

SAFETY DATA SHEET

Formalin 10%

This SDS is valid for all grades that start with catalog numbers for 10% Formalin

1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

Product Identifier: Synonyms: Other means of identification: High Purity Chemicals Formaldehyde 10% solution CAS No. 50-00-0 EINECS No. 200-001-8

Recommended use of the chemical and restrictions on use:

Supplier Details:

LabPulse Medical 29B Kripes Road East Granby, CT 06026 Telephone (General) 800-922-9037 CCN17213

Emergency Contact:

CHEMTEL: 1.888.255.3924 (USA) / +1.813.248.0573 (International)

2. HAZARDS IDENTIFICATION

OSHA Hazards:

Carcinogen, Combustible liquid, Corrosive, Skin and respiratory sensitizer, Target organ effect, Toxic by ingestion, Toxic by inhalation, Toxic by skin absorption

Target Organs:

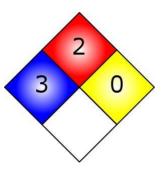
Central nervous system, Eyes, Heart, Kidney, Liver



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NFPA



GHS label elements, including precautionary statements



Toxic if swallowed.

Toxic if inhaled

medical attention.

Toxic in contact with skin.

Suspected of causing cancer.

Causes severe skin burns and eye damage.

Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

Wear protective gloves and eye and face protection.

IF exposed: Call a POISON CENTER or doctor/ physician.

May cause an allergic skin reaction.

Signal Word: DANGER!

Hazard statement(s)

| H301 | |
|------|--|
| H311 | |
| H314 | |
| H317 | |
| H331 | |
| H351 | |

Precautionary statement(s)

P305 + P351 + P338

P260 P307 + P311 P280

GHS Classification(s)

Specific target organ toxicity - single exposure (Category 3) Skin corrosion (Category 1B) Eye damage (Category 1) Acute Toxicity, Dermal (Category 3) Acute Toxicity, Inhalation (Category 3)

SDS: 4499 **Revision Date:** 07.21.15

Revision Number: 1

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek

Initials: ZD



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Skin sensitization (Category 1) Acute Toxicity, Oral (Category 3) Carcinogenicity (Category 2)

Other hazards which do not result in classification:

Potential Health Effects:

| Organ | Description | |
|------------|---|--|
| Eyes | Causes eye burns. | |
| Ingestion | Toxic if swallowed. | |
| Inhalation | Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper | |
| Innalation | respiratory tract. | |
| Skin | Toxic if absorbed through skin. Causes skin burns. | |
| Skin | Toxic if absorbed through skin. Causes skin burns. | |

3. COMPOSITION AND INFORMATION ON INGREDIENTS

| Chemical identity: |
|------------------------|
| Common name / Synonym: |
| CAS number: |
| EINECS number: |
| EC #: |

Formalin 10% Formaldehyde 10% solution 50-00-0 200-001-8 605-001-00-5

| % Weight | Material | CAS |
|----------|--------------|---------|
| 3.8-4.1 | Formaldehyde | 50-00-0 |

4. FIRST AID MEASURES

General advice

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin

Wash skin with soap and copious amounts of water. Seek medical attention.

Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eyes

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. Keep rinsing while in transport to hospital.

Ingestion



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DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Carbon oxides expected to be the primary hazardous combustion product.

Special protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

Flammable Properties Flash point

85 °C (185 °F) - closed cup

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions:

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up:

Contain spill, then collect with an electrically protected vacuum cleaner or by wet-brushing and put the material into a convenient waste disposal container. Keep container closed.

7. HANDLING AND STORAGE

Precautions for safe handling:

Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

Conditions for safe storage, including any incompatibilities:

Container must be sealed tightly and kept in a dry, well-ventilated space.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters, e.g., occupational exposure limit values or biological limit values:

Occupational Exposure Limits

| Component | Source | Туре | Value | Note |
|--------------|------------|---------|-----------|----------------------------------|
| Formaldehyde | US (ACGIH) | Ceiling | 0.3 ppm | ACGIH Threshold Limit Value |
| Formaldehyde | US (NIOSH) | TWA | 0.016 ppm | NIOSH Recommended Exposure Limit |

Appropriate engineering controls:

General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

Individual protection measures, such as personal protective equipment:

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

Skin and body protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance (physical state, color, etc.) | Liquid. |
|--|-----------------------------|
| Initial boiling point and boiling range | 100 °C (212 °F) |
| Flash point | 85 °C (185 °F) - closed cup |

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| Upper / Lower flammability or explosive limits | 7 %(V) / 70% (V) |
|--|------------------------------------|
| Vapor pressure | 53 hPa (40 mmHg) at 39 °C (102 °F) |
| Relative Density | 1.080 g/cm3 at 25 °C (77 °F) |
| Solubility(ies) | completely miscible |

10. STABILITY AND REACTIVITY

| Chemical Stability | Stable under recommended storage conditions. |
|--|--|
| Possibility of hazardous reactions | No data available |
| Conditions to avoid (e.g., static discharge, shock or vibration) | Heat, flames, and sparks. |
| Incompatible materials | Strong bases, Acids, Oxidizing agents, Alkali metals, Strong oxidizing agents, Amines, Strong acids, Acid chlorides, Acid anhydrides, Reducing agents, Peroxides, Isocyanates, Phenol, Aniline |
| Hazardous decomposition products | Hazardous decomposition products formed under fire conditions Carbon oxides |

11. TOXICOLOGICAL INFORMATION

• Formaldehyde 50-00-0

Product Summary:

No data available for the mutagenic, teratogenic, or reproductive effects of the product.

Acute Toxicity:

No data available

Irritation:

No data available

/

Carcinogenicity

IARC: Group 1: Carcinogenic to humans NTP: Reasonably anticipated to be a human carcinogen

Other Hazards

| Organ | Description | |
|------------|--|--|
| Eyes | Causes eye burns. | |
| Ingestion | Toxic if ingested. | |
| Inhalation | Toxic if inhaled. Material is extremely damaging to the upper respiratory tract. | |
| Skin | Toxic if absorbed through skin. Causes skin burns. | |



12. ECOLOGICAL INFORMATION

• Formaldehyde 50-00-0

Ecotoxicity (aquatic and terrestrial, where available): Ecotoxicity No data available

Persistence and degradability: No data available

Bioaccumulative potential: No data available

13. DISPOSAL CONSIDERATIONS

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

Description of waste residues and information on their safe handling and methods of disposal:

| UN number | NA1993 |
|--------------------------------------|---|
| UN proper shipping name | Combustible liquid, n.o.s. (Formaldehyde, Methanol) |
| Transport hazard class(es) | CBL |
| Packing group <i>(if applicable)</i> | III |

Reportable Quantity 100 lbs IMDG UN-Number: Not a dangerous good. Marine pollutant: No IATA UN-Number: Not a dangerous good.



15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question:

OSHA Hazards

Carcinogen, Combustible liquid, Corrosive, Skin and respiratory sensitizer, Target organ effect, Toxic by ingestion, Toxic by inhalation, Toxic by skin absorption

All ingredients are on the following inventories or are exempted from listing

| Country | Notification | |
|--------------------------|--------------|--|
| Australia | AICS | |
| Canada | DSL | |
| China | IECS | |
| European Union | EINECS | |
| Japan | ENCS/ISHL | |
| Korea | ECL | |
| New Zealand | NZIOC | |
| Philippines | PICCS | |
| United States of America | TSCA | |

SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302: FORMALDEHYDE CAS-No. 50-00-0 Revision Date 2007-07-01

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313: FORMALDEHYDE CAS-No. 50-00-0 Revision Date 2007-07-01

SARA 311/312 Hazards

Acute Health Hazard Chronic Health Hazard Fire Hazard

CERCLA

Formaldehyde CAS-No. 50-00-0, RQ: 100 lbs

Massachusetts Right to Know Components

Formaldehyde CAS-No. 50-00-0 Revision Date 2007-07-01

Pennsylvania Right to Know Components

Formaldehyde CAS-No. 50-00-0 Revision Date 2007-07-01



New Jersey Right to Know Components

Formaldehyde CAS-No. 50-00-0 Revision Date 2007-07-01

California Prop 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer. FORMALDEHYDE CAS-No. 50-00-0 Revision Date 2007-09-28

16. OTHER INFORMATION: INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

Disclaimer

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Revision Number: 1