



issued 2011/Apr./22

revised 2015/8/21

**MATERIAL SAFETY DATA SHEET****CHEMICAL IDENTITY**

Polyethylene Glycol

**1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER**

PRODUCT NAME: Signal Booster, Signal Booster Neo  
Signal Booster Immunostain and  
components of below ELISA kits;  
HB Pre-S1 antigen Quantitative ELISA kit, Rapid (BCL-S1HP-01)  
HB Pre-S2 antigen Quantitative ELISA kit, Rapid (BCL-S2HP-01)  
Urine Antibody detection kit for Visceral Leishmaniasis (BCL LEI-01)

PRODUCT CODE: BCL-105,BCL-110,BCL-125,BCL-110A,BCL-125A,BCL-110B,BCL-125B, BCL-  
IS,BCL-ISF,BCL-ISM, BCL-ISS, BCL-SBN-01,BCL-SBN-02,BCL-DBR, BCL-DBR1,

CHEMICAL IDENTIFICATION: Polyethylene Glycol

CONTENT IN THE PRODUCT: below 6%

RECOMMENDED USE: Western blotting, ELISA, Immunostaining (for research use only)

MANUFACTURER : Beacle Inc.

SUPPLIER : Beacle Inc.  
Address: 25-10 Kamikazan-Sakajiri, Yamashina-ku, Kyoto, Japan  
Tel: +81-75-582-8505  
Fax: +81-75-582-6055  
Emergency: +81-75-582-8505

(THE BELOW DESCRIPTION IS APPLIED FOR THE IDENTIFIED CHEMICAL OF 100%)

**2. HAZARDS IDENTIFICATION**

SYMBOL : -----

HAZARD STATEMENTS, including R-phrase : -----

ADDITIONAL HAZARD STATEMENTS : May be harmful if inhaled and ingested.  
May cause eye and skin irritation.

PRECAUTIONARY STATEMENTS, including S-phras -----

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CHEMICAL IDENTITY : Polyethylene Glycol

FORMULA :  $\text{H}(\text{OCH}_2\text{CH}_2)_n\text{OH}$

MOLECULAR WEIGHT : not identified

CAS NUMBER : 25322-68-3

TSCA INVENTORY : Listed

EINECS No. : Not listed

EC INDEX NUMBER : Not listed

**4. FIRST AID MEASURES**

GENERAL ADVICE : Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

INHALATION : Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.

SKIN CONTACT : Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.

EYE CONTACT : Remove any contact lenses at once. Flush eyes well with a large amount of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.

INGESTION : Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Consult a physician.

**5. FIRE FIGHTING MEASURES**

EXTINGUISHING MEDIA : Carbon dioxide, dry chemical powder, foam, water

FIRE & EXPLOSION HAZARDS : Toxic, irritating dust or smoke may be emitted.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS : Firemen should wear normal protective equipment(full bunker gear)and positive-pressure self-contained breathing apparatus.

**6. ACCIDENTAL RELEASE MEASURES**

PERSONAL PRECAUTIONS : Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin

ENVIRONMENTAL PRECAUTIONS : Prevent spills from entering sewers, watercourses or low areas.

METHODS FOR CLEANING UP : Do not touch spilled material without suitable protection(See section 8). 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**

PRECAUTION FOR SAFE HANDLING : Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection.

CONDITIONS FOR SAFE STORAGE : Store away from sunlight in well-ventilated dry place at room temperature. Keep container tightly closed.

INCOMPATIBILITIES : Oxidizers

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

ENGINEERING MEASURES :	Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.
VENTILATION :	Local Exhaust ; Necessary, Mechanical(General) ; Recommended
INDIVIDUAL PROTECTION MEASURES ;	
Respiratory protection :	Use a NIOSH/MSHA or European Standard EN149 approved respirator if the vapor concentrations exceed regulatory guidelines.
Hand protection :	Chemical resistant gloves
Eye protection :	Safety glasses(goggles)
Skin protection :	Protective clothing
CONTROL PARAMETER :	
OSHA Final Limits :	None established
ACGIH TLV(s) :	None established
<b>9. PHYSICAL AND CHEMICAL PROPERTIES</b>	
APPEARANCE :	White - nearly white, flake
ODOUR :	Almost odourless
pH :	4.5-7.5 (50 g/l at 25 °C= 77 °F)
FREEZING POINT :	50-65 °C= 122-149 °F
INITIAL BOILING POINT :	Not available
FLASH POINT :	Not available
FLAMMABILITY (solid, gas) :	Not available
EXPLOSIVE LIMITS :	Not available
VAPOR PRESSURE :	<0.01 hPa (20 °C= 68 °F)
SPECIFIC GRAVITY :	1.128
SOLUBILITY IN ;	
WATER :	Freely soluble (550 g/L at 20 °C= 68 °F)
PARTITION COEFFICIENT :	Not available
AUTOIGNITION TEMPERATURE :	420 °C= 788 °F
DECOMPOSITION TEMPERATURE :	>220 °C= 428 °F
VISCOSITY :	200 - 400 m pa/s
<b>10. STABILITY AND REACTIVITY</b>	
CHEMICAL STABILITY :	Will not occur.
CONDITIONS TO AVOID :	Sunlight, heat
INCOMPATIBLE MATERIALS :	Oxidizers
HAZARDOUS DECOMPOSITION PRODUCTS :	Carbon monoxide may be formed.
<b>11. TOXICOLOGICAL INFORMATION</b>	
ACUTE TOXICITY(oral/dermal/inhalation) :	LD50(ori,rat): 50gm/kg(34ZIAG -,747,1969) LD50(ip,rat): 6790gm/kg(ARZNAD 3,451,1953)
SKIN CORROSION/IRRITATION :	rabbit; 500mg; Mild(UCDS** 4/9/1965)
EYE DAMAGE/EYE IRRITATION :	rabbit; 500mg/24H; Mild(85JCAE -, 1413,1986)
RESPIRATORY OR SKIN SENSITIZATION :	Not available
GERM CELL MUTAGENICITY :	DNA damage; rat; cells; 100gm/L(PNASA6 72,4288,1975) Cytogenetic analysis; hamster; cells; 50 pph(DKBSAS 240,228,1978)
TOXIC TO REPRODUCTION :	Not available
STOST-SINGLE EXPOSURE :	Not available
STOST-REPEATED EXPOSURE :	Not available
ASPIRATION TOXICITY :	Not available
CARCINOGENICITY :	Not available
ADDITIONAL INFORMATION ;	
NTP :	Not listed
IARC :	Not listed
OSHA :	Not listed
ACGIH :	Not listed
<b>12. ECOLOGICAL INFORMATION</b>	
ECOTOXICITY :	Not available
PERSISTENCE AND DEGRADABILITY :	This material is biodegradable.
BIOACCUMULATION POTENTIAL :	Not available
MOBILITY IN SOIL :	Not available
OTHER ADVERSE EFFECTS :	WGK: 1
<b>13. DISPOSAL CONSIDERATION (INCLUDING CONTAINER)</b>	
Burn in a chemical incinerator equipped with an afterburner and scrubber in accordance with all applicable regulations. Any disposal After contents are completely removed, dispose of its container at hazardous or special waste collection point. (in accordance with	
<b>14. TRANSPORT INFORMATION</b>	
IATA :	Not Restricted.
MARINE POLLUTANT :	Yes
DOT(Department of Transportation) :	Not a Hazardous Material for DOT shipping.
<b>15. REGULATORY INFORMATION</b>	
US REGULATIONS ;	
TSCA CHiPs,	
EPA :	CERCLA RQ= Not listed EPCRA TPQ= Not listed
OSHA :	TQ= Not listed
<b>16. OTHER INFORMATION INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS</b>	
No specific notes	

The information described above is believed to be correct to be the best of our knowledge and information but does not purport to be all inclusive and shall be used only as a guide. The product should be used by expert persons having knowledge and skill with their own risk. Beacle shall not be held liable for any damageresulting from handling or from contact with the above material.