

SAFETY DATA SHEET

SECTION 1 --- IDENTIFICATION

Product Name: Karl Fischer Water Validation Standard
Common Synonyms: KF standard
Part Number: LQC-KF-V, LQC-KF-VL
Chemical Family: Analytical Standards
Product Use: 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: Flammable liquid and vapor.
Causes skin/eye irritation.
Causes serious eye damage.
May cause dizziness or drowsiness.
May cause respiratory irritation.
Harmful to aquatic life with long lasting effects.



Precautionary Statements: Keep away from heat/sparks/open flames/hot surfaces- No smoking.
Keep container tightly closed. Keep cool. Store and use in a well-ventilated area.
Wear protective gloves/clothing/eye and face protection.
Avoid breathing fumes.
Wash thoroughly after use.
Avoid environmental release.

SECTION 3 --- COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %
n-Butanol	71-36-3	10 – 30%
m-Xylene	108-38-3	10 – 30%
Propylene Carbonate	108-32-7	50 – 70%
Water	7732-18-5	0 – 2%

SECTION 4 --- FIRST AID MEASURES

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. Keep patient warm. 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 several minutes under running water. Remove contact lenses, if present. Continue rinsing. Seek immediate medical advice.

SECTION 5 --- FIRE-FIGHTING MEASURES

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

Toxic Gases Produced: Carbon monoxide and carbon dioxide

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

SECTION 6 --- ACCIDENTAL RELEASE MEASURES

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use personal protective equipment. Avoid breathing vapors. Ensure adequate ventilation. Keep away from ignition sources. Dispose of according to local and federal regulations.

SECTION 7 --- HANDLING AND STORAGE

Storage Requirements

Avoid contact with skin and eyes. Avoid inhalation of vapor. Keep container tightly closed. Keep material away from heat/sparks/open flames/hot surfaces. No smoking permitted in area when working with the material. Store in a cool, dry, well-ventilated area. Wash thoroughly after use.

SECTION 8 --- EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA PEL (Xylene):	TWA 100 ppm
OSHA PEL (Butanol):	TWA 100 ppm
Eye/Face Protection:	Goggles
Protective Clothing:	Coat & Apron
Protective Gloves:	Use chemically resistant gloves
Ventilation Requirements:	Vent Hood
Breathing equipment:	Use suitable respirator when high concentrations are present.

SECTION 9 --- PHYSICAL and CHEMICAL PROPERTIES

Boiling Point:	Not determined
Melting Point:	Not determined
Specific Gravity:	~1 (Water = 1)
Physical State:	Liquid
Vapor Pressure (mmHg):	Not determined
Vapor Density (air=1):	N/A
Evaporation Rate:	N/A
Appearance & Odor:	Clear, colorless liquid with solvent-like odor
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:	Sparks, heat and flames
Incompatibles:	Oxidizing agents
Decomposition Products:	Carbon monoxide and Carbon dioxide

SECTION 11 --- TOXICOLOGICAL INFORMATION

Emergency Overview: Toxic and flammable. May be harmful if swallowed. Harmful if inhaled. Causes respiratory tract irritation. Affects central nervous system. May cause blindness. Causes irritation to skin and eyes. May affect liver, blood, and reproductive system. Target Organs: Eyes, skin, respiratory tract, central nervous system, liver, and stomach. Inhalation: May cause irritation to the mucous membranes of the upper respiratory tract. Ingestion: Causes headaches, gastritis, intoxication, blindness, and may be fatal if swallowed. Eyes: Can cause eye irritation. May cause temporary pain and blurred vision. Skin: Causes skin irritation, or prolonged skin contact causes drying and cracking of the skin.

Toxicity of components

Acute toxicity:

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Butanol (CAS# 71-36-3)
ORL-RAT LD50: 790 mg/kg
IHL-RAT LC50: 8000 ppm

m-Xylene (CAS# 108-38-3)
ORL-RAT LD50: 5000 mg/kg
IHL-RAT LC50: not determined

Propylene Carbonate (CAS# 108-32-7)
ORL-RAT LD50: > 20700 mg/kg
IHL-RAT LC50: not determined

n-Butanol - RTECS# EO1400000
m-Xylene – RTECS# ZE2275000
Propylene Carbonate I - RTECS# FF9650000

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

SECTION 12 --- ECOLOGICAL INFORMATION

No ecological information available for this product.

SECTION 13 --- DISPOSAL CONSIDERATIONS

Disposal Procedure

Dispose in accordance with all applicable federal, state, and local environmental regulations.

SECTION 14 --- TRANSPORT INFORMATION

Domestic (D.O.T.)

Proper Shipping Name:
Flammable Liquids, N.O.S.
(n-Butanol, xylene)
UN1993
PGII

International (I.M.O.)

Proper Shipping Name:
Flammable Liquids, N.O.S.
(n-Butanol, xylene)
UN1993
PGII

SECTION 15 --- REGULATORY INFORMATION

This product does not contain any chemical known to the State of California to cause cancer, birth defects or any other reproductive harm.

SECTION 16 --- OTHER INFORMATION

Revision Date: 5/11/2015

N/A =Not Applicable or Not Available
N/E = Not Established

The information in this Material 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.

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