



Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name	Hemacolor, Solution I, HARLECO ®	Product Code	65044A
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	6/16/2005
		Print Date	7/15/2005

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	Methyl Alcohol
Material Uses	Analytical reagent.
Chemical Family	Alcohol.

Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Methanol	67-56-1	100

Section 3. Hazards Identification

Physical State and Appearance	Liquid. (Colorless.)
Emergency Overview	DANGER! POISON! FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. MAY BE FATAL IF SWALLOWED. MAY CAUSE BLINDNESS IF SWALLOWED. CANNOT BE MADE NON-POISONOUS. VAPOR HARMFUL. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: GASTROINTESTINAL TRACT, RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA.

Routes of Entry	Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.
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Potential Acute Health Effects

Eyes Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

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Skin Hazardous in case of skin contact (permeator, irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Inhalation Hazardous in case of inhalation (lung irritant).

Ingestion Extremely hazardous in case of ingestion. May be fatal or cause blindness if swallowed.

Potential Chronic Health Effects

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

Additional information See Toxicological Information (section 11)

Medical Conditions Aggravated by Overexposure:

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	Product will burn.
Auto-ignition Temperature	464.05°C (867.3°F)
Flash Points	Open cup: 15.9°C (60.6°F).
Flammable Limits	LOWER: 6% UPPER: 36.5%
Products of Combustion	These products are carbon oxides (CO, CO ₂).
Fire Hazards in Presence of Various Substances	Highly flammable in presence of open flames, sparks and static discharge, of heat, of oxidizing materials.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of static discharge: Highly flammable in presence of open flames, sparks and static discharge. Highly explosive in presence of open flames, sparks and static discharge. Risks of explosion of the product in presence of mechanical impact: No.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Protective Clothing (Fire)	Be sure to use an approved/certified respirator or equivalent.
Special Remarks on Fire Hazards	Dangerous fire and explosion risk. Container explosion may occur under fire conditions or when heated. Vapor may travel considerable distance to source of ignition and flash back.

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Special Remarks on Explosion Hazards Not available.

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 Keep away from heat. Keep away from sources of ignition. 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 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 The following EMD Chemicals Inc. SpillSolv® absorbent is recommended for this product: SX1330 Solvent Treatment Kit

Section 7. Handling and Storage

Handling Keep away from heat, sparks and flame. Keep container closed. Avoid breathing vapors or spray mists. Do not get in eyes, on skin, or on clothing. Do not ingest.

Storage 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 Splash goggles.

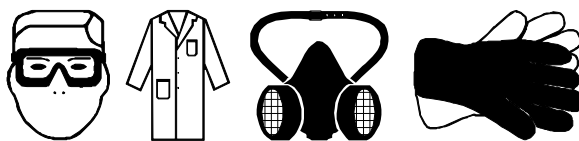
Body Lab coat.

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

Hands Gloves.

Feet Not applicable.

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

Methanol

Exposure Limits

ACGIH (United States, 1994). Skin

TWA: 262 mg/m³

STEL: 328 mg/m³

OSHA (United States, 1989). Skin

TWA: 260 mg/m³

STEL: 325 mg/m³

ACGIH (United States, 1994). Skin

STEL: 328 mg/m³ 15 minute(s).

STEL: 250 ppm 15 minute(s).

TWA: 262 mg/m³ 8 hour(s).

TWA: 200 ppm 8 hour(s).

NIOSH REL (United States, 1994). SkinSTEL: 325 mg/m³ 15 minute(s).

STEL: 250 ppm 15 minute(s).

TWA: 260 mg/m³ 10 hour(s).

TWA: 200 ppm 10 hour(s).

OSHA Final Rule (United States, 1989). SkinSTEL: 325 mg/m³ 15 minute(s).

STEL: 250 ppm 15 minute(s).

TWA: 260 mg/m³ 8 hour(s).

TWA: 200 ppm 8 hour(s).

Section 9. Physical and Chemical Properties

Odor	Characteristic. Alcohol like.
Color	Not available.
Physical State and Appearance	Liquid. (Colorless.)
Molecular Weight	32.05 g/mole
Molecular Formula	CH ₄ O
pH	Not available.
Boiling/Condensation Point	64.55°C (148.2°F)
Melting/Freezing Point	-97.72°C (-143.9°F)
Specific Gravity	0.792 (Water = 1)
Vapor Pressure	12.9 kPa (97 mmHg) (@ 20°C)
Vapor Density	1.11 (Air = 1)
Volatility	99.9% (v/v).
Odor Threshold	100 ppm
Evaporation Rate	5.91 compared to (n-BUTYL ACETATE=1)
VOC	100 (%)
LogK_{ow}	Not available.
Dispersion Properties	See solubility in water.
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	Highly reactive with oxidizing agents. Reactive with metals, acids.
Rem/Incompatibility	Not available.

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Hazardous Decomposition Products carbon oxides (CO, CO₂)

Hazardous Polymerization Will not occur.

Section 11. Toxicological Information

RTECS Number:	Methanol	PC1400000
Toxicity	Acute oral toxicity (LD ₅₀): 5628 mg/kg [Rat]. Acute dermal toxicity (LD ₅₀): 15800 mg/kg [Rabbit]. Acute toxicity of the vapor (LC ₅₀): 64000 ppm 4 hour(s) [Rat].	
Chronic Effects on Humans	Not available.	
Acute Effects on Humans	Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching. Hazardous in case of skin contact (permeator, irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Hazardous in case of inhalation (lung irritant). Extremely hazardous in case of ingestion. May be fatal if swallowed.	
Synergetic Products (Toxicologically)	Not available.	
Irritancy	<u>Draize Test</u> (Rabbit): Skin: 20mg/24h. Reaction: Moderate. Eye: 100 mg/24h moderate	
Sensitization	Not available.	
Carcinogenic Effects	This material is not known to cause cancer in animals or humans.	
Toxicity to Reproductive System	Tests on laboratory animals for reproductive effects are cited in Registry of Toxic Effects on Chemical Substances (RTECS).	
Teratogenic Effects	Not available.	
Mutagenic Effects	Tests on laboratory animals for mutagenic effects are cited in Registry of Toxic Effects of Chemical Substances (RTECS).	

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	U154 D001
Treatment	Incineration, fuels blending or recycle. Contact your local permitted waste disposal site (TSD) for permissible treatment sites. Always contact a permitted waste disposal (TSD) to assure compliance with all current local, state, and Federal Regulations.

Section 14. Transport Information

DOT Classification Proper Shipping Name: METHANOL SOLUTION
 Hazard Class: 3
 UN number: UN1230
 Packing Group: II
 RQ: Not applicable.

TDG Classification Not available.

IMO/IMDG Classification Not available.

ICAO/IATA Classification Not available.

Section 15. Regulatory Information

U.S. Federal Regulations TSCA 8(b) inventory: Methanol
 SARA 302/304/311/312 extremely hazardous substances: No products were found.
 SARA 302/304 emergency planning and notification: No products were found.
 SARA 302/304/311/312 hazardous chemicals: Methanol
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Methanol: Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard
 SARA 313 toxic chemical notification and release reporting: Methanol
 Clean Water Act (CWA) 307: No products were found.
 Clean Water Act (CWA) 311: No products were found.
 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) WHMIS Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
 WHMIS Class D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).
 WHMIS Class D-2B: Material causing other toxic effects (TOXIC).
 CEPA DSL: Methanol
 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 Methanol 200-659-6

DSCL (EEC) R11- Highly flammable.
 R37/38- Irritating to respiratory system and skin.
 R41- Risk of serious damage to eyes.

International Lists Australia (NICNAS): Methanol

Japan (MITI): Methanol

Korea (TCCL): Methanol

Philippines (RA6969): Methanol

China: No products were found.

State Regulations

Pennsylvania RTK: Methanol: (environmental hazard, generic environmental hazard)

Massachusetts RTK: Methanol

New Jersey: Methanol

California prop. 65: No products were found.

Section 16. Other Information

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



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Revision

**Notice to Reader**

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