

# Safety Data Sheet

Formalin 20%, Buffered

Revision Date: 01/08/19

## 1. PRODUCT AND COMPANY IDENTIFICATION

|                                     |   |
|-------------------------------------|---|
| <b>1.1 Product identifier</b>       | Trade name: Formalin 20%, Buffered<br>Product code(s): 3295-G                                 |
| <b>1.2 Relevant identified uses</b> | Laboratory Reagent  |
| <b>Supplier:</b>                    | Astral Diagnostics Inc.<br><br>800-441-0366 Technical Service<br>Monday-Friday: 8:00 -5:00 PM |
| <b>Synonym:</b>                     | None.   |
| <b>Material uses:</b>               | Laboratory Reagent.   |
| <b>Validation date:</b>             | 12/11/2013  |
| <b>In case of emergency:</b>        | 800-424-9300 CHEMTREC (USA)<br>24 Hours/Day: 7 Days/Week                                      |

## 2. HAZARDS IDENTIFICATION

### Emergency Overview:

#### GHS Label Elements: Pictogram



Signal Word:

**Danger!**

#### Hazard statement(s):

- H315:** Causes skin irritation
- H317:** May cause an allergic skin reaction
- H318:** Causes serious eye damage
- H350:** May cause cancer (inhalation)
- H402:** Harmful to aquatic life

#### Precautionary statement(s):

- P202:** Do not handle until all safety precautions have been read and understood
- P261:** Avoid breathing in gas, mist, vapors, spray
- P264:** Wash exposed skin thoroughly after handling
- P273:** Avoid release to the environment
- P280:** Wear protective gloves/ eye protection/ face protection.
- P302+P352:** If on skin: Wash with plenty of soap and water
- P305+351+338:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**NFPA Rating**

Health hazard: 2  
Fire: 1  
Reactivity Hazard: 0

**HMIS Classification**

Health hazard: 2  
Flammability: 1  
Physical hazards: 0

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Name                        | CAS number | % by volume |
|-----------------------------|------------|-------------|
| Water                       | 7732-18-5  | Balance     |
| Formaldehyde                | 50-00-0    | 20          |
| Methanol                    | 67-56-1    | <1          |
| Sodium Phosphate, Dibasic   | 7558-79-4  | <1          |
| Sodium Phosphate, Monobasic | 7558-80-7  | <1          |

**4. FIRST AID MEASURES**

**First-aid measures general:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid measures after inhalation:** *Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.*

**First-aid measures after skin contact:** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.

**First-aid measures after eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

**First-aid measures after ingestion:** Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

**5. FIREFIGHTING MEASURES****5.1 Extinguishing media**

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.  
Unsuitable extinguishing media: Do not use a heavy water stream

**5.2 Special hazards arising from the substance or mixture**

No additional information available

**5.3 Advice for firefighters**

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Do not enter fire area without proper protective equipment, including respiratory protection.

**6. ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

Protective equipment: Gloves. Safety glasses. Combined gas/dust mask with filter type B/P3.  
Emergency procedures: Evacuate unnecessary personnel.

**6.1.2. For emergency responders**

Protective equipment: Equip cleanup crew with proper protection.  
Emergency procedures: Ventilate area.

**6.2. Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection

## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

**Precautions for safe handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mist, vapors, spray. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood.

**Hygiene measures:** Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

**Technical measures:** Comply with applicable regulations.

**Storage conditions:** Keep container closed when not in use. Protect from sunlight. Store in a well-ventilated place.

**Incompatible products:** Strong oxidizers. Strong acids. Strong bases.

**Incompatible materials:** Sources of ignition. Direct sunlight

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult local authorities for acceptable exposure limits.

| Component    | Source | Type    | Value                 | Note |
|--------------|--------|---------|-----------------------|------|
| Formaldehyde | ACGIH  | Ceiling | 0.37mg/m <sup>3</sup> |      |
|              | ACGIH  | Ceiling | 0.3 ppm               |      |
|              | OSHA   | TWA     | 0.75 ppm              |      |
|              | OSHA   | STEL    | 2 ppm                 |      |
| Methanol     | ACGIH  | TWA     | 200 ppm               |      |
|              | ACGIH  | STEL    | 250 ppm               |      |
|              | OSHA   | PEL     | 260 mg/m <sup>3</sup> |      |
|              | OSHA   | PEL     | 200 ppm               |      |

**Personal protective equipment:** Safety glasses. Gloves. Protective clothing. High gas/vapor concentration: gas mask with filter type B.

**Hand protection:** Wear protective gloves.

**Eye protection:** Chemical goggles or face shield.

**Skin and body protection:** Wear suitable protective clothing.

**Respiratory protection:** Wear appropriate mask. Gas mask with filter type B.

**Other information:** Do not eat, drink or smoke during use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid.

**Color:** clear, colorless

Flash Point: NA  
pH: 7  
Melting/freezing point: NA  
Vapor pressure: NA  
Odor threshold: NA  
VOC: NA

Odor: characteristic  
Boiling/condensation point: NA  
Relative density: NA  
Vapor density: NA  
Evaporation rate: NA  
Solubility: Soluble in the following materials: water

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Not established

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures

### 10.5. Incompatible materials

Strong oxidizers. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Phosphorus oxides. Carbon monoxide. Carbon dioxide.

## 11. TOXICOLOGICAL INFORMATION

### Formaldehyde (50-00-0)

LD50 oral rat 500 mg/kg  
ATE US (oral) 0.579 ppm/4hr

### Water (7732-18-5)

LD50 oral rat  $\geq 90000$  mg/kg  
ATE US (oral) 90000.000 mg/kg body weight

### Methanol (67-56-1)

LD50 oral rat  $>5000$  mg/kg  
LD50 dermal rabbit 18500 mg/kg  
LC50 inhalation rat 85 mg/4hr  
LC50 inhalation rat 64000 ppm/4hr

**Skin corrosion/irritation:** Causes skin irritation

**Serious eye damage/irritation:** Causes serious eye damage

**Respiratory or skin sensitization:** may cause allergic reaction to skin

**Germ cell mutagenicity:** Not classified

**Carcinogenicity:** May cause cancer (inhalation)

## 12. ECOLOGICAL INFORMATION

### Toxicity:

Formaldehyde (50-00-0)  
EC50 Daphnia 1 2000 mg/l

**Persistence and degradability:** no data available

**Bioaccumulative potential:** no data available

### Mobility in soil:

Methanol (67-56-1)  
Surface tension 0.023 N/m (20°C)

**PBT and vPvB assessment:** no data available

**Other adverse effects:**

avoid release into the environment

### 13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

### 14. TRANSPORT INFORMATION

**DOT (US)**

Not Regulated

### 15. REGULATORY INFORMATION

#### 15.1 US Federal Regulations

Formalin 10%

SARA Section 311/312 Hazardous Classes- Immediate (acute) health hazard, Delayed (chronic) health hazard

Sodium Phosphate, Dibasic

Reportable quantity, section 304 of EPA's list of lists, 5000 lb

Formaldehyde

Reportable quantity, section 304 of EPA's list of lists, 100 lb

SARA Section 302 Threshold planning quantity, 500 lb

Methanol

Reportable quantity, section 304 of EPA's list of lists, 5000 lb

#### 15.2 International Regulations (WHMIS Classifications)

Formalin 10%

Canada Class D Division 2 Subdivision A- Very toxic material causing other toxic effects

Canada Class D Division 2 Subdivision B- Toxic material causing other toxic effects

Formaldehyde

Canada Class D Division 1 Subdivision A- Very toxic material causing immediate and serious toxic effects

Canada Class D Division 2 Subdivision A- Very toxic material causing other toxic effects

Canada Class E- Corrosive material

#### 15.3 California Proposition 65



**WARNING:** This product can expose you to chemicals including Formaldehyde, which is known to the State of California to cause cancer, and Methanol, which is known to the State of California to cause birth defects or to the reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

### 16. OTHER INFORMATION

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



### **Notice to reader**

This Safety Data Sheet has been prepared in accordance with the Globally Harmonized System for the Classification and Labeling of Chemicals (GHS). To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries makes any warranty of merchantability or any other warranty, expressed or implied, which respect to such information, and we assume no liability resulting from its use. In no event shall Astral Diagnostics, Inc be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages resulting from use of or reliance upon this information.