

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	Carnoy's Solution Fixative
CAS number	See Section 3
Synonyms	None

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

Emergency Phone #	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)

Flam. Liq. 2
Carc. 2
STOT RE 2
Skin Irrit. 2
Acute Tox. 5

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Highly flammable liquid and vapour.
May be harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

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.
Use explosion-proof electrical/ventilating/lighting/equipment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/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, denatured	-	64-17-5	<65
Trichloromethane	-	67-66-3	<30
Acetic acid	-	64-19-7	<15

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice	Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
If inhaled	In case of unconsciousness place patient stably in side position for transportation.
In case of skin contact	Immediately wash with water and soap and rinse thoroughly.
In case of eye contact	Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
If swallowed	Immediately call a doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media CO₂, sand, extinguishing powder. Do not use water.

Unsuitable extinguishing media Water.

5.2 Specific hazards arising from the substance or mixture

No further relevant information available.

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 0°C (32 °F)

Autoignition Temperature No information available.

Explosion limits

Upper 3.5 Vol %

Lower 17.0 Vol %

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
3	3	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions

Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Dilute with plenty of water.

6.3 Methods and materials for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents.

6.4 Reference to other sections

Refer to protective measures listed in Sections 7 and 8. See section 13 for proper disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

Hygiene measures

Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles.

Incompatibilities

No further relevant information available.

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
Acetic Anhydride	(Vacated) Ceiling	5 ppm 20 mg/m3
	TWA	5 ppm 20 mg/m3
Dichloromethane	TWA	25 ppm
	STEL	125 ppm
Ethanol	PEL-TWA	1000 ppm 1900 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Acetic Anhydride	TWA	1 ppm
	STEL	3 ppm
Dichloromethane	TWA	50 ppm
Ethanol	STEL	1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Acetic Anhydride	IDLH	200 ppm
	Ceiling	5 ppm 20 mg/m3
Dichloromethane	IDLH	2300 ppm
Ethanol	IDLH	3300 ppm
	TWA	1000 ppm 1900 mg/m3

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Personal protective equipment

Eye/face protection

Tightly sealed goggles

Skin protection

Protective gloves. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Body Protection

Protective work clothing

Respiratory protection

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Control of environmental exposure

Prevent release into sewers and waterways.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Fluid
Appearance	Clear, colorless
Odor	Phenol-like
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No information available
Boiling Point/Range	62°C (144 °F)
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	3.5 Vol %
Lower	17.0 Vol %
Vapor Pressure	210 hPa (158 mm Hg)
Vapor Density	No information available
Density	1.02296 g/cm ³ (8.537 lbs/gal)
Solubility	Fully miscible in water
Partition coefficient; n-octanol/water	No information available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	Mixture
Molecular Weight	Mixture
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

No dangerous reactions known.

10.2 Chemical stability

No information available.

10.3 Possibility of hazardous reactions

No decomposition if used according to specifications.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trichloromethane	908 mg/kg (rat)	75 mg/kg (rat)	-

Skin corrosion/irritation

Irritant to skin and mucous membranes.

Serious eye damage/eye irritation

Irritating effect.

Respiratory or skin sensitization

No sensitizing effects known.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Trichloromethane	67-66-3	2B	R	Not listed	Not listed	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

No information available.

SECTION 12: Ecological information**12.1 Toxicity**

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

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 Number	UN1170
Proper Shipping name	ETHANOL SOLUTION
Hazard Class	3
Packaging Group	II

IMDG

UN Number	UN1170
Proper Shipping name	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Hazard Class	3
Packaging Group	II

IATA

UN Number	UN1170
Proper Shipping name	ETHANOL SOLUTION
Hazard Class	3
Packaging Group	II

SECTION 15: Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not applicable/listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
67-66-3 trichloromethane, 10 lb RQ.

SARA 304 Emergency release notification

67-66-3 trichloromethane, 10 lb RQ.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not applicable/listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

67-66-3 trichloromethane.

SARA 311/312 Hazardous

See section 2 for hazard classifications.

SARA 313 (TRI reporting)

67-66-3 trichloromethane.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

67-66-3 trichloromethane.

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

67-66-3 trichloromethane: 20,000 lb TQ.

Safe Drinking Water Act

67-66-3 trichloromethane, 10,000 lb RQ.

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

64-17-5 Ethanol, Listed.

US state regulations

US. Massachusetts RTK - Substance List

Not listed.

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

64-17-5 Ethanol, Listed.

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

67-66-3 Trichloromethane, Listed.

64-17-5 Ethanol, Listed.

California Proposition 65

67-66-3 Trichloromethane, Carcinogenic Hazard

64-17-5 Ethanol, Developmental Hazard

SECTION 16: Other information

Date of Issue: 8/7/2025

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.