and degradability:</b>	Not available.
<b>12.3 Bioaccumulative potential:</b>	Not available.
<b>12.4 Mobility in soil:</b>	Not available.
<b>12.5 Results of PBT and vPvB assessment:</b>	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
<b>12.6 Other adverse effects:</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Potentially toxic to aquatic life.

## SECTION 13: DISPOSAL CONSIDERATIONS

<b>13.1 Waste treatment methods</b>	
<b>Product:</b>	Offer surplus and non-recyclable solutions to a licensed disposal company.
<b>Contaminated packaging:</b>	Dispose of as unused product.

## SECTION 14: TRANSPORT INFORMATION

<b>14.1 – UN Number</b>	ADR/ RID/ IATA: Not regulated as a dangerous good
<b>14.2 – Proper shipping name</b>	ADR/ RID/ IATA: Not regulated as a dangerous good
<b>14.3 – Hazard class</b>	ADR/ RID/ IATA: Not regulated as a dangerous good
<b>14.4 – Packing group</b>	ADR/ RID/ IATA: Not regulated as a dangerous good
<b>14.5 – Environmental hazards</b>	ADR/ RID/ IATA/ IMDG: Not regulated as a dangerous good

<b>14.6 – Special precautions for the user</b>	Not required
<b>14.7 – Transport in bulk information</b>	Not applicable

**SECTION 15: OTHER REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Contains no REACH substances with Annex XVII restrictions. Contains no substance on the REACH candidate list.  
Contains no REACH Annex XIV substances.

**15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

**United States of America:**

Regulatory Status Classified in accordance with Appendix A, Appendix B and Appendix F of the OSHA Hazard Communication Standard 29 CFR §1910.1200. Regulatory References OSHA Hazard Communication Standard 29 CFR §1910.1200

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

See section 2 for more information

**Clean Water Act/ Clean Air Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act or Clean Air Act.

**US State Regulation****State Right to Know:**

Glycerol (CAS-No. 56-81-5) can be found on the following state Right-to-Know lists: Pennsylvania, Minnesota, Massachusetts, New Jersey, Rhode Island

Sodium azide (CAS-No. 26628-22-8) can be found on the following state Right-to-Know lists: Pennsylvania, Minnesota, Massachusetts, New Jersey, Rhode Island

Tween 20 (Cas-No. 9005-64-5) can be found on the following state Right-to-Know lists: Pennsylvania, Minnesota, Massachusetts, New Jersey, Rhode Island

TS-769099 (RNAstable LB) can be found on the following state Right-to-Know lists: Pennsylvania, Minnesota, Massachusetts, New Jersey, Rhode Island

**California Directors List of Hazardous Substances**

The following ingredients are listed or exempt: TS-769099

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**SECTION 16: OTHER INFORMATION****Full text of H-Statements referred to under section 3.**

H300 Fatal if swallowed.

H310 Fatal in contact with skin.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

EUH032 Contact with acids liberates very toxic gas.

**Further information**

To the best of our knowledge, the information contained herein is accurate and complete. However, we can neither guarantee nor assume any liability whatsoever for the accuracy or completeness of the information contained in this MSDS. Final determination of suitability of any material is the sole responsibility of the user, as health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. All materials and mixtures may present unknown hazards and should be used with caution. No warranty is made, either express or implied.