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

Identification of the substance or mixture:

mixture

Product code:

292

Product name:

GEL-SAFE 1000X in DMSO

Company/undertaking identification:

Poly Creative New Materials, Ltd.

Rm. 1, 4F., No. 15, Aly. 15, Ln. 71, Changyu St., Sanmin Dist., Kaohsiung City 807, Taiwan (R.O.C.)

+886-926159317

24 hour Emergency Response for Hazardous Materials:

+886-926159317

SECTION 2: Hazards identification

Signal Word:

WARNING

Hazard pictograms:

None

Health hazards:

Not Hazardous

Physical hazards:

GHS Physical Hazard 1: Flammable liquids

GHS Physical Hazard Category Number: Category 4

Environmental hazards:

Not Hazardous

Hazard Statements:

H227 - Combustible liquid

Precautionary Statements:

Prevention:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response:

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

Storage:

P403 - Store in a well-ventilated place

Disposal:

P501 - Dispose of contents/ container to an approved waste disposal plant

Other hazards:

Not Applicable

HMIS:

Health: 1

Flammability: 2 Reactivity: 0

SECTION 3: Composition/information on ingredients

Component	CAS#	EINECS#	Weight %
dimethylsulfoxide	67-68-5	200-664-3	95-100
GEL-SAFE	Not found	Not found	<0.5

SECTION 4: First aid measures

Description of first aid measures:

Skin contact:

Rinse with plenty of water. Immediate medical attention is not required.

Eye contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Ingestion:

Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

Inhalation:

Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

Notes to Physician:

Treat symptomatically.

Most important symptoms and effects, both acute and delayed:

Not Applicable.

Indication of any immediate medical attention and special treatment needed:

None.

SECTION 5: Firefighting measures

Extinguishing media:

Suitable extinguishing media:

Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

Unsuitable extinguishing media:

No information available.

Special hazards arising from the substance or mixture:

No information available.

Advice for fire-fighters:

Standard procedure for chemical fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Use personal protection equipment. See Section 8 for more detail.

Environmental precautions:

No special environmental precautions required.

Methods and material for containment and cleaning up:

Soak up with inert absorbent material.

Reference to other sections:

See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling:

Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities:

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Specific end use(s):

For research use only.

SECTION 8: Exposure controls/personal protection

Control parameters:

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
dimethylsulfoxide	None	None	None	None
GEL-SAFE	None	None	None	None

Engineering measures:

Ensure adequate ventilation, especially in confined areas

Exposure controls:

Personal Protective Equipment:

Respiratory protection:

In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Hand protection:

Wear suitable gloves Glove material: Compatible chemical-resistant gloves.

Eye protection:

Tight sealing safety goggles.

Skin and Body Protection:

Wear suitable protective clothing.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls:

No special environmental precautions required.

SECTION 9: Physical and chemical properties

Appearance: liquid	Odor: No data available
pH : 6-8	Melting point / melting range: 18 – 19 °C
Boiling point / boiling range : 188 – 190 °C	Flash point: 87 – 89 °C
Autoignition Temperature : 214 – 216 °C	Decomposition temperature: No data
	available
Evaporation rate: No data available	Flammability (solid, gas): No data available
Upper explosion limit: 61% - 64%	Lower explosion limit: 2.4% - 2.8%
Vapor Pressure: No data available	Relative density: No data available
Specific gravity: No data available	Solubility: No data available
Partition coefficient: No data available	n-octanol/water: No data available
Explosive properties: No data available	Other information: No data available

SECTION 10: Stability and reactivity

<u> </u>
Reactivity: None known.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: Hazardous reaction has not been reported.

Conditions to avoid: No information available.

Incompatible materials: Strong acids. Strong oxidizing agents.

Hazardous decomposition products: No data available.

SECTION 11: Toxicological information

Information on toxico	ological effects:		
Chemical Name	LD50 (oral,rat/mouse)	LD50 (dermal,rat/rabbit)	LC50 (inhalation,rat/mou se)
dimethylsulfoxide	14500 mg/kg Oral LD50	>40000 mg/kg bw	>5000 mg/l
GEL-SAFE	No data available	No data available	No data available

Principal Routes of Exposure:

Irritation: Mild skin irritant, Mild eye irritation, Components of the product may be absorbed into the body through the skin.

Corrosivity: Conclusive but not sufficient for classification. **Sensitization**: Conclusive but not sufficient for classification.

STOT - Single Exposure: Conclusive but not sufficient for classification. **STOT - Repeated Exposure**: Conclusive but not sufficient for classification.

Carcinogenicity: Conclusive but not sufficient for classification.

Mutagenicity: Substances which cause concern for man owing to possible mutagenic effects but for which the available information is not adequate for making a satisfactory assessment.

Reproductive toxicity: Conclusive but not sufficient for classification **Aspiration hazard**: Conclusive but not sufficient for classification

SECTION 12: Ecological information

Toxicity:					
Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Da	Microtox Data	log Pow
dimethylsulf oxide	Skeletonem a costatum EC5012350 - 25500 mg/L (96 h)	Daphnia species EC50=7000 mg/L (24 h)	No data available	No data available	logPow-2.03
GEL-SAFE	No data available	No data available	No data available	No data available	No data available

Persistence and degradability: Inherently biodegradable.

Bioaccumulative potential: Material does not bioaccumulate.

Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other adverse effects: No information available.

SECTION 13: Disposal considerations

Waste treatment methods:

The generation of waste should be avoided or minimized wherever possible. Empty

containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG: Not classified as dangerous in the meaning of transport regulations.

UN number: Not Applicable.

UN proper shipping name: Not Applicable.

Transport hazard class(es): Not Applicable.

Packing group: Not Applicable.

Environmental hazards: Not Applicable.

Special precautions for user: Not Applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not Applicable.

SECTION 15: Regulatory information

Component	US TSCA
dimethylsulfoxide	Listed
GEL-SAFE	NOT FOUND

US Federal Regulations:

SARA 313:

This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):

This product does not contains HAPs.

US State Regulations:

California Proposition 65:

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class:

B3 - Combustible liquid



This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

Revision number: 1.

Revision date: 2019/07/30

For Research Use Only. Not for use in diagnostic procedures.

References:

• ECHA: http://echa.europa.eu/

TOXNET: http://toxnet.nlm.nih.gov/

eChemPortal: http://www.echemportal.org/

• LOLI database: https://www.chemadvisor.com/loli-database

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE