



Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name	HARLECO, Gelatin Fixative	Product Code	785
Manufacturer	EMD Chemicals Inc. P.O. Box 70 480 Democrat Road Gibbstown, NJ 08027 Prior to January 1, 2003 EMD Chemicals Inc. was EM Industries, Inc. or EM Science, Division of EM Industries, Inc.	Effective Date	12/11/2003
		Print Date	5/3/2004

For More Information Call

856-423-6300 Technical Service
Monday-Friday: 8:00 AM - 5:00 PM

In Case of Emergency Call

800-424-9300 CHEMTREC (USA)
613-996-6666 CANUTEC (Canada)
24 Hours/Day: 7 Days/Week

Synonym None.

Material Uses Laboratory Reagent

Chemical Family Phenol Solution

Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Glycerine	56-81-5	13-14
Phenol	108-95-2	1-2
Gelatin	9000-70-8	<1
Water	7732-18-5	>83

Section 3. Hazards Identification

Physical State and Appearance Liquid. (Homogeneous)

Emergency Overview WARNING !
CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS.
HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED.
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:
KIDNEYS, LUNGS, LIVER, SPLEEN, RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA, PANCREAS.

Routes of Entry Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Potential Acute Health Effects

Eyes Hazardous in case of eye contact (corrosive). Causes eye burns.

Skin Hazardous in case of skin contact (permeator, corrosive). Skin contact produces burns.

Inhalation Hazardous in case of inhalation (lung corrosive).

Ingestion Hazardous in case of ingestion. Do not ingest.

Potential Chronic Health Effects

Carcinogenic Effects This material is not known to cause cancer in animals or humans.

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Additional information See Toxicological Information (section 11)

**Medical Conditions
Aggravated by
Overexposure:**

Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4. First Aid Measures

Eye Contact

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Section 5. Fire Fighting Measures

**Flammability of the
Product**

Non-flammable.

**Auto-ignition
Temperature**

Not applicable.

Flash Points

Not applicable.

Flammable Limits

Not applicable.

Products of Combustion

COx

**Fire Hazards in Presence
of Various Substances**

Not applicable.

**Explosion Hazards in
Presence of Various
Substances**

Risks of explosion of the product in presence of static discharge: No.

Risks of explosion of the product in presence of mechanical impact: No.

**Fire Fighting Media
and Instructions**

Use DRY chemicals, CO₂, water spray or foam.

Protective Clothing (Fire)

Wear suitable protective clothing.

**Special Remarks on Fire
Hazards**

Not available.

**Special Remarks on
Explosion Hazards**

Thermal decomposition may release toxic and/or hazardous gases.

Section 6. Accidental Release Measures

Small Spill and Leak

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill and Leak Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Spill Kit Information No specific spill kit required for this product.

Section 7. Handling and Storage

Handling Avoid contact with eyes, skin and clothing. Do not ingest. Do not breathe vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Storage Keep container tightly closed. Keep container in a cool, well-ventilated area.

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 occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Eyes Face shield.

Body Full suit.

Respiratory Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Hands Gloves.

Feet Boots.

Protective Clothing (Pictograms)



Personal Protection in Case of a Large Spill Splash goggles. Full suit. Vapor 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.

Product Name

Exposure Limits

Glycerine

Belgium Minister of Labour (Belgium, 1998).
 VL: 10 mg/m³ 8 hour(s).
Tyterveyslaitos (Finland, 1998).
 TWA: 20 mg/m³ 8 hour(s).
INRS (France, 1996).
 VME: 10 mg/m³ 8 hour(s).
National Authority for Occupational Safety/Health (Ireland, 1999).
 OEL: 10 mg/m³ 8 hour(s).
Arbeidsinspectie (Netherlands, 1999).
 TGG 8 uur: 10 mg/m³ 8 hour(s).
EH40-OES (United Kingdom (UK), 1997).
 TWA: 10 mg/m³ 8 hour(s).
ACGIH (United States, 1994).
 TWA: 10 mg/m³ 8 hour(s). Form: Mist
OSHA Final Rule (United States, 1989).
 TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction
 TWA: 10 mg/m³ 8 hour(s). Form: Total dust
EH40-OES (United Kingdom (UK), 1997). Skin
 STEL: 39 mg/m³ 15 minute(s).
 STEL: 10 ppm 15 minute(s).
 TWA: 20 mg/m³ 8 hour(s).

Phenol

TWA: 5 ppm 8 hour(s).
ACGIH (United States, 1996). Skin
 TWA: 19 mg/m³ 8 hour(s).
 TWA: 5 ppm 8 hour(s).
NIOSH REL (United States, 1994). Skin
 CEIL: 60 mg/m³ 15 minute(s).
 CEIL: 15.6 ppm 15 minute(s).
 TWA: 19 mg/m³ 10 hour(s).
 TWA: 5 ppm 10 hour(s).
OSHA Final Rule (United States, 1989). Skin
 TWA: 19 mg/m³ 8 hour(s).
 TWA: 5 ppm 8 hour(s).
 Gelatin Not available.
 Water Not available.

Section 9. Physical and Chemical Properties

Odor	Phenol-like.
Color	Clear. Colorless.
Physical State and Appearance	Liquid. (Homogeneous)
Molecular Weight	Not applicable.
Molecular Formula	Not applicable.
pH	Not available.
Boiling/Condensation Point	The lowest known value is 99.9°C (211.8°F) (Water). Weighted average: 126.27°C (259.3°F)
Melting/Freezing Point	May start to solidify at 17.778°C (64°F) based on data for: Glycerine. Weighted average: 2.38°C (36.3°F)
Specific Gravity	Weighted average: 1.24 (Water = 1)
Vapor Pressure	The highest known value is <0.1 kPa (<1 mmHg) (@ 20°C) (Glycerine).
Vapor Density	The highest known value is 3.1 (Air = 1) (Glycerine).
Odor Threshold	Not available.
Evaporation Rate	0.36 (Water) compared to(n-Butyl Acetate =1)
LogK_{ow}	Not available.
Solubility	Soluble in water.

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Not available.
Incompatibility with Various Substances	Reactive with oxidizing agents.
Rem/Incompatibility	Avoid excessive heat.
Hazardous Decomposition Products	COx
Hazardous Polymerization	Will not occur.

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Section 11. Toxicological Information

RTECS Number:	Glycerine	MA8050000
	Phenol	SJ3325000
	Gelatin	LX8580000
	Water	ZC0110000
Toxicity	Acute oral toxicity (LD ₅₀): 27 mg/kg [Rabbit]. (Glycerine). Acute dermal toxicity (LD ₅₀): 53 mg/kg [Rabbit]. (Glycerine). Acute toxicity of the vapor (LC ₅₀): 570 mg/m ³ 1 hour(s) [Rat]. (Glycerine).	

Chronic Effects on Humans Not available.

Acute Effects on Humans Hazardous in case of eye contact (corrosive). Causes eye burns. Hazardous in case of skin contact (permeator, corrosive). Skin contact produces burns. Hazardous in case of inhalation (lung corrosive). Hazardous in case of ingestion.

Synergetic Products (Toxicologically) Not available.

Irritancy Draize Test: Not available.

Sensitization Not available.

Carcinogenic Effects This material is not known to cause cancer in animals or humans.

Toxicity to Reproductive System Not available.

Teratogenic Effects Not available.

Mutagenic Effects Not available.

Section 12. Ecological Information

Ecotoxicity Not available.

BOD5 and COD Not available.

Toxicity of the Products of Biodegradation The products of degradation are less toxic than the product itself.

Section 13. Disposal Considerations

EPA Waste Number U188

Treatment Specified technology-Contact your local permitted waste disposal site (TSD) for permissible treatment sites. Always contact permitted waste disposer (TSD) to assure compliance with all Current local, State and Federal Regulations.

Section 14. Transport Information

DOT Classification Proper Shipping Name: PHENOL SOLUTIONS
Hazard Class: 6.1
UN number: UN2821
Packing Group: III
RQ: Not applicable.



TDG Classification Not available.

IMO/IMDG Classification Not available.

ICAO/IATA Classification Not available.

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Section 15. Regulatory Information

U.S. Federal Regulations TSCA 8(b) inventory: Glycerine; Phenol; Gelatin; Water
 TSCA 8(d) H and S data reporting: Phenol: 1987
 SARA 302/304/311/312 extremely hazardous substances: Phenol
 SARA 302/304 emergency planning and notification: Phenol
 SARA 302/304/311/312 hazardous chemicals: Glycerine; Phenol
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Glycerine: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard; Phenol: Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard
 SARA 313 toxic chemical notification and release reporting: Phenol 1.5%
 Clean Water Act (CWA) 307: Phenol
 Clean Water Act (CWA) 311: Phenol
 Clean air act (CAA) 112 accidental release prevention: No products were found.
 Clean air act (CAA) 112 regulated flammable substances: No products were found.
 Clean air act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada) Class D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).
 Class D-2A: Material causing other toxic effects (VERY TOXIC).
 CLASS E: Corrosive liquid.

CEPA DSL: Glycerine; Phenol; Gelatin; Water

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

International Regulations

EINECS Glycerine 200-289-5
 Phenol 203-632-7
 Gelatin 232-554-6
 Water 231-791-2

DSCL (EEC) R26- Very toxic by inhalation.
 R21- Harmful in contact with skin.
 R38- Irritating to skin.
 R41- Risk of serious damage to eyes.

International Lists Australia (NICNAS): Glycerine; Phenol; Gelatin; Water
 Japan (MITI): Glycerine; Phenol; Water
 Korea (TCCL): Glycerine; Phenol; Gelatin; Water
 Philippines (RA6969): Glycerine; Phenol; Gelatin; Water
 China: No products were found.

State Regulations Pennsylvania RTK: Glycerine: (generic environmental hazard); Phenol: (environmental hazard, generic environmental hazard)
 Massachusetts RTK: Glycerine; Phenol
 New Jersey: Gelatin Fixative
 California prop. 65: No products were found.

Section 16. Other Information

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



Changed Since Last
Revision

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Notice to Reader

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