

BBC Biochemical

MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Information

Common Name:	Glycerol	Code:	8560, 8557
Supplier:	BBC Biochemical PO Box 1320 409 Eleanor Lane Mount Vernon, WA 98273 1-800-635-4477	MSDS#:	8560, 8557
Synonym:	Glycerin, 1,2,3-Propanetriol	Validation Date:	3-27-09
Trade Name:	Not available	Print Date:	3-27-09
Material Uses:	Not available	Responsible Name:	Dr. B
Manufacturer:	Integra Chemical Company 710 Thomas Ave SW Renton WA 98055 425-277-9244	In Case of Emergency: 1-800-424-9300 Chemtrec USA 1-202-483-7616 Chemtrec Intrl 1-800-635-4477	

Section 2. Composition and Information on Ingredients

Name	CAS#	% by Weight	Exposure Limits
1) Glycerin	56-81-5	100	Not available

Section 3. Hazards Identification

Physical State and Appearance	Clear to yellowish liquid.
Emergency Overview	Not available.
Routes of Entry	Eye contact, inhalation, ingestion, skin contact.
Potential Acute Health Effects	
Eyes	Irritation, may cause permanent damage.
Skin	Irritation.
Inhalation	Irritation to nose, throat and respiratory system.
Ingestion	May cause allergic reaction. Irritation to throat and respiratory system.
Potential Chronic Health Effects	Not available.
Medical Conditions Aggravated by Overexposure/Overexposure/Signs/Symptoms	Not available.

Section 4. First Aid Measures

Eye Contact	Immediately flush thoroughly with water for at least 15 minutes.
Skin Contact	Wash thoroughly with water. Remove contaminated clothing at once (launder before reuse); discard contaminated shoes.
Inhalation	Remove to fresh air; give artificial respiration if breathing has stopped.
Ingestion	If conscious, drink water. Do not induce vomiting, seek medical attention.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	Not available.
Auto-ignition Temperature	Not available.
Flash Points	Not available.
Flammable Limits	Not available.
Products of Combustion	Not available.
Fire Hazards in Presence Of Various Substances	Not available.
Explosion Hazards in	Thermal decomposition produces toxic fumes.

Presence of Various Substances**Fire Fighting Media and Instructions** CO₂, foam, water. Wear self-contained breathing apparatus and protective clothing.**Protective Clothing (Fire)****Special Remarks on Fire Hazards****Special Remarks on Explosion Hazards****Section 6. Accidental Release Measures****Small Spill and Leak** Evacuate the area of all unnecessary personnel. Wear suitable protective equipment listed under section VIII. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Take up and containerize for proper disposal as described under Waste Disposal Method. Comply with Federal, State and local regulations on reporting releases. Always contact a permitted waste disposer (TSD) to assure compliance with all current local, state and federal regulations.**Large Spill and Leak** Same as above.**Section 7, Handling and Storage****Handling** Do not breathe vapor or mist. Do not get in eyes, on skin, or on clothing.**Storage** Keep container tightly closed. Store away from heat, sparks, open flame.**Section 8. Exposure Controls / Personal Protection****Engineering Controls****Personal Protection****Eyes** Safety glasses with side shields must be worn at all times.**Body** Impervious protective clothing must be worn to prevent skin contact.**Respiratory** If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety supplier). Engineering and/or administrative controls should be implemented to reduce exposure. Material must be handled or transferred in an approved fume hood or with adequate ventilation.**Hands** Neoprene, nitrile or equivalent gloves.**Feet** Not available.**Personal Protection in Case of a Large Spill** Safety glasses with side shields, impervious protective clothing, respirator if necessary and neoprene, nitrile or equivalent gloves.**Product Name****Exposure Limits**

1)Glycerin Not available

Consult Local authorities before acceptable exposure limits.**Section 9. Physical and Chemical Properties**

Physical State and Appearance	Clear liquid.	Odor:	Odorless
Molecular Weight	92.1	Taste:	Not available.
Molecular Formula	C3H5(OH)3	Color:	Clear.
pH (1%/Water)	Not applicable.		
Boiling/Condensation Point	290 deg C		
Melting/Freezing Point	17.8 deg C		
Critical Temperature	Not applicable.		
Specific Gravity	1.2607		
Vapor Pressure	Not available.		
Vapor Density	3.1 Air=1		
Volatility	Not applicable.		
Odor Threshold	Not applicable.		
Evaporation Rate	Not available.		
VOC	Not available.		
Viscosity	Not available.		
Ionicity (in water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Miscible with water.		
Physical Chemical Comments	Not available.		

Section 10. Stability and Reactivity

Stability and Reactivity	Stable under normal temperatures and conditions.
Conditions of Instability	Avoid contact with ignition sources.
Incompatibility with Various Substances	Acids, oxidizers, strong alkalis. Contact with HCl may cause formation of the potent carcinogen, bischloromethyl ether.
Hazardous Decomposition Products	Metal•O, HCl, Cl, CO _x Carbon dioxide, carbon monoxide
Hazardous Polymerization	Not available.

Section 11. Toxicological Information

Toxicity to Animals	LD50: oral, rat: 17000 mg/kg; skin, rabbit: >10000 mg/kg LC50: inhalation, rat: >4 mg/L/6H
Chronic Effects on Humans	Not listed as a carcinogen.
Other Toxic Effects on Humans	
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on Other Toxic Effects on Humans	Not available.

Section 12. Ecological Information

Ecotoxicity	Not available.
BODS and COD	Not available.
Biodegradable/OEDC	Not available.
Mobility	Not available.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on The Products of Biodegradation	Not available.

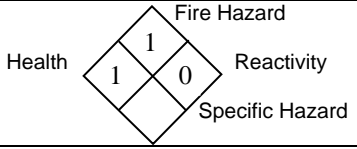
Section 13. Disposal Considerations

Waste Information	Not available.
Waste Stream	Not available.
Consult your local or regional authorities.	

Section 14. Transport Information

DOT Classification	Not hazardous
Marine Pollutant	Not available.
Hazardous Substances Reportable Quantity	Not available.
Special Provisions for Transport	Not applicable.
TDG Classification	Not controlled under TDG (Canada).
ADR/RID Classification	Not controlled under ADR (Europe).
IMO/IMDG Classification	Not controlled under IMDG.
ICAO/IATA Classification	Not controlled under IATA.

Section 15. Other Information

Label requirements			
Hazardous Material Information System (U.S.A.)	Health	1	National Fire Protection Association (U.S.A.)
	Fire Hazard	1	
	Reactivity	0	
	Personal Protection	B	
			
References			

**Other Special
Considerations**

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.