SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	Plating Test Solution
CAS number	See Section 3
Synonyms	Phenolphthalein Indicator Solution

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

Identified uses	Laboratory Chemicals

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)

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
Flammable liquids Category 2
Serious Eye Damage/Eye Irritation Category 2

Germ Cell Mutagenicity Category 2
Carcinogenicity Category 2
Reproductive Toxicity Category 2
Specific target organ toxicity (single exposure) Category 3
Target Organs - Respiratory system, Central nervous system (CNS).
Specific target organ toxicity - (repeated exposure) Category 2
Target Organs - Kidney, Liver.

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word: Danger

Hazard statements:
Highly flammable liquid and vapor
Causes serious eye irritation
Suspected of causing genetic defects
Suspected of causing cancer
Suspected of damaging fertility or the unborn child
May cause respiratory irritation
May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure

Precautionary statements:
Prevention:
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood

Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
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
Keep cool
Response:
IF exposed or concerned: Get medical attention/advice
Inhalation:
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Skin:
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
Eyes:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Fire:
In case of fire: Use CO_2, dry chemical, or foam for extinction
Storage:
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Disposal:
Dispose of contents/container to an approved waste disposal plant

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

May form explosive peroxides

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Isopropyl alcohol	No information available	67-63-0	99%
Phenolphthalein	No information available	77-09-8	1%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
If swallowed	Do not induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Breathing difficulties. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Carbon dioxide (CO 2). Dry chemical. alcohol-resistant foam. Water spray. Cool containers with flooding quantities of water until well after fire is out.
Unsuitable extinguishing media	Water may be ineffective, Do not use a solid water stream as it may scatter and spread fire.

5.2 Specific hazards arising from the substance or mixture

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors.

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	12 °C / 53.6 °F
Autoignition Temperature	398.9 °C

Explosion limits

Upper	12.7 vol %
Lower	2.0 vol %
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

Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing.

6.2 Environmental precautions

Avoid release to the environment. See Section 12 for additional ecological Information.

6.3 Methods and materials for containment and cleaning up

Remove all sources of ignition. Take precautionary measures against static discharges. Soak up with inert absorbent material. Use spark-proof tools and explosion-proof equipment. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See Section 12.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only non-sparking tools. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not ingest.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Flammables area.

Incompatibilities

See Section 10.

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
Isopropyl alcohol	(Vacated) TWA (Vacated) TWA (Vacated) STEL (Vacated) STEL TWA TWA	400 ppm 980 mg/m3 500 ppm 1225 mg/m3 400 ppm 980 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Isopropyl alcohol	TWA STEL	200 ppm 400 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Isopropyl alcohol	IDLH TWA TWA STEL STEL	2000 ppm 400 ppm 980 mg/m3 500 ppm 1225 mg/m3

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Use personal protective equipment as required.

Respiratory protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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	Colorless
Odor	Alcohol-like
Odor Threshold	No information available
pH	No information available
Melting Point/Range	-89 °C / 128.2 °F
Boiling Point/Range	83 °C / 181.4 °F
Evaporation Rate	2.88 (Butyl Acetate = 1.0)
Flammability (solid)	No information available
Flammability or explosive limit	
Upper	12.7 vol %
Lower	2.0 vol %
Vapor Pressure	40 mmHg
Vapor Density	2.1
Density	0.7855
Solubility	Soluble 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	No information available
Molecular Weight	No information available
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 reactive hazard known, based on information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Incompatible products. Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Strong oxidizing agents, Strong acids, Alkali metals, Aluminium

10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO 2), peroxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isopropyl alcohol	5840 mg/kg (Rat)	13900 mg/kg (Rat) 12870 mg/kg (Rabbit)	72.6 mg/L (Rat) 4 h

Skin corrosion/irritation

Irritating to eyes and respiratory system

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
Phenolphthalein	77-09-8	Group 2B	Reasonably Anticipated	Not listed	X	Not listed
Isopropyl alcohol	67-63-0	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

Respiratory system, Central nervous system (CNS)

Specific target organ toxicity - repeated exposure

Kidney, Liver

Reproductive toxicity
Experiments have shown reproductive toxicity effects on laboratory animals.

Chronic effects
No information available

11.2 Additional Information
Developmental effects have occurred in experimental animals. Teratogenic effects have occurred in experimental animals. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,tiredness, nausea and vomiting

SECTION 12: Ecological information

12.1 Toxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Isopropyl alcohol	1000 mg/L EC50 > 96 h 1000 mg/L EC50 > 72 h	1400000 µg/L LC50 96 h 9640 mg/L LC50 96 h 11130 mg/L LC50 96 h	35390 mg/L EC50 Photobacterium phosphoreum 5 min	13299 mg/L EC50 = 48 h 9714 mg/L EC50 = 24 h

12.2 Persistence and degradability
No information available

12.3 Bio accumulative potential
No information available

12.4 Mobility in soil

Component	log Pow
Phenolphthalein	2.41
Isopropyl alcohol	0.05

12.5 Results of PBT and vPvB assessment
No information available

12.6 Endocrine disrupting properties
Phenolphthalein is on the EU - Endocrine Disrupters Candidate List as a Group III Chemical.

12.7 Other adverse effects
The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

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	UN1219
Proper Shipping name	ISOPROPANOL
Hazard Class	3
Packaging Group	II

IMDG

UN Number	UN1219
Proper Shipping name	ISOPROPANOL
Hazard Class	3
Packaging Group	II

IATA

UN Number	UN1219
Proper Shipping name	ISOPROPANOL
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.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not applicable

SARA 304 Emergency release notification
No information available

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not applicable

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance
No information available

SARA 311/312 Hazardous

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313 (TRI reporting)

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Isopropyl alcohol	67-63-0	99	1
Phenolphthalein	77-09-8	1	0.1

Other federal regulations

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

Not applicable

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

Not applicable

Safe Drinking Water Act

Not applicable

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

No information available

US state regulations

US. Massachusetts RTK - Substance List

Isopropyl alcohol is listed as RTK.

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

Isopropyl alcohol and Phenolphthalein are listed as RTK.

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

Isopropyl alcohol is listed as RTK.

California Proposition 65

This product contains the following Proposition 65 chemicals: Phenolphthalein listed as a Carcinogen.

SECTION 16: Other information

Date of Issue: 12/29/2025

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.