MATERIAL SAFETY DATA SHEET

1 IDENTIFICATION	
Details of the supplier of the	he safety data sheet :
Company	: Nanohelix Co., Ltd.
Address	: 43-15, Techno 5-ro, Yuseong-gu Deajeon 34014, South Korea
Telephone Number	: +82-42-867-9055
Fax Number	: +82-42-867-9057
http://www.nanohelix.net	
Information department :	
Quality control, Nanoheli	ix Co., Ltd.
E-mail	: info@nanohelix.net
Product Name	: Ready-2x-Go [Power-Pfu] (without dye)
U.N.Number	: None allocated.
Dangerous Goods Class	: None allocated.
and Subsidiary Risk	
Hazchem Code	: None allocated.
Poison Schedule	: None allocated.
Use	: Mixture used in DNA amplification

2 HAZARDS IDENTIFICAT	ION
Hazard pictograms	
	GHS08
Signal word	: Warning.
Hazard statement	: Causes mild skin irritation.
Precautionary statement	: Wash hands thoroughly after handling.
Response	: If skin irritation occurs – Get medical advice/ attention, IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists – Get medical advice/ attention.
Most Important Hazards	: Few adverse humna health effects are anticipated.
Specific Hazards	: Not available.
GHS Classification	: Classification not possible.

3 COMPOSITION/ INFORM	MATION ON INGREDIENTS	
Substance / Mixture	: Mixture	
Description Hazardous ingredients		azardous substances. The exact he hazardous substances may be
Name	CAS No.	Weight (%)
Glycerol	56-81-5	>= 1 - < 5

: In case of irritation by inhaling this product, move affected person
to fresh air and await recovery. Call a POISON CENTER or doctor
if you feek unwell.



Skin Contact Eye Contact	 Wash with plenty of clean water, immediately. Rinse cautiously with water several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	: Try to get the affected person to vomit as much as possible. Seek medical attention, immediately.

5 FIRE FIGHTING MEASURES	
Extinguishing Media	: Water, Carbon Dioxide, Foam, Dry Chemical Powder
Protection of fire-fighters	: Fire-fighting should be done from the windward side of fire area. Firefighters should wear proper protective equipment in case of large scale fire.

6 ACCIDENTAL RELEASE MEASURES		
Personal Precautions	: Wear protective gear to avoid eye/skin contact and inhalation.	
Environmental Precautions	: Avoid disposition to the environment.	
Methods for Cleaning up	: Use cloth, paper or anything similar to soak up the solution leaking out of the container. Take up under vacuum using dust collecting filter.	

7 HANDLING AND STORA	AGE
HANDLIING	
Technical Measures	: Wear protective equipments and avoid contact with eyes and skin. Avoid substance contact. After handling, wash hands completely.
Precautions	: Handle with ventilation and local exhaust system.
Safe Handling Advice	: Keep the handling area always clean.
STORAGE	
Storage Conditions	: Store at about -20°C.
Packaging Materials	: Store in the original package.

8 EXPOSURE CONTROLS	PERSONAL PROTECTION
ENGINEERING MEASURES	: Set up good ventilation and exhaust system in the work area.
PERSONAL PROTECTIVE	
EQUIPMENT	
Respiratory Protection	: Wear a dust mask when needed.
Hand Protection	: Wear chemical safety gloves.
Eye Protection	: Wear protective eyeglasses or chemical safety goggles.
Skin and Body Protection	: Wear lab coat when needed.

9 PHYSICAL AND CHEMICAL PROPERTIES		
Appearance	: Liquid	
Color	: No data available.	
Odor	: None.	
pН	: No data available.	
Flash point	: Not flammavility.	
Boiling point	: Not available.	
Melting point	: Not available.	

10 STABILITY AND REAC	CTIVITY	
Stability	: Stable at less than -20°C.	
Possible Hazardous Reac	tions : Nothing particular.	
Conditions to Avoid	: High temperature, ignition sources, direct sunlight.	



Material to Avoid	: Strong acids, strong alkalines and strong oxidizers.
Hazardous Decomposition Product	: Not available.
TOXICOLOGICAL INFOR	MATION
Acute toxicity	: Not available.
Local Effects	: May cause eye and skin irritation.
Toxicological information on	: Glycerol
the component of this product	
Acute toxicity (LD50)	: Oral-mouse: 4,090mg/kg
	Oral-rat: 12.6g/kg

12 ECOLOGICAL INFORMATION	
Mobility	: Soluble in water and diffusible into water environment.
Persistence/Degradability	: Glycerol, enzyme, antibody, and deoxynucleotide are biodegradable.
Bioaccumulation	: Not available.

13 DISPOSAL CONSIDERATION		
Waste from Residues	: Dispose of in accordance with all applicable local and national laws and regulations.	
Contaminated Packaging	: Dispose of in accordance with all applicable local and national laws and regulations.	
14 TRANSPORT INFORMATION		

International Regulations	
UN Classification Number	: Not classified. Follow all of the laws and regulations in your respective country.
Specific Precautions	: To prevent packages from breaking, handle with care.

15 REGULATORY INFORMATION

Follow all of the laws and regulations in your country.

16 OTHER INFORMTION

The data provided in this Material Safety Data Sheet is based on current experience and knowledge. The purpose of this Material Safety Data Sheet is to describe products in terms of their safety requirements. This data given is designed only as a guidance for safe handling, use, storage, transportation, disposal and is not to be considered quality specification or warranty. The above details do not imply any guarantee concerning composition or performance of this product.