



Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name	Albumin Standard Set	Product Code	31005
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	12/12/2005
		Print Date	12/12/2005

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 None.

Material Uses Laboratory Reagent

Chemical Family Solution.

Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Gelatin	9000-70-8	10
Water	7732-18-5	88-90
Formaldehyde.	50-00-0	0.3
Hexamethylenetetramine	100-97-0	<1
Hydrazine Sulfate	10034-93-2	<1

Product contains 7 test tubes with varying concentrations of Hexamethylenetetramine and Hydrazine Sulfate.

Section 3. Hazards Identification

Physical State and Appearance Liquid.

Emergency Overview

WARNING !
HARMFUL IF SWALLOWED.
CAUSES EYE AND SKIN IRRITATION.
MAY BE HARMFUL IF INHALED.
MAY CAUSE ALLERGIC RESPIRATORY REACTION.
MAY CAUSE EYE INJURY.
CANCER HAZARD
CONTAINS MATERIAL WHICH CAN CAUSE CANCER
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: MUCOUS MEMBRANES, GASTROINTESTINAL TRACT, RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA.

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Routes of Entry Dermal contact. Eye contact. Inhalation. Ingestion.

Potential Acute Health Effects

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

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

Inhalation May be hazardous in case of inhalation (lung sensitizer).

Ingestion Hazardous in case of ingestion. Do not take internally.

Potential Chronic Health Effects

Carcinogenic Effects Classified + (Proven.) by OSHA [Formaldehyde.]. Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde.]. Classified 2 (Reasonably Anticipated To Be Human Carcinogens.) by NTP [Hydrazine Sulfate].

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.

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 available.

Flash Points

Not available.

Flammable Limits

Not available.

Products of Combustion

Not available.

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

Not applicable.

Protective Clothing (Fire) Not applicable.

Special Remarks on Fire Hazards Not available.

Special Remarks on Explosion Hazards Explosive reaction with acetic acid + acetic anhydride + ammonium nitrate + nitric acid. (Hexamethylenetetramine)

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. Eliminate all ignition sources. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. 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 (TM) absorbent is recommended for this product: SX1340 Formaldehyde Treatment Kit

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 Safety glasses with side shields.

Body Lab coat.

Respiratory Dust mask.

Hands Gloves.

Feet No special protective clothing is required.

Protective Clothing (Pictograms)



Personal Protection in Case of a Large Spill Safety glasses. Lab coat. Dust mask. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name

Gelatin
Water
Formaldehyde.

Exposure Limits

Not available.
Not available.
EH40-MEL (United Kingdom (UK), 1997).
STEL: 2.5 mg/m³ 15 minute(s).
STEL: 2 ppm 15 minute(s).
TWA: 2.5 mg/m³ 8 hour(s).
TWA: 2 ppm 8 hour(s).

ACGIH (United States, 2000).CELL: 0.37 mg/m³

CELL: 0.3 ppm

NIOSH REL (United States, 1994).

CELL: 0.1 ppm 15 minute(s).

TWA: 0.01 ppm 10 hour(s).

OSHA Final Rule (United States, 1989).

STEL: 2 ppm 15 minute(s).

TWA: 0.75 ppm 8 hour(s).

OSHA Transitional Rule (United States, 1993).

STEL: 2 ppm 15 minute(s).

TWA: 0.75 ppm 8 hour(s).

N- Arbeidstilsynet (Norway, 1996).AN: 3 mg/m³**AFS (Sweden, 1996).**NGV: 3 mg/m³KTV: 5 mg/m³**N- Arbeidstilsynet (Norway, 1996).**AN: 3 mg/m³ 8 hour(s).**AFS (Sweden, 1996). Sensitizer skin, Sensitizer inhalation**KTV: 5 mg/m³ 15 minute(s).NGV: 3 mg/m³ 8 hour(s).

Not available.

Hexamethylenetetramine

Hydrazine Sulfate

Product contains 7 test tubes with varying concentrations of Hexamethylenetetramine and Hydrazine Sulfate.

Section 9. Physical and Chemical Properties

Odor	Not available.
-------------	----------------

Color	Clear to turbid
--------------	-----------------

Physical State and Appearance	Liquid.
--------------------------------------	---------

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).
-----------------------------------	---

Melting/Freezing Point	May start to solidify at -0.1°C (31.8°F) based on data for: Water.
-------------------------------	--

Specific Gravity	Not available.
-------------------------	----------------

Vapor Pressure	Not available.
-----------------------	----------------

Vapor Density	Not available.
----------------------	----------------

Odor Threshold	Not available.
-----------------------	----------------

Evaporation Rate	0.36 (Water) compared to (n-Butyl Acetate =1)
-------------------------	---

LogK_{ow}	Not available.
--------------------------	----------------

Solubility	Partially soluble in water.
-------------------	-----------------------------

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Avoid Heat
Incompatibility with Various Substances	Reactive with reducing agents, acids, alkalis. Slightly reactive to reactive with oxidizing agents.
Rem/Incompatibility	Avoid contact with corrosive material. Avoid Heat

Hazardous Decomposition Products Not available.

Hazardous Polymerization Will not occur.

Section 11. Toxicological Information

RTECS Number:	Gelatin	LX8580000
	Water	ZC0110000
	Formaldehyde	LP8925000
	Hexamethylenetetramine	MN4725000
	Hydrazine Sulfate	MV9625000

Toxicity LD₅₀: Not available.
LC₅₀: Not available.

Chronic Effects on Humans **CARCINOGENIC EFFECTS:** Classified + (Proven.) by OSHA [Formaldehyde.]. Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde.]. Classified 2 (Reasonably Anticipated To Be Human Carcinogens.) by NTP [Hydrazine Sulfate].

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 (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. May be hazardous in case of inhalation (lung sensitizer). Hazardous in case of ingestion.

Special Remarks on Other Toxic Effects on Humans Material is irritating to mucous membranes and upper respiratory tract. MAY CAUSE EYE INJURY.

Synergetic Products (Toxicologically) Not available.

Irritancy Draize Test: Not available.

Sensitization Hazardous in case of inhalation (lung sensitizer).

Carcinogenic Effects Classified + (Proven.) by OSHA [Formaldehyde.]. Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde.]. Classified 2 (Reasonably Anticipated To Be Human Carcinogens.) by NTP [Hydrazine Sulfate].

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 Not available.

Treatment Material does not have an EPA Waste number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished. Always contact permitted waste disposer (TSD) to assure compliance with all Current local, State and Federal Regulations.

Section 14. Transport Information

DOT Classification Not available.

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: Gelatin; Water; Formaldehyde.; Hexamethylenetetramine; Hydrazine Sulfate
SARA 302/304/311/312 extremely hazardous substances: Formaldehyde.
SARA 302/304 emergency planning and notification: Formaldehyde.
SARA 302/304/311/312 hazardous chemicals: Formaldehyde.; Hexamethylenetetramine; Hydrazine Sulfate
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Formaldehyde.: Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard;
Hexamethylenetetramine: Fire Hazard, Immediate (Acute) Health Hazard; Hydrazine Sulfate: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard
SARA 313 toxic chemical notification and release reporting: Formaldehyde. 0.3%; Hydrazine Sulfate 0.9%
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: Formaldehyde.
Clean air act (CAA) 112 accidental release prevention: Formaldehyde.
Clean air act (CAA) 112 regulated flammable substances: No products were found.
Clean air act (CAA) 112 regulated toxic substances: Formaldehyde.

WHMIS (Canada) Class D-2A: Material causing other toxic effects (VERY TOXIC).
Class D-2B: Material causing other toxic effects (TOXIC).

CEPA DSL: Gelatin; Water; Formaldehyde.; Hexamethylenetetramine; Hydrazine Sulfate
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	Gelatin	232-554-6
	Water	231-791-2
	Formaldehyde.	200-001-8
	Hexamethylenetetramine	202-905-8
	Hydrazine Sulfate	233-110-4

DSCL (EEC) This product is not classified according to the EU regulations.

International Lists Australia (NICNAS): Gelatin; Water; Formaldehyde.; Hexamethylenetetramine; Hydrazine Sulfate
 Japan (MITI): Water; Formaldehyde.; Hexamethylenetetramine; Hydrazine Sulfate
 Japan (MOL): Formaldehyde.
 Korea (TCCL): Gelatin; Water; Formaldehyde.; Hexamethylenetetramine; Hydrazine Sulfate
 Philippines (RA6969): Gelatin; Water; Formaldehyde.; Hexamethylenetetramine; Hydrazine Sulfate
 China: No products were found.

State Regulations

Pennsylvania RTK: Formaldehyde.: (special hazard, environmental hazard, generic environmental hazard); Hydrazine Sulfate: (special hazard, environmental hazard, generic environmental hazard)
 Massachusetts RTK: Formaldehyde.; Hydrazine Sulfate
 New Jersey: Albumin Standard Set
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Formaldehyde.; Hydrazine Sulfate
 California prop. 65 (no significant risk level): Formaldehyde.; Hydrazine Sulfate
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Formaldehyde.; Hydrazine Sulfate

Section 16. Other Information

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



**Changed Since Last
 Revision** +

Notice to Reader

The statements contained herein are based upon technical data that EMD Chemicals Inc. believes to be reliable, are offered for information purposes only and as a guide to the appropriate precautionary and emergency handling of the material by a properly trained person having the necessary technical skills. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use, storage and disposal of these materials and the safety and health of employees and customers and the protection of the environment. EMD CHEMICALS INC. MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, WITH RESPECT TO THE INFORMATION HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS.