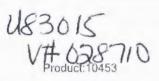


Safety Data Sheet

according to OSHA Hazard Communication 29 CFR Part 1910.1200





WWW.EMCOCHEM.COM

SECTION 1. Identification

Product Code	10453
Product Name:	Formaldehyde 37%-11%Methanol
Supplied by:	EMCO Chemical Distributors, Inc. 8601 95th Street Pleasant Prairie, Wisconsin 53158 (262) 427-0400 E-Mail: information@emcochem.com

24 hr. Emergency: CHEMTREC: 1-800-424-9300

International: +1-703-527-3887

NOTE: CHEMTREC emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals

SECTION 2. Hazard(s) Identification

*** EMERGENCY OVERVIEW ***: May be fatal if inhaled. Cancer hazard. Combustible liquid and vapor. Causes serious eye damage. May damage fertility or the unborn child. May harm breast-fed children. Causes damage to organs through prolonged or repeated exposure. Toxic in contact with skin.

GHS Classification

Acute Tox. 2 Inhalation, Carc. 1A, Eye Dam. 1, Flam. Liq. 4, Lact. Effect, Repr. 1A, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1, STOT RE 2, STOT SE 1

Symbol(s) of Product



Signal Word Danger

GHS HAZARD STATEMENTS		
Acute Toxicity, Dermal, category 3	H311	Toxic in contact with skin.
Acute Toxicity, Inhalation, category 2	H330	Fatal if inhaled.
Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Carcinogenicity, category 1A	H350	May cause cancer.
Effects on or via lactation	H362	May cause harm to breast-fed children.
Flammable liquid, category 4	H227	Combustible liquid
Reproductive Toxicity, category 1A	H360	May damage fertility or the unborn child.
Respiratory Sensitizer, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT, repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
STOT, single exposure, category 1	H370	Causes damage to organs.
Serious Eye Damage, category 1	H318	Causes serious eye damage.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
GHS PRECAUTIONARY STATEMEN	TS	
P201		pecial instructions before use.
P202	Do not ha	andle until all safety precautions have been read and understood.
P210	Keep awa	ay from heat, hot surfaces, sparks, open flames and other ignition sources. No

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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Bate Finted. OF LEAT	
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P263	Avoid contact during pregnancy/while nursing.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
	present and easy to do. Continue rinsing.
P308+P311	IF exposed or concerned: Call a POISON CENTER/doctor/physician
P310	Immediately call a POISON CENTER/doctor
P320	Specific treatment is urgent (see first aid section on this label).
P321	Specific treatment (see first aid section on this label).
P330	Rinse mouth.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor/physician
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use appropriate method to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3. Composition/Information on Ingr	redients
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Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Formaldehyde	50-00-0	25-50	GHS05-GHS06- GHS08	H227-302-311-315-317-318-330 -334-350-360-362-370-373
Methanol	67-56-1	10-25	GHS02-GHS06- GHS08	H225-301-311-331-360-362-370

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

SECTION 4. First-Aid Measures



FIRST AID - EYE CONTACT: Remove contact lenses if worn. Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly. Retract eyelids often.

FIRST AID - SKIN CONTACT: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately and clean shoes before reuse. If sticky, use waterless cleaner first.

FIRST AID - INHALATION: Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, do NOT induce vomiting. Give victim a glass of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

SECTION 5. Fire-Fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors can travel to a source of ignition and flash back. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Also, do not reuse container without commercial cleaning or reconditioning. Combustible liquid and vapor.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Water spray to cool containers or protect personnel. Use with caution. Avoid use of

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solid water streams. Do not use water jet (frothing possible). Small fires: Dry chemical, carbon dioxide, water spray or alcoholresistant foam. Large fires: Water spray, water fog, and alcohol-resistant foam.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog

COTION & Evenesure Controls/Demonal Destantia

SECTION 6. Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASE OR SPILLED: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Use only non-combustible material for clean-up. Use clean, non-sparking tools to collect absorbed materials. Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Stay upwind of spill. Ventilate spill area. Collect spilled materials for disposal. Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.)A vapor supressing foam or water mist/spray may be used to disperse vapors.

SECTION 7. Handling and Storage



HANDLING: Use only in a well ventilated area. Follow all MSDS/label precautions even after containers are emptied because they may retain product residues. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapor, fumes or mist. Take precautionary measures against static discharge.

STORAGE: Keep away from heat, sparks, and flame. Keep container closed when not in use. Protect from direct sunlight. Store containers in a cool, well ventilated place. Blanket storage with inert gas.

SECTION 8. Exposure Controls/Personal Protection				
Ingredients with Occupation	onal Exposure Limits ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Formaldehyde Methanol	N.D. 200 ppm	N.D. 250 ppm	N.D. 200 ppm	N.D. N.D,

Personal Protection



RESPIRATORY PROTECTION: Wear a MSHA/NIOSH approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.



SKIN PROTECTION: Wear impervious gloves to prevent contact with the skin. Wear protective gear as needed - apron, suit, boots.

EYE PROTECTION: Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).



OTHER PROTECTIVE EQUIPMENT: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.



HYGENIC PRACTICES: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Avoid breathing vapors. Do not eat, drink, or smoke in areas where this material is used.



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Product:10453

SECTION 9. Physical and Chemical Properties

Appearance:	Clear liquid	Physical State:	Liquid	
Odor:	Typical	Odor Threshold:	N.D.	
Density, g/cm3:	1.087	pH:	N.D.	
Freeze Point, °F:	N.D.	Viscosity:	N.D.	
Solubility in Water:	Soluble	Explosive Limits, vol%:	N.D.	
Boiling Range, °F:	210 - 212	Flash Point, °F:	156	
Evaporation Rate:	N.D.	Auto-ignition Temp., *F:	N.D.	
Vapor Density:	N.D.	Vapor Pressure:	N.D.	

(See "Other information" Section for abbreviation legend)

SECTION 10. Stability and Reactivity

STABILITY: No Information

CONDITIONS TO AVOID: Avoid impact, friction, heat, sparks, flame and source of ignition.

INCOMPATIBILITY: Keep away from acids. Prevent contact with strong oxidizing agents. Keep separate from alkalies. Avoid contact with hydrogen peroxide, chromic anhydride, nitric acid, mixed nitric/sulfuric acid, nitrosyl perchlorate, permonosulfuric acids, potassium tert-butoxide, sodium hypobromite, chlorinated melamine. Product reacts with phenol.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic gases/fumes are given off during burning or thermal decomposition. During combustion carbon monoxide may be formed. During combustion carbon dioxide may be formed. Combustion can lead to the formation of formaldehyde. Combustion can lead to formation of formic acid.

HAZARDOUS POLYMERIZATION: No Information

SECTION 11. Toxicological Information



Information on Toxicological Effects

Primary Route(s) of Entry: Eye Contact, Ingestion, Inhalation, Skin Contact

EFFECTS OF OVEREXPOSURE - INHALATION: May be fatal if inhaled. Vapors can cause irritation of the respiratory tract. High concentrations can cause headache, nausea, weakness, lightheadedness, and stupor (CNS depression). Breathing in the material may irritate the mucous membranes of the nose, throat bronchi and lungs. May cause dizziness and drowsiness. Vapors are irritating to the respiratory tract. May cause respiratory sensitization or asthma in suspectible individuals.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material. Personnel with pre-existing skin disorders should avoid contact with this product. Skin absorption may add significantly to the overall toxic effect. Severely irritating to skin and may cause burns. May cause redness and pain. Toxic if in contact with skin.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Symptoms may include stinging, tearing, redness and swelling.

EFFECTS OF OVEREXPOSURE - INGESTION: May be fatal or cause blindness if swallowed. May cause central nervous system depression. May cause severe and permanent damage to mouth, throat and stomach. Contains Methanol which may cause nausea, abdominal pain, vomiting, headache, dizziness, shortness of breathe, weakness, fatigue, leg cramps, restlessness, confusion, druken behavior, visual disturbances, drowsiness, coma, and death. Harmful if swallowed. EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: May cause delayed lung damage. Cancer hazard. Possible reproductive

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: May cause delayed lung damage. Cancer hazard. Possible reproductive hazard. Overexposure may cause kidney damage. May cause liver disorder (e.g., edema, proteinuria) and damage. Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system, central nervous system, kidney, liver, skin, and/or eyes. Material is slowly eliminated from the body, therefore it can have cummulative toxicity effects with repeated exposures. Adverse symptoms may include the following: reduced fetall weight, increase in fetal deaths, skeletal malformations. May cause damage to unborn child. May cause harm to breast-fed children.

Carcinogenicity

CAS-No.	Name	IARC
7732-18-5	Water	 Not classifiable as to its carcinogenicity to humans.

NTP Not Listed

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50-00-0	Formaldehyde	1- Carcinogenic to humans.	Known to be a human carcinogen
67-56-1	Methanol	 Not classifiable as to its carcinogenicity to humans. 	Not Listed

Product:10453

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Name	Oral LD50, mg/kg	Dermal LD50, mg/kg	Vapor LC50, mg/L
50-00-0	Formaldehyde	800	270	0.578
67-56-1	Methanol	300	>200	>2

SECTION 12. Ecological Information

ECOLOGICAL INFORMATION: No Information

SECTION 13. Disposal Considerations

For more guidance and information contact our Waste Services Division at (262) 658-4000.

Always dispose of any waste in accordance with all local, state, and federal regulations.

DISPOSAL METHOD: Dispose of waste in accordance with all local, state and federal regulations.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASE OR SPILLED: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Use only noncombustible material for clean-up. Use clean, non-sparking tools to collect absorbed materials. Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Stay upwind of spill. Ventilate spill area. Collect spilled materials for disposal. Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.)A vapor supressing foam or water mist/spray may be used to disperse vapors.

SECTION 14. Transport Information			
DOT Proper Shipping Name:	Formaldehyde solutions	Packing Group:	ш
DOT Hazard Class: DOT UN/NA Number:	8 UN2209	Hazard SubClass: Resp. Guide Page:	No Information

SECTION 15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS-No.
Formaldehyde	50-00-0
Methanol	67-56-1

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

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No TSCA components exist in this product.

NEW JERSEY RIG	HT-TO-KNOW:						
The following mate	rials are non-hazardo	ous, but are an	nong the top five o	ompon	ients in	this product.	
Chemical Name Water				<u>CAS-No.</u> 7732-18-5			
PENNSYLVANIA R	IGHT-TO-KNOW						
The following non-h	azardous ingredients	are present in	n the product at gr	eater ti	han 3%	b.	
Chemical Name Water	Name			<u>CAS-No.</u> 7732-18-5			
CALIFORNIA PRO	POSITION 65 CAR	CINOGENS					
Warning: The follow	ving ingredients prese	ent in the prod	uct are known to t	he state	e of Ca	lifornia to cause Cancer.	
Chemical Name Formaldehyde	Chemical Name			CAS-			
CALIFORNIA PRO Warning: The follow reproductive hazard	ving ingredients prese			he stat	e of Ca	alifornia to cause birth defe	ects, or other
Chemical Name Methanol				CAS- 67-56-			
International Re CANADIAN WHMIS This SDS has been WHMIS Class:	5:		rolled Product Re	gulatior	ns exce	ept for the use of the 16 he	adings.
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GHS06

GHS08

Product: 1045

H350	May cause cancer.
H360	May damage fertility or the unborn child.
H362	May cause harm to breast-fed children.
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.
Icons for GHS F	Pictograms shown in Section 3 describing each ingredient:
GHS02	
GHS05	(A)

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information on this SDS was obtained from sources which we believe to be reliable. However, the information provided is without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information and recommendations are offered for the user's consideration and examination and should be used to make an independent determination of the methods to safeguard workers and the environment. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For these reasons we do not assume responsibility and expressly disclaim any liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS may not be applicable. It is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

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