SAFETY DATA SHEET
PROPYLENE GLYCOL

Revision Date 24-Dec-2021 Revision Number 4

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: 1,2-Propanediol

Synonyms: 1,2-Dihydroxypropane; Methylethylene glycol; Monopropylene glycol; Mono propylene glycol;Propane-1,2-diol; alpha-Propyleneglycol; 1,2-Propylene glycol ; Propylene glycol;

Company Identification:

Boxa Chemical Co.,Limited

Jiangjun Avenue 55#, Jiangning Area, Nanjing, China

For information and emergencies in China, call: +86-15365006308

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Chemical Name	Percent	EINECS/ELINCS
57-55-6	1,2Propanediol	99.5	200-338-0

SECTION 4: FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.
Notes to Physician: Persons with impaired kidney function may be more susceptible to the effects of this substance. Treat symptomatically and supportively.

SECTION 5: FIRE-FIGHTING MEASURES

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas
Extinguishing Media: Use alcohol foam. Cool containers with flooding quantities of water until well after fire is out.
Flash Point: 107 deg C (224.60 deg F)
Autoignition Temperature: 414 deg C (777.20 deg F)
Explosion Limits, Lower:2.6 vol %
Upper: 12.6 vol %
NFPA Rating: (estimated) Health: 0; Flammability: 1; Instability: 0

SECTION 6: ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Provide ventilation.

SECTION 7: HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
1,2-Propanediol	none listed	none listed	none listed

OSHA Vacated PELs: 1,2-Propanediol: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR ?910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Appearance: colorless viscous liquid

Odor: Odorless

pH: Not available.

Vapor Pressure: 0.08 mm Hg @ 20C

Vapor Density: 2.62

Evaporation Rate: Not available.

Viscosity: 0.581 P@25C

Boiling Point: 188.2 deg C

Freezing/Melting Point:-59 deg C

Decomposition Temperature: Not available.

Solubility: Miscible.

Specific Gravity/Density:1.0370g/cm3

Molecular Formula:C3H8O2

Molecular Weight:76.09

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, excess heat, exposure to moist air or water.

Incompatibilities with Other Materials: Oxidizing agents, reducing agents, acid chlorides, nitric acid, acid anhydrides, silver nitrate, hydrofluoric acid, chloroformates, moisture.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, acetic acid, propionaldehyde, lactic acid, pyruvic acid.
Hazardous Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

RTECS#:
CAS# 57-55-6: TY2000000
LD50/LC50:
CAS# 57-55-6:
Draize test, rabbit, eye: 100 mg Mild;
Draize test, rabbit, eye: 500 mg/24H Mild;
Oral, mouse: LD50 = 22 gm/kg;
Oral, rabbit: LD50 = 18500 mg/kg;
Oral, rat: LD50 = 20 gm/kg;
Skin, rabbit: LD50 = 20800 mg/kg;<BR.

Carcinogenicity:
CAS# 57-55-6: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.
Teratogenicity: Intraperitoneal, mouse: TDLo = 100 mg/kg (female 15 day(s) after conception) Effects on Embryo or Fetus - fetotoxicity (except death, e.g., stunted fetus).
Reproductive Effects: Intraperitoneal, mouse: TDLo = 100 mg/kg (female 11 day(s) after conception) Fertility - post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants).
Neurotoxicity: No information available.
Mutagenicity: DNA Inhibition: Subcutaneous, mouse = 8000 mg/kg.; Cytogenetic Analysis: Subcutaneous, mouse = 8000 mg/kg.; Cytogenetic Analysis: Hamster, Fibroblast = 32 gm/L.
Other Studies: Standard Draize Test: Administration into the eye (rabbit) = 100 mg (Mild). Standard Draize Test: Administration into the eye (rabbit) = 500 mg/24H (Mild). Standard Draize Test: Administration onto the skin (human) = 500 mg/7days (Mild). Standard Draize Test: Administration onto the skin (human) = 104 mg/3 days-Intermittent (Moderate).

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Fish: Goldfish: LC50 > 5000 mg/L; 24 Hr; Unspecified flea Daphnia: EC50 > 10000 mg/L; 48 Hr; Unspecified Guppy: LC50 > 10000; 48 Hr; Unspecified ria: Phytobacterium phosphoreum: EC50 = 710 mg/L; 30 min; Microtox test If released to water, 1,2-propanediol is expected to degrade relatively rapidly via biodegradation. If released to soil, relatively rapid biodegradation should also occur. Significant leaching in soil can be predicted.
Environmental: If released to the atmosphere, it is degraded rapidly by reaction with photochemically produced hydroxyl radicals (typical half-life of 32 hr). Physical removal from air by rainfall is possible.
Physical: No information available.
Other: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

SECTION 14: TRANSPORT INFORMATION

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	No information available.				No information available.
Hazard Class:					
UN Number:					
Packing Group:					

IMDG: NON-HAZARDOUS FOR SEA TRANSPORT

SECTION 15: REGULATORY INFORMATION

US FEDERAL

TSCA

CAS# 57-55-6 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any

Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 57-55-6 can be found on the following state right to know lists: Pennsylvania, Minnesota.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

Not available.

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 57-55-6: 0

Canada - DSL/NDSL

CAS# 57-55-6 is listed on Canada's DSL List.

Canada - WHMIS

This product does not have a WHMIS classification.

Canadian Ingredient Disclosure List

CAS# 57-55-6 is listed on the Canadian Ingredient Disclosure List.

Exposure Limits

SECTION 16: OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Boxa Chemical Co.,Limited. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Boxa Chemical Co.,Limited . has been advised of the possibility of such damages.