BRG Products

Tianjin BRG Products Co., Ltd.

Material Safety Data Sheet

Propylene glycol

Section 1. Chemical Product and Company Identification			***Page Number: 1***
Trade Name:	Propylene glycol	**Product Serial #:**	BRG-04
Synonym:	1,2-propanediol 1,2-dihydroxypropane	**CAS #:**	57-55-6
Chemical Name:	Propylene glycol	**UN #:**	N/A
Chemical Formula:	$CH_3CHOHCH_2OH$	**Packaging Group:**	N/A
Molecular Weight:	76.09	**EMERGENCY CALL**	
Chemical Family:	Not available.	+86-22-23528561	
Supplier Information:	Tianjin BRG Products Co., Ltd. Address: Kangning Tower B, Xikang Ave., Heping Dist., Tianjin, 300070 Tel #: +86-22-23528561 Fax #: +86-22-23523959		

Section 2.Composition and Information on Ingredients				
Ingredients Name	**CAS Number**	**TWA(mg/m^3)**	**CEIL(mg/m^3)**	**% By Weight or Volume**
Propylene glycol	57-55-6			100

Section 3. Hazards Identification

Potential Acute Health Effects

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant,permeator), of eye contact (irritant),of inhalation.

Potential Chronic Health Effects

Slightly hazardous in case of skin contact (sensitizer).

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

The substance maybe toxic toCNS.Reapted or prolonged exposure tothesubstance canproduc organs damage.

Section 4. First Aid Measures

Eye Contact:	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.
Skin Contact:	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Continued On Next Page

Serious Skin Contact:	Wash with a disinfectant soap cover thecontaminatedskin with a nanti-bacterial cream.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation:	Not available.
Ingestion:	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion:	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product:	May be combustible at high temperature.
Auto-Ignition Temperature:	371℃（699.78℉）
Flash Points:	CLOSED CUP:99℃(210.2℉)OPEN CUP:107 ℃ (224.6 ℉)(Cleveland)
Flammable Limits:	LOWER: 2.6% UPPER: 12.5%
Products of Combustion:	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances:	Slightly flammable to flammable in presence of heat
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions:	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards	When heated to decomposition it emits acrid smoke and irritating fumes.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill:	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Ifnecessary: Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminatedsurface and dispose of according to local and regional authority requirements.
Large Spill:	Absorb with an inert material and put the spilled material in an appropriate waste disposal. Neutralize the residue with a dilutesolution of acetic acid. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through thesanitary system.

Section 7. Handling and Storage

Precautions:	Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

Continued On Next Page

Storage:	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23℃(73.4℉)

Section 8. Exposure Controls/Personal Protection

Engineering Controls:	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection:	Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves
Personal Protection in Case of a Large Spill:	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits:	TWA:10(mg/m^3) from AIHA. Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance:	Liquid
Odor:	Practically Odorless.
Taste:	Practically Tasteless
Color:	Colorless Clear
Molecular Weight:	76.1 g/mole
pH (1% soln/water):	Not available.
Boiling Point:	188℃(370.4℉)
Melting Point:	-59°C (-74.2°F)
Critical Temperature:	Not available.
Specific Gravity:	1.036(Water = 1)
Vapor Pressure:	0 kPa (@ 20°C)
Vapor Density:	2.62 (Air = 1)
Volatility:	Not available.
Odor Threshold:	Not available.
Water/Oil Dist. Coeff.:	The product is more soluble in water ;log(oil/water)=-0.9
Ionicity (in Water):	Not available.
Dispersion Properties:	See solubility in water,acetone
Solubility:	Soluble in cold water, hot water,acetone

Section 10. Stability and Reactivity Data

Stability:	The product is stable.
Instability Temperature:	Not available.
Conditions of Instability:	Incompatible materials, excess heat, exposure to moist air or water.
Incompatibility with various substances	Reactive with oxidizing agents, reducing agents acids, alkalis.
Corrosivity:	Non-corrosive in presence of glass.

Continued On Next Page

Special Remarks on Reactivity	Hygroscopic; keep container tightly closed. Incompatible with chloroformates.strong acids, caustics, aliphatic amines, isocyanates, sliver nitrate,reducing agents
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information	
Routes of Entry:	Absorbed through skin. Eye contact.
Toxicity to Animals:	Acute oral toxicity (LD50): 18500mg/kg [Rabbit]. Acute dermal toxicity (LD50): 20800 mg/kg [Rabbit].
Chronic Effects on Humans:	May cause damage to the following organs:central nervous systerm(CNS).
Other Toxic Effects on Humans:	Hazardous in case of ingestion . Slightly hazardous in case of skin contact (irritant,permeator), of ingestion.
Special Remarks on Toxicity to Animals:	Not available.
Special Remarks on Chronic Effects on Humans:	May affect genetic material (mutagentic).May cause adverse reproductive effect and birth defects (teratogenic) based on animal test date
Special Remarks on other Toxic Effects on Humans:	Acute Potenial Health Effects: Skin: It may cause mild skin irritation. Eyes: Can cause mild eye irritation.with some immediate ,transitory stinging ,lacrimation blepharohpansm and mild transient conjunctival hyperemia.there is no residual discomfort or injury once it is washed away Inhalation:May cause respiratory tract irritation. Ingestion:It may cause gastrointestinal tract irritation .It may affect behavior /central nervous system,depression,general anesthetic ,convulsions seizures,blood ,respiration,cardiovascular systerm,endocrine systerm,urinary systerm. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may cause allergic contact dermatitis. Ingestion: Prolonged or repeated ingestion may be cause hyperglycemia and may affect behavior/CNS. Inhalation : Prolonged or repeated inhalation may affect behavior/CNS,and spleen.

Section 12. Ecological Information	
Ecotoxicity:	Ecotoxicity in water (LC50):>5000mg/l 24 hours 〔Goldfish〕.>10000mg/l 48 hours 〔guppy〕.>10000mg/l 48 hours 〔water flea〕
BOD5 and COD:	Not available.
Products of Biodegradation:	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation:	The product of degradation areless toxic than the product itself .
Special Remarks on the Products of Biodegradation:	Not available.

Continued On Next Page

Section 13. Disposal Considerations	
Waste Disposal:	Contents:when disposing of unused contents.comply with applicable regulatory and local procedures .Container:offer empty container to qualified recondition ,or crush and dispose of in an approved landfill or by other procedures approved by regulatory and local authorities.

Section 14. Transport Information	
DOT Classification:	Not a DOT controlled material (United States).
Identification	Not applicable.
Special Provisions for Transport	Not applicable.
DOT (Pictograms)	

Section 15. Regulatory Information		
Other Regulations:	Pennsylvania RTK: Propylene glycol TSCA 8(b) inventory: Propylene glycol; Minnesota : Propylene glycol	
Other Classifications:	WHMIS (Canada) CLASS	Not controlled under WHMIS (Canada).
	DSCL (EEC)	R21/22-Harmful in contact with skin and if swallowed S24/25-Aviod contact with skin and eyes

HMIS (U.S.A.):

National Fire Protection Association (U.S.A.)

Health
Flammability
Reactivity
Specific hazard

Protective Equipment:	
	Gloves.
	Lab coat.
	Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
	Splash goggles.

Continued On Next Page

Section 16. Other Information

Prepared By	Peter Yan , 2015-4
Notice to Reader	All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Tianjin BRG Products Co., Ltd., assumes no responsibility for the completeness or accuracy of the information contained herein.

Tianjin BRG Products Co., Ltd.

Address: Kangning Tower B, Xikang Ave., Heping Dist., Tianjin, 300070

Tel #: +86-22-23528561 **Fax #: +86-22-23523959**