

SAFETY DATA SHEET

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

1.1 Product identifiers

Product name	Gram Stain #3 (Acetone Alcohol)
CAS number	See Section 3
Synonyms	Gram's Acetone Alcohol. Gram Stain #3

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)

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
Carcinogenicity	Category 1A

Specific target organ toxicity (single exposure)
 Target Organs - Respiratory system, Central nervous system (CNS), Optic nerve.
 Specific target organ toxicity - (repeated exposure)
 Target Organs - Liver, Blood.

Category 1

Category 1

2.2 GHS Label elements, including precautionary statements

Pictogram	
Signal Word	Danger
Hazard statements	Highly flammable liquid and vapor Causes serious eye irritation May cause respiratory irritation May cause drowsiness or dizziness May cause cancer Causes damage to organs Causes 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. 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. Do not eat, drink or smoke when using this product. 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: Call a POISON CENTER or doctor/physician IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN (or hair): 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. If eye irritation persists: Get medical advice/attention. In case of fire: Use CO₂, 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

Repeated exposure may cause skin dryness or cracking
WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Acetone	No information available	67-64-1	40%
Ethyl alcohol	No information available	64-17-5	57%
Methyl alcohol	No information available	67-56-1	3%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice	If symptoms persist, call a physician.
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. Obtain medical attention.
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	Clean mouth with water and drink afterwards plenty of water.

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	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.
Unsuitable extinguishing media	No information available.

5.2 Specific hazards arising from the substance or mixture

Extremely flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

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 -17 °C / 1.4 °F

Autoignition Temperature No information available.

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
3	4	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges.

6.2 Environmental precautions

Should not be released into the environment. See Section 12 for additional ecological information.

6.3 Methods and materials for containment and cleaning up

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

6.4 Reference to other sections

See Section 12 for additional ecological information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure adequate ventilation. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

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 heat and sources of ignition.

Incompatibilities

No 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
Acetone	(Vacated) TWA	750 ppm
	(Vacated) TWA	1800 mg/m3
	(Vacated) STEL	2400 mg/m3
	(Vacated) STEL	1000 ppm
	TWA	1000 ppm
	TWA	2400 mg/m3
Ethyl Alcohol	(Vacated) TWA	1000 ppm
	(Vacated) TWA	1900 mg/m3
	TWA	1000 ppm
	TWA	1900 mg/m3
Methyl Alcohol	(Vacated) TWA	(Vacated) TWA: 200 ppm
	(Vacated) TWA	(Vacated) TWA: 260 mg/m3
	(Vacated) STEL	(Vacated) STEL: 250 ppm
	(Vacated) STEL	(Vacated) STEL: 325 mg/m3
	TWA	Skin
	TWA	TWA: 200 ppm TWA: 260 mg/m3

US. ACGIH Threshold Limit Values

Component	Type	Value
Acetone	TWA	250 ppm
	STEL	500 ppm
Ethyl Alcohol	STEL	1000 ppm
Methyl Alcohol	TWA	200 ppm
	STEL	250 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Type	Value
Acetone	IDLH	2500 ppm
	TWA	250 ppm
	TWA	590 mg/m3
Ethyl Alcohol	IDLH	3300 ppm
	TWA	1000 ppm
	TWA	1900 mg/m3
Methyl Alcohol	IDLH	6000 ppm
	TWA	200 ppm
	TWA	260 mg/m3
	STEL	250 ppm
	STEL	325 mg/m3

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Face-shield.

Skin protection

Long sleeved clothing.

Body Protection

Wear protective gloves.

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	Clear
Odor	Strong
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No data available
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	
Upper	No data available

Lower	No data available
Vapor Pressure	No information available
Vapor Density	No information available
Density	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data 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(%)	100
Oxidizing properties	No information available

9.2 Other safety information No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

None known, based on information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

None under normal processing.
Hazardous polymerization does not occur.

10.4 Conditions to avoid

Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

None under normal use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetone	5800 mg/kg (Rat)	> 15800 mg/kg (Rabbit) > 7400 mg/kg (Rat)	76 mg/l, 4 h, (Rat)
Ethyl Alcohol	LD50 = 7060 mg/kg (Rat)	Not listed	20000 ppm/10H (Rat)
Methyl Alcohol	Calc. ATE 60 mg/kg (Human evidence) LD50 = 6200 mg/kg (Rat)	Calc. ATE 300 mg/kg (Human evidence) LD50 = 15800 mg/kg (Rabbit)	Calc. ATE 3.0 mg/l (vapours) or 0.5 mg/l (dust/mists) (Human evidence) LC50 = 64000 ppm (Rat) 4 h 83.2 mg/L (Rat) 4 h

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
Acetone	67-64-1	Not listed	Not listed	Not listed	Not listed	Not listed
Ethyl Alcohol	64-17-5	Group 1	Known	A3	X	Not listed
Methyl Alcohol	67-56-1	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

Respiratory system Central nervous system (CNS) Optic nerve.

Specific target organ toxicity - repeated exposure

Liver Blood.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

Contains a substance which is: Toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Acetone	NOEC = 430 mg/l (algae; 96h)	Oncorhynchus mykiss: LC50 = 5540 mg/l 96h Alburnus alburnus: LC50 = 11000 mg/l 96h Leuciscus idus: LC50 = 11300 mg/L/48h Salmo gairdneri: LC50 = 6100 mg/L/24h	EC50 = 14500 mg/L/15 min	EC50 = 8800 mg/L/48h EC50 = 12700 mg/L/48h EC50 = 12600 mg/L/48h
Ethyl Alcohol	EC50 (72h) = 275 mg/l (Chlorella vulgaris)	Fathead minnow (Pimephales promelas) LC50 = 14200 mg/l/96h	Photobacterium phosphoreum:EC50 = 34634 mg/L/30 min Photobacterium phosphoreum:EC50 = 35470 mg/L/5 min	EC50 = 9268 mg/L/48h EC50 = 10800 mg/L/24h
Methyl Alcohol	Not listed	Pimephales promelas: LC50 > 10000 mg/L 96h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	EC50 > 10000 mg/L 24h

12.2 Persistence and degradability

No information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Component	log Pow
Acetone	-0.24
Ethyl Alcohol	-0.32
Methyl Alcohol	-0.74

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 Number	1993
Proper Shipping name	FLAMMABLE LIQUIDS, N.O.S.
Hazard Class	(Ethanol, Acetone)
Packaging Group	3
Technical name	II

IMDG

UN Number	1993
Proper Shipping name	FLAMMABLE LIQUIDS, N.O.S.
Hazard Class	(Ethanol, Acetone)
Packaging Group	3
Technical name	II

IATA

UN Number	1993
Proper Shipping name	FLAMMABLE LIQUIDS, N.O.S.
Hazard Class	(Ethanol, Acetone)
Packaging Group	3
Technical name	II

SECTION 15: Regulatory information

US federal regulations

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

Acetone (67-64-1) Listed.

Ethyl Alcohol (64-17-5) Listed.

Methyl Alcohol (67-56-1) Listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

SARA 304 Emergency release notification

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not applicable.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Acute Health Hazard.

Chronic Health Hazard.

Fire Hazard.

SARA 313 (TRI reporting)

Methyl Alcohol 67-56-1 Listed.

Other federal regulations

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

Methyl Alcohol 67-65-1 Listed.

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

Methyl Alcohol 67-65-1 Listed.

Clean Water Act

Not applicable

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

Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Ethyl Alcohol 64-17-5 Listed.

Methyl alcohol 67-56-1 Listed.

Acetone 67-64-1 Listed.

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

Ethyl Alcohol 64-17-5 Listed.

Methyl alcohol 67-56-1 Listed.

Acetone 67-64-1 Listed.

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

Ethyl Alcohol 64-17-5 Listed.

Methyl alcohol 67-56-1 Listed.

Acetone 67-64-1 Listed.

California Proposition 65

Ethyl Alcohol 64-17-5 Listed.

Methyl alcohol 67-56-1 Listed.

SECTION 16: Other information

Date of Issue: 9/19/2012

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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.