

February 8, 2018

		Safety Data Sheet
1. IDENTIFICATION OF	THE SUBSTAN	CE/PREPARATION AND THE COMPANY/UNDERTAKING
Product name	POLARIC-MLI	
Product code	GC2031, GC2035	5
Company name	GORYO Chemica	al, Inc.
Address	EAREE Bldg. 5F	, Kita 8 Nishi 18-35-100 Chuo-ku, Sapporo 060-0008, Japan
Department	Product Develop	ment Div.
Tel	+81-11-624-5860	
Fax	+81-11-351-1822	
E-mail	info@goryochemi	<u>cal.com</u>
2. HAZARDS IDENTIFI	CATION	
GHS classification	n	
Classification of t	he substance or mix	xture
PHYSICAL HAZ	ZARDS	Classification not possible
HEALTH HAZA	RDS	Classification not possible
ENVIRONMEN'	TAL HAZARDS	Classification not possible
Label elements		
Pictograms or ha	azard symbols	None
Signal word		No signal word
Hazard statemer	nts	None
Precautionary st	atements	None
B. COMPOSITION/INFC		NGREDIENTS
Substance or Mix	ture Substa	unce
Compound name	POLA	RIC-MLI
Percent	$\geq 90\%$	(LC)
4. FIRST AID MEASURI	ES	
Skin contact		
• Wash	off immediately wi	th plenty of water. If symptoms persist, call a physician.
• If ski	n stimulates or rash	h appears, call a physician.
Eye contact		
	e thoroughly with pl	lenty of water, also under the eyelids. If symptoms persist, consult a
physi		
		s when wash with water.
Inhalation	·	
	ove to fresh air imm	ediately, give a rest and keep warm covering the body with blanket, and
	n medical attention	
	ling bad, call a phys	
Ingestion	g son, sun a prije	
	e out mouth thoroug	ably with water.
	ling bad, call a phys	
Protection of first		
		ersonal protective equipment, such as rubber gloves and airtight goggles.
5. FIRE-FIGHTING ME		
Suitable extingui		Water spray, Alcohol resistance, Powder, Carbon dioxide
Specifically dange	-	Thermal decomposition can lead to release of irritating and toxic gase
		and vapors.
Extinguishing me	thod	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is

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used. Uninvolved persons should evacuate to a safe place. In case of fire

in the surroundings: Remove movable containers if safe to do so. Use personal protective equipment as required

Protection of fire-fighters 6. ACCIDENTAL RELEASE MEASURES

Personal precautions

- · Go to the windward, and wearing protective clothing during procedures is imperative.
- · Keep away the people under lee and seal off by roping spill site.
- Keep away near inflammables swiftly and prepare fire-fighting equipment.

Environmental precautions

• Prevent product from entering drains.

Methods and materials for containment and cleaning up

• Do not touch spilled material without suitable protection. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

7. HANDLING AND STORAGE

Handling

Technical measures

- Handling is performed in a well-ventilated place.
- $\boldsymbol{\cdot}$ Avoid contact with skin, eyes and clothing.
- \cdot Wear suitable protective equipment.
- · Wash hands and face thoroughly after handling.
- · Use a local exhaust if dust or aerosol will be generated.

Advice on safe handling

- Handle in accordance with good industrial hygiene and safety practice.
- · Vessel shouldn't be treated violently, such as rolling, shocking or dragging.

Storage

- Storage conditions
 - Keep container tightly closed. Store in a dark place under -20 degrees Celsius.
 - Avoid long storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

	Engineering controls	Install a closed system or local exhaust.
		Install safety shower and eye bath.
	Control parameters	Not set up
	Personal protective equipment	
	Respiratory protection	Dust respirator
	Hand protection	Protective gloves
	Eye protection	Safety glasses
	Skin and body protection	Protective clothing. Protective boots, if the situation requires.
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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (color/form)	Reddish orange/powder
Odor	Odorless
pH	No data available
Melting point/freezing point	No data available
Boiling Point/Range	No data available
Flash Point	No data available
Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Density	No data available
Solubility(ies)	
[Water]	No data available
[Other solvents]	
Soluble	Dimethyl sulfoxide, Dichloromethane, Methanol

Firing point No dat	ta available
Decomposition temperature No dat	ta available
10. STABILITY AND REACTIVITY	
Stability	Stable under proper conditions.
Reactivity	None under normal processing.
Incompatible materials	Strong oxidizing agents, reducing agents
Hazardous Decomposition Products	None under normal use.
11. TOXICOLOGICAL INFORMATION	
Acute Toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory sensitization	No data available
Skin sensitization	No data available
Reproductive cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
STOT-single exposure	No data available
STOT-repeated exposure	No data available
Aspiration hazard	No data available
12. ECOLOGICAL INFORMATION	
Ecotoxicity effects	No information available
Mobility	No information available
Biodegradation	No information available
Bioaccumulation	No information available
Hazard to the ozone layer	No information available
13. DISPOSAL CONSIDERATIONS	
Chemical materials	
• Dispose of in accordance	with local regulations.
Polluted vessels and package	
Polluted vessels and package • Dispose of in accordance	
Polluted vessels and package • Dispose of in accordance 14. TRANSPORT INFORMATION	with local regulations.
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Proper shipping name UN classification Subsidiary hazard class Packing group Environmentally Hazardous No informa Substance

No information available

15. REGULATORY INFORMATION

Not applicable

16. OTHER INFORMATION

· International Chemical Safety Card (ICSC) database in Japanese (National Institute of Health Sciences)

• This MSDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity.

- Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used.
- · Some new information or amendments may be added afterwards.
- If the products are to be used far behind the expected time of use or if you have any questions, please feel free to contact us.