

SECTION 1: Product and Company Identification

Identification of the substance or mixture

Product Name: 10% Neutral Buffered Formalin
Catalog #: 66312-0, 66312-1

Company Identification

Cepharm Life Sciences Inc.
11830 W Market Place, Suite K
Fulton, MD 20759
USA
Toll Free: 1-800-257-1565
Phone: 410-636-4954

24-hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Toll Free: 1-800-424-9300/ +1 703-527-3887 CCN 1010970

For Research Use Only. Not for use in diagnostic procedures.

SECTION 2: Hazards identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4), H227
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Skin sensitization (Category 1), H317
Germ cell mutagenicity (Category 2), H341
Carcinogenicity (Category 1B), H350
Short-term (acute) aquatic hazard (Category 3), H402

For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS Label elements, including precautionary statements



Signal word Danger

Hazard statement(s)

H302 + H332	Harmful if swallowed or if inhaled.
H317	May cause an allergic skin reaction.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H402	Harmful to aquatic life.

Precautionary statement(s)

P201	Obtain special instructions before use.
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P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264	Wash skin 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 must not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition / Information on Ingredients

Mixtures

Component	Classification	Concentration
Formaldehyde CAS-No. 50-00-0 EC-No. 200-001-8 Index-No. 605-001-00-5	Flam. Liq. 4; Acute Tox. 3; Acute Tox. 2; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 1B; STOT SE 3; Aquatic Acute 2; H227, H301, H330, H311, H314, H318, H317, H341, H350, H335, H401 Concentration limits: >= 25 %: Skin Corr. 1B, H314; 5 - < 25 %: Eye Irrit. 2, H319; >= 5 %: STOT SE 3, H335; >= 0.2 %: Skin Sens. 1, H317; 5 - < 25 %: Skin Irrit. 2, H315; >= 25 %: Skin Corr. 1B, H314; 5 - < 25 %: Skin Irrit. 2, H315; 5 - < 25 %: Eye Irrit. 2, H319; >= 5 %: STOT SE 3, H335; >= 0.2 %: Skin Sens. 1, H317	>= 1 - < 5 %
Methanol CAS-No. 67-56-1 EC-No. 200-659-6 Index-No. 603-001-00-X	Flam. Liq. 2; Acute Tox. 3; STOT SE 1; H225, H301, H331, H311, H370 Concentration limits: >= 10 %: STOT SE 1,	>= 1 - < 3 %

	H370; 3 - < 10 %: STOT SE 2, H371;	
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SECTION 4: First Aid Measures

Description of first aid measures

General Advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting Measures

Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Carbon oxides

Not combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Forms explosive mixtures with air on intense heating.

Ambient fire may liberate hazardous vapors.

Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling & Storage

Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2

Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage class

Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

Specific end use(s)

Apart from the uses mentioned in section 1, no other specific uses are stipulated

SECTION 8: Exposure Controls/ Personal Protection

OSHA (ACGIH) Exposure Limits

	TWA	STEL	CEILING					
	ppm	mg/	ppm	mg/m3	ppm	mg/m3		
CAS#: 0000050000			IDLH: 20					
OSHA					Not classifi	--	2/15 mi NE	--
ACGIH					--	--	--	0.3 c 0.37

CAS#: 0000067561 IDLH: 6,000

OSHA	ACGIH;CA	260	--	--	--	--
ACGIH	200	262	250	250	--	--

CAS#: 0007558794 IDLH: NE

OSHA	NE	NE	NE	NE	NE	NE
ACGIH	NE	NE	NE	NE	NE	NE

CAS#: 0007732185 IDLH: NE

OSHA	NE	NE	NE	NE	NE	NE
ACGIH	NE	NE	NE	NE	NE	NE

CAS#: 0010049215 IDLH: NE

OSHA	NE	NE	NE	NE	NE	NE
ACGIH	NE	NE	NE	NE	NE	NE

The use of eye protection in the form of safety glasses with side shields and the use of skin protection for hands in the form of gloves are considered minimum and non-discretionary in work places and laboratories. Any recommended personal protection equipment or environmental equipment is to be considered as additional to safety glasses and gloves.

Use chemical splash goggles and face shield.

Use latex or equivalent gloves.

Use process enclosures, local exhaust ventilation, or other engineering controls.

Chemical-resistant gloves should be worn whenever this material is handled. The glove material has to be impermeable and resistant to the product. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water. All glove recommendations presume that the risk of exposure is through splash and not intentional immersion of the hands into the product.

Since glove permeation data does not exist for this material, no recommendation for the glove material can be given for the product. Permeation data must be obtained from the glove manufacturer to determine if the glove is suitable for the task.

Section 9: Physical and Chemical Properties

Formula:	no data no	vapor pressure:	1.3
Formula	data >200	@ 20c vapor density:	1.04
Weight:	F 5 F	Specific gravity:	1.01
boiling point:	completely	pH:	2.8 for a 31% SOLUTION
melting point:		appearance:	clear colorless liquid
solubility:			formaldehyde

Section 10: Stability and Reactivity

Chemical Stabilit stable

Conditions to Avoid: heat, flames, ignition sources

Incompatibility with other materials: oxidizing agents and alkalis, nitrogen dioxide, perchloric acid, nitromethane, hydrochloric acid.

Hazardous Decomposition Products: no data Hazardous Polymerization: will not occur

Section 11: Toxicological Information

Acute Data: Formaldehyde:

LD 50 Oral Rat: 100 mg/kg

LD 50 skin rabbit: 270 uL/kg

LC 50 inhalation rat: 203 mg/m3
Irritation data: eye rabbit, 750 ug: severe
Investigated as a tumorigen, mutagen and reproductive effector
Subchronic data: no data

Section 12: Ecological Information

Formaldehyde:

LC 50/96-hour for fish are between 10 and 100 mg/l.

Formaldehyde is expected to leach into groundwater, readily biodegrade in water, not expected to evaporate, not expected to significantly bioaccumulate, will readily degrade by reaction w

Section 13: Disposal Considerations

The following chart lists the status of the chemical and its components in reference to 40 CFR Part 261.33. If the product is listed by code number the substance may be subject to special federal and state disposal regulations. If no codes are listed the material must be disposed in compliance with all Federal, State and Local Regulations.

CAS#	Waste Code	Regulated Name
0000050000	U122	Formaldehyde
0000067561	U154	Methanol
0007558794	not listed	not listed
0007732185	not listed	not listed
0010049215	not listed	not listed

Section 14: Transportation Data

Proper Shipping Name NOT REGULATED Chemical Name
UN
Class
PG

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Section 15: Regulatory Information

All components of this product are on the TSCA public inventory.

All components of this product are on the TSCA public inventory.

Prop 65 - Column A identifies those items which are known to the State of California to cause cancer. Column B identified items which are known to the State of California to cause reproductive toxicity.

CAS#	Column A	Column B
0000050000	Yes	no
0000067561	Yes	no
0007558794	no	no

0007732185	no	no
0010049215	no	no

State Regulatory Information: If a CAS# is listed below this material is subject to the listed state right-to-know requirements.
CAS#

0000050000	not listed
0000067561	not listed
0007558794	not listed
0007732185	not listed
0010049215	not listed

SARA Toxic Release Chemicals(as defined in Section 313 of SARA Title III)

This list identifies the toxic chemicals, including their de minimis concentrations for which reporting is required under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). The list is also referred to as the Toxics Release Inventory (TRI) List.

CAS#	Regulated name	de minimis conc. %	Rep. Thres.
0000050000	Formaldehyde	0.1	not listed
0000067561	Methanol	1.0	not listed
0007558794	not listed	not listed	not listed
0007732185	not listed	not listed	not listed
0010049215	not listed	not listed	not listed

SARA Extremely Hazardous Substances and TPQs

This list includes hazardous chemicals as defined in 29 CFR 1910.1200(c); and extremely hazardous substances regulated under Section 302 of SARA Title III with their TPQs (in pounds), as listed in 40 CFR 355, Appendices A and B.

CAS#	Regulated name	TPQ (pounds)	EHS-RQ(pounds)
0000050000	Formaldehyde	500	100
0000067561	not listed	not listed	not listed
0007558794	not listed	not listed	not listed
0007732185	not listed	not listed	not listed
0010049215	not listed	not listed	not listed

CERCLA

The hazardous substances, and their reportable quantities (RQs) are listed in the federal regulations at 40 CFR Part 302, Table 302.4. Release of a CERCLA hazardous substance in an amount equal to or greater than its RQ, in any 24-hour period, must be reported to the National Response Center at (800) 424-8802.

CAS#	Regulated name	RQ (pounds)
0000050000	Formaldehyde	100
0000067561	Not listed	Not listed

0000067561	Methyl alcohol	5,000
0007558794	Not listed	Not listed
0007558794	Sodium phosphate, dibasic	5,000
0007732185	Not listed	Not listed
0010049215	Not listed	Not listed

Section 16: Other Information

HMIS Rating

Health hazard: 0
Chronic Health Hazard:
Flammability: 0
Physical Hazard 0

NFPA Rating

Health hazard: 0
Fire Hazard: 0
Reactivity Hazard: 0

Disclaimer:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not represent any guarantee of the properties of the product. Cepham Life Sciences Incorporated and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

END OF MSDS