



Material Safety Data Sheet

Section 1. Product and Company Identification

Product Name Buffered Neutral Formalin 10%
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.

For More Information Call
 856-423-6300 Technical Service
 Monday-Friday: 8:00 AM - 5:00 PM

Synonym None.
Material Uses Laboratory Reagent
Chemical Family Mixture.

Product Code R04586B
Effective Date 10/14/2005

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

Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Formaldehyde.	50-00-0	3.7
Methanol	67-56-1	1.5
Sodium Phosphate, Dibasic	7558-79-4	<0.7
Sodium Dihydrogen Phosphate Monohydrate	10049-21-5	<0.5
Water	7732-18-5	>94

+ Section 3. Hazards Identification

Physical State and Appearance Liquid.
Emergency Overview

WARNING !
 HARMFUL IF SWALLOWED.
 CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
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.
 Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Routes of Entry

Potential Acute Health Effects

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

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

Inhalation Hazardous in case of inhalation (lung irritant). Non-hazardous in case of inhalation.

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].

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.

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Inhalation

Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately. 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 Not applicable.

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:
Slightly explosive in presence of open flames, sparks and static discharge.

Risks of explosion of the product in presence of mechanical impact:

Slightly explosive in presence of shocks.

Not applicable.

Fire Fighting Media and Instructions

Protective Clothing (Fire)

Special Remarks on Fire Hazards

Not applicable.
Development of hazardous combustion gases or vapors possible in the event of fire.

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

Stop leak if without risk. 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; dikes 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 (TM) absorbent is recommended for this product:
SX1340 Formaldehyde Treatment Kit

Section 7. Handling and Storage

Handling

Avoid prolonged contact with eyes, skin, and clothing. Avoid contact with eyes. Do not ingest. Avoid breathing vapors or spray mists. Avoid prolonged or repeated contact with skin. 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.

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
Formaldehyde.

Exposure Limits
EH40-MEL (United Kingdom (UK), 1997):
STEL: 2.5 mg/m³ 15 minute(s).

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Methanol	STEL: 2 ppm 15 minute(s).
	TWA: 2.5 mg/m ³ 8 hour(s).
ACGIH (United States, 2000).	TWA: 2 ppm 8 hour(s).
	CEIL: 0.37 mg/m ³
NIOSH REL (United States, 1994).	CEIL: 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).
ACGIH (United States, 1994). Skin	TWA: 262 mg/m ³
	STEL: 328 mg/m ³
OSHA (United States, 1989). Skin	TWA: 260 mg/m ³
	STEL: 325 mg/m ³
ACGIH (United States, 1994). Skin	STEL: 328 mg/m ³ 15 minute(s).
	STEL: 250 ppm 15 minute(s).
TWA: 262 mg/m ³ 8 hour(s).	TWA: 200 ppm 8 hour(s).
	NIOSH REL (United States, 1994). Skin
STEL: 325 mg/m ³ 15 minute(s).	STEL: 250 ppm 15 minute(s).
	TWA: 260 mg/m ³ 10 hour(s).
TWA: 200 ppm 10 hour(s).	OSHA Final Rule (United States, 1989). Skin
	STEL: 325 mg/m ³ 15 minute(s).
STEL: 250 ppm 15 minute(s).	TWA: 260 mg/m ³ 8 hour(s).
	TWA: 200 ppm 8 hour(s).
Not available.	Not available.
	Not available.

Sodium Phosphate, Dibasic

Sodium Dihydrogen Phosphate, Monohydrate

Water

Section 9. Physical and Chemical Properties

Odor	Pungent.
Color	Clear. Colorless.
Physical State and	Liquid.
Appearance	Not applicable.
Molecular Weight	Not applicable.
Molecular Formula	7 [Neutral.]
pH	The lowest known value is 64.55°C (148.2°F) (Methanol). Weighted average: 99.27°C (210.7°F)
Boiling/Condensation Point	May start to solidify at -0.1°C (31.8°F) based on data for: Water. Weighted average: -4.96°C (23.1°F)
Melting/Freezing Point	Weighted average: 0.98 (Water = 1)
Specific Gravity	The highest known value is 12.9 kPa (97 mmHg) (@ 20°C) (METHANOL).
Vapor Pressure	The highest known value is 1.11 (Air = 1) (METHANOL). Weighted average: 1.06 (Air = 1)
Vapor Density	99.9% (v/v). (METHANOL.)
Volatility	The lowest known value is 0.05 ppm (Formaldehyde.) Weighted average: 28.88 ppm
Odor Threshold	0.36 (Water) compared to(n-Butyl Acetate =1)
Evaporation Rate	5 (%)
VOC	Not available.
LogKow	Soluble in water.
Solubility	

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, acids, alkalis.
Reactivity	Slightly reactive to reactive with metals.
Reactivity with Water	Not available.
Reactivity with Air	CO _x , Na ₂ O
Reactivity with Soil	Will not occur.

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Section 11. Toxicological Information**RTECS Number:**

Formaldehyde
Methanol
Sodium Phosphate, Dibasic, Anhydrous
Sodium dihydrogen phosphate monohydrate
Water

LP8925000
PC1400000
WC4500000
Not available,
ZC0110000

Toxicity

Acute oral toxicity (LD50): 100 mg/kg [Rat]. (Formaldehyde.).
Acute dermal toxicity (LD50): 15800 mg/kg [Rabbit]. (Methanol).
Acute toxicity of the vapor (LC50): 64000 ppm 4 hour(s) [Rat]. (Methanol).
CHRONIC EFFECTS ON HUMANS
CARCINOGENIC EFFECTS: Classified + (Proven.) by OSHA [Formaldehyde.]. Classified A2 (Suspected for human.) by IARC [Formaldehyde.].
Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, scaling, reddening, or, occasionally, blistering. Non-permeator by skin. Hazardous in case of inhalation (lung irritant). Non-hazardous in case of inhalation. Hazardous in case of ingestion.
Not available.

Acute Effects on Humans**Synergistic Products**

(Toxicologically)

Irritancy**Sensitization****Carcinogenic Effects****Toxicity to Reproductive**

System

Teratogenic Effects

Mutagenic Effects

Draize Test: Not available.

Not available.

Classified + (Proven.) by OSHA [Formaldehyde.]. Classified A2 (Suspected for human.) by ACGIH, 2A (Probable for human.) by IARC [Formaldehyde.].

Not available.

Not available.

Not available.

Section 12. Ecological Information**Eutotoxicity**

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**

Treatment

U122 U154

Incineration, fuels blending or recycle. 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**

Not available.

TDG Classification

Not available.

IMO/MDG

Classification

Not available.

ICAO/IATA

Classification

Not available.

+ Section 15. Regulatory Information**U.S. Federal Regulations**

TSCA 8(b) inventory: Formaldehyde.; Methanol; Sodium Phosphate, Dibasic ; Sodium Dihydrogen Phosphate, Monohydrate; Water

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.; Methanol; Sodium Phosphate, Dibasic

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Formaldehyde.; Fire

Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard; Methanol; Fire Hazard,

Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard; Sodium Phosphate, Dibasic ;

Immediate (Acute) Health Hazard

SARA 313 toxic chemical notification and release reporting: Formaldehyde. 3.7%; Methanol 1.5%

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: Formaldehyde.; Sodium Phosphate, Dibasic

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.

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

CEPA DSL: Formaldehyde.; Methanol; Sodium Phosphate, Dibasic ; Water

This product has been classified in accordance with the hazard criteria of the Controlled Product

WHMIS (Canada)

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International Regulations
EINECS

Regulations and the MSDS contains all required information.

Formaldehyde. 200-001-8
Methanol 200-659-6
Sodium Phosphate, Dibasic 231-448-7
Sodium Dihydrogen Phosphate, Monohydrate 231-449-2
Water 231-791-2

DSL (EEC)

R22- Harmful if swallowed.

R36/38- Irritating to eyes and skin.

Australia (NICNAS): Formaldehyde.; Methanol; Sodium Phosphate, Dibasic ; Sodium Dihydrogen Phosphate, Monohydrate; Water

International Lists

Japan (MITI): Formaldehyde.; Methanol; Sodium Phosphate, Dibasic ; Water

Japan (MOL): Formaldehyde.

Korea (TCCL): Formaldehyde.; Methanol; Sodium Phosphate, Dibasic ; Water

Philippines (RA6969): Formaldehyde.; Methanol; Sodium Phosphate, Dibasic ; Water

China: No products were found.

Pennsylvania RTK: Formaldehyde.; (special hazard, environmental hazard, generic environmental hazard); Methanol; (environmental hazard, generic environmental hazard); Sodium Phosphate, Dibasic ; (environmental hazard, generic environmental hazard)

Massachusetts RTK: Formaldehyde.; Methanol; Sodium Phosphate, Dibasic

New Jersey: Buffered Neutral Formalin 10%

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.

California prop. 65 (no significant risk level): Formaldehyde.

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.

State Regulations

Section 16. Other Information

National Fire Protection Association (U.S.A.)	Health	2 1 0	Fire Hazard
			Reactivity
			Specific Hazard

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.

Buffered Neutral Formalin 10% R04586B

Sensor Health Products Inc

6-110 Turnbull Court
Cambridge, ON
Canada, N1T 1K6

Phone: 519-621-1515
Fax: 519-621-8778

FAX MESSAGE

To: Nasem Hamid

From: Mary

Fax # 905-565-2266

Date: June 25/07

of Pages 6

Nasem,

The MSDS sheets with this
fax cover all 3 products you
requested

Regards
Mary

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