

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name	Universal Indicator
CAS number	N/A
Synonyms	N/A

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Laboratory chemicals.
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#### 1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

#### 1.4 Emergency telephone

<b>Emergency Phone #</b>	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

Flammable Liquids	Category 2
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#### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Highly flammable liquid and vapor.

Precautionary statements

Prevention: If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Fire: In case of fire, use CO<sub>2</sub>, dry chemical, or foam for extinction.

Storage: Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Ethanol	-	64-17-5	47.34%
Bromothymol Blue, Sodium Salt	-	34722-90-2	0.05%
DI Water	-	7732-18-5	52.45%
Methyl Orange	-	547-58-0	0.02%
Methyl Red, Sodium Salt	-	845-10-3	0.015%
Phenolphthalien	-	77-09-8	0.035%

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

## General advice

- If inhaled** Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. If breathing is difficult, give oxygen. Immediately get medical attention.
- In case of skin contact** Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical attention if irritation persists or if concerned.
- In case of eye contact** Protect unexposed eye. Remove contact lens(es) if able to do so during rinsing. Rinse or flush exposed eye gently using water for 15-20 minutes. Immediately get medical assistance.
- If swallowed** Rinse mouth thoroughly. Do not induce vomiting. Dilute mouth with water or milk after rinsing. Immediately get medical assistance.

### 4.2 Most important symptoms and effects, both acute and delayed

Irritation. Nausea. Headache. Shortness of breath.

### 4.3 Indication of any immediate medical attention and special treatment needed

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** Use water, dry chemical, chemical foam, Carbon dioxide, or alcohol-resistant foam. Water spray can keep containers cool.
- Unsuitable extinguishing media** None.

### 5.2 Specific hazards arising from the substance or mixture

Moderate explosion hazard. Dangerous fire hazard when exposed to heat, sparks, and open flames.

### 5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 5.4 Further information

**Flash Point** 15.5°C (Closed Cup)

**Autoignition Temperature** No information available.

### Explosion limits

**Upper** 18.00%

**Lower** 3.30%

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

### NFPA

Health	Flammability	Instability	Physical hazards
2	3	0	N/A

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits. Ensure adequate ventilation.

### 6.2 Environmental precautions

Prevent from reaching drains, sewers, or waterways. Ethanol has a slight acute and chronic toxicity to aquatic life.

### 6.3 Methods and materials for containment and cleaning up

If necessary, use trained response staff or contractor. Wear protective eyewear, gloves, and clothing. Remove all sources of ignition. Contain spill. Absorb with suitable material and place in chemical waste container. Ventilate area of spill. Use non-sparking equipment. Dispose of empty containers as unused product.

### 6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear protective eyewear, gloves, and clothing. Do not eat, drink, or smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes, and clothing. Empty containers can still be hazardous since they retain product residue.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

## 7.2 Conditions for safe storage, including any incompatibilities

### Storage conditions

Store in a cool location. Store in a secure flammable storage area away from sources of ignition. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources, or open flame. Keep container tightly sealed. Store with like-hazards. Protect from freezing and physical damage.

### Incompatibilities

Strong oxidizers, heat, sparks, open flames, platinum, sodium, bromine pentafluoride, potassium dioxide, acetyl bromide, and acetyl chloride.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Ethanol	PEL-TWA	1000 ppm 1900 mg/m3

#### US. ACGIH Threshold Limit Values

Component	Type	Value
Ethanol	STEL	1000 ppm

#### US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Ethanol	IDLH	3300 ppm
	TWA	1000 ppm 1900 mg/m3

#### Biological occupational exposure limits

No information available.

### 8.2 Exposure controls

#### Appropriate engineering controls

Emergency eyewash fountains and safety showers should be available in the immediate vicinity of use/handling. Ensure that dust-handling systems (exhaust dusts, dust collectors, vessels, and processing equipment) are designed to prevent the escape of dust into the work area.

#### Personal protective equipment

##### Eye/face protection

Safety glasses with side shields or goggles.

##### Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

### **Body Protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

### **Respiratory protection**

Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. If exposure limit is exceeded, a full-face respirator with organic cartridge may be worn.

### **Control of environmental exposure**

No information available.

## **SECTION 9: Physical and chemical properties**

### **9.1 Information on basic physical and chemical properties**

Physical State	Liquid
Appearance	Clear-green
Odor	Alcohol-like
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No information available
Boiling Point/Range	80°C
Evaporation Rate	3.6
Flammability (solid)	Not applicable
Flammability or explosive limit	
Upper	18.00%
Lower	3.30%
Vapor Pressure	48 mmHg @20°C
Vapor Density	No information available
Density	No information available
Solubility	Soluble
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	N/A
Molecular Weight	N/A
VOC Content(%)	No information available
Oxidizing properties	No information available

### **9.2 Other safety information**

No information available.

## **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

None.

## 10.2 Chemical stability

Stable under normal conditions.

## 10.3 Possibility of hazardous reactions

Vapors may form explosive mixture with air.

## 10.4 Conditions to avoid

Excessive heat. Incompatible materials. Ignition sources.

## 10.5 Incompatible materials

Strong oxidizers, heat, sparks, open flames, platinum, sodium, bromine pentafluoride, potassium dioxide, acetyl bromide, and acetyl chloride.

## 10.6 Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>). Acrid and irritating fumes.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

##### Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Universal Indicator	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	130.7 mg/L (Rat)

##### Skin corrosion/irritation

No information available.

##### Serious eye damage/eye irritation

No information available.

##### Respiratory or skin sensitization

No information available.

##### Germ cell mutagenicity

No information available.

##### Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Ethanol	64-17-5	Not listed	Known	A3	Not listed	A3
Bromothymol Blue Salt	34722-90-2	Not listed	Not listed	Not listed	Not listed	Not listed
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed

Methyl Orange	547-58-0	Not listed	Not listed	Not listed	Not listed	Not listed
Methyl Red Salt	845-10-3	Not listed	Not listed	Not listed	Not listed	Not listed
Phenolphthalein	77-09-8	Group 2B	Reasonably Anticipated	Not listed	X	Not listed

**Specific target organ toxicity - single exposure**

No information available.

**Specific target organ toxicity - repeated exposure**

No information available.

**Reproductive toxicity**

No information available.

**Chronic effects**

No information available.

**11.2 Additional Information**

The toxicological properties have not been fully investigated.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Ethanol has a slight acute and chronic toxicity to aquatic life.

**12.2 Persistence and degradability**

No information available.

**12.3 Bio accumulative potential**

No information available.

**12.4 Mobility in soil**

Aqueous solution has high mobility in soil.

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Endocrine disrupting properties**

No information available.

**12.7 Other adverse effects**

No information available.

**SECTION 13: Disposal considerations**

**13.1 Waste Disposal Methods**



Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: Transport information

### DOT (US)

UN-No	UN1170
Proper Shipping Name	Ethanol
Hazard Class	3
Packing Group	II

### IMDG

UN-No	UN1170
Proper Shipping Name	Ethanol
Hazard Class	3
Packing Group	II

### IATA

UN-No	UN1170
Proper Shipping Name	Ethanol
Hazard Class	3
Packing Group	II

## SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not applicable.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not applicable.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous**

See Section 2 for more information.

**SARA 313 (TRI reporting)**

Listed, Phenolphthalein (CAS #77-09-8).

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act**

Not regulated.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Listed, Ethanol (CAS #64-17-5).

**US state regulations****US. Massachusetts RTK - Substance List**

Listed, Ethanol (CAS #64-17-5).

**US. New Jersey Worker and Community Right-to-Know Act**

Listed, Ethanol (CAS #64-17-5).

Listed, Phenolphthalein (CAS #77-09-8).

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed, Ethanol (CAS #64-17-5).

**California Proposition 65**

Listed, Ethanol (CAS #64-17-5).

Listed, Phenolphthalein (CAS #77-09-8).

**SECTION 16: Other information**

Issue date: 10/24/2024

**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.