

# SAFETY DATA SHEET

## SECTION 1 --- IDENTIFICATION

Product Name: Analytical Standard Mix- GC-UF (GC Organic Impurities)  
Common Synonyms: GC Validation Standard (GC Organic Impurities)  
Part numbers: LQC-GC-1UF, LQC-GC-2UF, LQC-GC-3UF, LQC-GC-4UF, LQC-GC-5UF, LQC-GC-VUF  
Product Use: Analytical standards, Laboratory Reagent  
Restrictions: Not for human consumption. Intended for laboratory use only.

Manufacturer/Supplier:

**Bion Analytical**  
**P.O. Box 85252**  
**Sioux Falls, SD 57118**  
**TEL: (605) 838-6679**

**In Case of EMERGENCY Call INFOTRAC: (800) 535-5053**

## SECTION 2 --- HAZARD IDENTIFICATION

Signal Word: Danger

Hazard Statements: Highly flammable liquid and vapor.  
May be fatal if swallowed or enters airways  
Causes serious eye and skin irritation.  
Harmful if swallowed or inhaled.  
Causes skin irritation.  
May cause respiratory irritation.  
May cause drowsiness or dizziness.  
Very toxic to aquatic life with long lasting effects.



Precautionary Statements: Keep away from heat/sparks/open flames/hot surfaces- No smoking.  
Keep container tightly closed.  
Avoid breathing vapors.  
Wear protective gloves/clothing/eye and face protection.  
Store in a dry, well-ventilated area, keep cool.  
Use in well-ventilated area.  
Wash thoroughly after use.  
Avoid release to environment.  
Dispose contents according to state and federal regulations.

## SECTION 3 --- COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No./EC No.</u>	<u>Concentration (% w/w)</u>
Ethanol:	64-17-5/200-578-6	98-99.98%
Acetaldehyde:	75-07-0/200-836-8	.001-.01%
Methanol:	67-56-1/200-659-6	.001-.01%
Isopropanol:	67-63-0/200-661-7	.001-.01%
Tert Butanol:	75-65-0/200-889-7	.001-.01%
1-propanol:	71-23-8/200-746-9	.001-.01%
Ethyl Acetate:	141-78-6/200-500-4	.001-.01%
2-Butanol:	78-92-2/201-158-5	.001-.01%
Benzene:	71-43-2/200-753-7	.001-.01%
Isobutanol:	78-83-1/201-148-0	.001-.01%
Isovaleraldehyde:	590-86-3/209-691-5	.001-.01%
Acetal:	105-57-7/203-310-6	.001-.01%
1-Butanol:	71-36-3/200-751-6	.001-.01%
Dioxane:	123-91-1/204-661-8	.001-.01%
Toluene:	108-88-3/203-625-9	.001-.01%
3-methyl-1-butanol:	123-51-3/204-633-5	.001-.01%
2-methyl-1-butanol:	137-32-6/205-289-9	.001-.01%

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1-pentanol:	71-41-0/200-752-1	.001-.01%
Ethyl Benzene:	100-41-4/202-849-4	.001-.01%
Xylene:	108-38-3/203-576-3	.001-.01%
Styrene:	100-42-5/202-851-5	.001-.01%

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## SECTION 4 --- FIRST AID MEASURES

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### Emergency and First Aid Procedures

**INGESTION:** Rinse mouth with water. Do not induce vomiting. Seek immediate medical advice.

**INHALATION:** Supply fresh air. If required provide artificial respiration. Seek immediate medical advice.

**SKIN CONTACT:** Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

**EYE CONTACT:** Rinse opened eye for at least 15 minutes under running water. Seek immediate medical advice.

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## SECTION 5 --- FIRE-FIGHTING MEASURES

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Fire Extinguishing Media: Water spray, dry chemical, alcohol foam, or carbon dioxide.

Toxic Gases Produced: Carbon monoxide and carbon dioxide.

Protective equipment: Wear self-contained breathing apparatus. Wear fully protective impervious suit.

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## SECTION 6 --- ACCIDENTAL RELEASE MEASURES

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### Steps to be Taken in the Event of a Spill or Discharge

Use PPE, avoid breathing vapors. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Do not let enter drains. Dispose of according to local and federal regulations. Ensure adequate ventilation. Keep away from ignition sources.

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## SECTION 7 --- HANDLING AND STORAGE

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### Storage Requirements

Avoid eye and skin contact. Avoid inhalation of vapors. Keep container tightly closed. Keep away from heat/sparks/open flames/hot surfaces. No smoking permitted in work area. Store in a dry, well-ventilated area, keep cool. Wash thoroughly after use. Avoid prolonged or repeated exposure. Keep Refrigerated.

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## SECTION 8 --- EXPOSURE CONTROLS/PERSONAL PROTECTION

Analyte	OSHA-PEL (ppm)		
	TWA	STEL	Skin
Ethanol:	1000	1000	
Acetaldehyde:	200		
Methanol:	200	250	x
Isopropanol:	200	400	
Tert Butanol:	100	150	
1-propanol:	100	250	x
Ethyl Acetate:	400		
2-Butanol:	100		
Benzene:	0.1	2.5	
Isobutanol:	50		
Isovaleraldehyde:			
Acetal:			
1-Butanol:	20		x
Dioxane:	20		x
Toluene:	100	150	
3-methyl-1-butanol:	100	125	
2-methyl-1-butanol:			
1-pentanol:	100		
Ethyl Benzene:	100	30	
Xylene:	100	150	
Styrene:	50	100	x

Eye/Face Protection: Safety glasses  
Protective Clothing: Coat & Apron  
Protective Gloves: Chemical resistant gloves  
Ventilation Requirements: Vent hood  
Breathing equipment: Use suitable respirator when high concentrations are present.

## SECTION 9 --- PHYSICAL and CHEMICAL PROPERTIES

Physical State: Liquid  
Appearance & Odor: Clear, colorless liquid, with alcohol-like sweet odor  
Boiling Point: Not determined  
Melting Point: Not determined  
Specific Gravity: 0.711-0.789 g/mL (Water = 1)  
Vapor Pressure (mmHg): N/A  
Vapor Density (air=1): N/A  
Evaporation Rate: N/A  
Flash Point (Closed Cup): not determined  
Auto ignition Temperature: not determined  
Flammable Limits: Upper - not determined  
Lower - not determined

## SECTION 10 --- STABILITY AND REACTIVITY

Stability: Stable  
Conditions to Avoid: Heat, flames and sparks, direct sunlight  
Incompatibles: Oxidizing agents, acids  
Decomposition Products: Carbon monoxide and Carbon dioxide

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## SECTION 11 --- TOXICOLOGICAL INFORMATION

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### Emergency Overview

Emergency Overview: Causes irritation to skin and eyes May affect liver, stomach and kidneys. Target Organs: Eyes, skin, central nervous system, liver, kidney, stomach. May cause irritation. May cause headaches, gastritis, intoxication. May cause temporary pain and blurred vision. May cause skin irritation, or prolonged skin contact causes drying and cracking of the skin.

### Toxicity of components:

See section 2 for specific toxicological information for the ingredients of this product.

LD50 Oral: Rat-7060mg/kg, LD50 Dermal: N/A, LD50 Inhalation: Rat-38mg/L

Central nervous system depression including headaches, narcosis and heart damage are possible. May cause drowsiness or dizziness. Known to cause human aspiration toxicity hazards. Liver irregularities. This product contains chemicals known to the state of California to cause cancer and to cause birth defects or other reproductive harm.

Not all chemical, physical and toxicological properties have been thoroughly investigated.

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## SECTION 12 --- ECOLOGICAL INFORMATION

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Do not release into environment. Very toxic to aquatic life with long lasting effects.  
Not all ecological information has been thoroughly investigated.

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## SECTION 13 --- DISPOSAL CONSIDERATIONS

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### Disposal Procedure

Dispose in accordance with all applicable federal, state, and local environmental regulations. Do not allow to get into drains or waste. Contact a licensed professional waste disposal company to dispose of this material. Incineration with afterburner and scrubber.

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## SECTION 14 --- TRANSPORT INFORMATION

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If shipping over exempt quantities.

### Domestic (D.O.T.)

Proper Shipping Name: Flammable liquids, n.o.s

UN #: UN1993

Packing Group: II

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## SECTION 15 --- REGULATORY INFORMATION

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### California Prop 65

This product contains chemicals known to cause cancer and to cause birth defects or other reproductive harm.

For laboratory and research use ONLY.

In addition to federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

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## SECTION 16 --- OTHER INFORMATION

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Revision Date: 4-20-2020

N/A =Not Applicable or Not Available

N/E = Not Established

The information in this Safety Data Sheet meets the requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and regulations promulgated there under (29 CFR 1910.1200 et. seq.) and the Canadian WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, chemical handling. The user is responsible for determining the application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes.

# **SAFETY DATA SHEET**

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Bion Analytical 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, howsoever arising, even if Bion Analytical has been advised of the possibility of such damages.*