

# SAFETY DATA SHEET

SKU: FM100X

FORMALDEHYDE 37% LIQUID TECH (12-15% METHANOL)

**Xenex Laboratories Inc**  
**#102 - 2440 Canoe Ave Coquitlam BC V3K 6C2**

## Section 1: Chemical Product and Company Identification

Catalog Name: FORMALDEHYDE 37% LIQUID TECH (12-15% METHANOL)  
Commercial Names: Formaldehyde 37% Liquid  
Synonyms: Formaldehyde Solution, Formalin  
Chemical Name: Not Available.  
Chemical Formula: CH<sub>2</sub>O  
Cas #: Not Available.  
RTECS: Not Available.  
TSCA: Not Available.  
Emergency Contact: 1-703-527-3887 (CHEMTREC)

## Section 2: Hazards Identification

GHS Classification: Flammable liquids (Category 3), H226  
Acute toxicity, Oral (Category 3), H301  
Acute toxicity, Inhalation (Category 3), H331  
Acute toxicity, Dermal (Category 3), H311  
Skin corrosion (Category 1B), H314  
Serious eye damage (Category 1), H318  
Skin sensitisation (Category 1), H317  
Germ cell mutagenicity (Category 2), H341  
Carcinogenicity (Category 1B), H350  
Specific target organ toxicity - single exposure (Category 1), Eyes, H370  
Short-term (acute) aquatic hazard (Category 3), H402

Signal Word: Danger

Hazard and Precautionary Statements:	H226	H301+H311+H331	H314	H341	H350
	H370	H402	P201	P202	P210
	P233	P241	P243	P270	P271
	P301+310	P330	P308+311	P403+233	P501

Flammable liquid and vapour.

Toxic if swallowed, in contact with skin or if inhaled

Causes severe skin burns and eye damage.

Suspected of causing genetic defects .

May cause cancer .

Causes damage to organs .

Harmful to aquatic life

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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Keep away from heat/sparks/open flames/hot surfaces. — No smoking.  
 Keep container tightly closed.  
 Use explosion-proof electrical/ventilating/lighting/equipment.  
 Take precautionary measures against static discharge.  
 Do no eat, drink or smoke when using this product.  
 Use only outdoors or in a well-ventilated area.  
 IF SWALLOWED; Immediately call a POISON CENTER/doctor/...  
 Rinse mouth.  
 If exposed or concerned; Call a POISON CENTER/ doctor/...  
 Store in a well ventilated place. Keep container tightly closed.  
 Dispose of contents/ container to an approved waste disposal plant.

Pictograms:

Flammable

Toxic

Health Hazard

Corrosive

Harmful / Irritant



HMIS

Health Hazard:	3
Fire Hazard:	2
Reactivity:	0

Personal Protection: G

Personal Protective Equipment

Respirator

Face Shield

Protective Clothing

Hand Protection

Safety Goggles

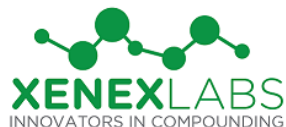


Potential Health Effects:

Not Available.

## Section 3: Composition and Information on Ingredients

Chemical Name	CAS Number	% by Weight
Formaldehyde	50-00-0	36.5-38
Methanol	67-56-1	10-15
Water	7732-18-5	47-53.5



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## Section 4: First Aid Measures

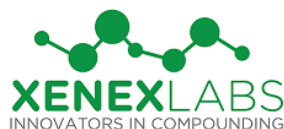
Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin Contact:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
Eye Contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
Ingestion:	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## Section 5: Fire-fighting Measures

Suitable Extinguishing Media:	Dry powder Dry sand
Unsuitable Extinguishing Media:	Do NOT use water jet.
Hazardous Combustion Products:	Not Available.
Specific hazards:	Carbon oxides
Specific Methods:	Use water spray to cool unopened containers.
Special Protective Equipment for Firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.

## Section 6: Accidental Release Measures

Personal Precautions:	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.



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Methods and materials for containment and clean up:

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

## Section 7: Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): 3: Flammable liquids

## Section 8: Exposure Controls / Personal Protection

Exposure Limits:

Component	CAS Number	Value	Control Parameters	Basis
Formaldehyde	50-00-0	(c)	1.000000 ppm 1.300000 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	0.300000 ppm	Canada. British Columbia OEL
		STEL	0.3 ppm	USA. ACGIH Threshold Limit Values (TLV)
Methanol	67-56-1	TWA	200 ppm 262 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWAEV	200 ppm 262 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants

Engineering Controls:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.



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## Personal Protection:

### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye

protection tested and approved under appropriate government standards such as

NIOSH (US) or EN 166(EU).

### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact

with this product. Dispose of contaminated gloves after use in accordance with

applicable laws and good laboratory practices. Wash and dry hands.

### Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 480 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

### Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.2 mm Break through time: 60 min

Material tested: Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail

sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which

differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist

and safety officer familiar with the specific situation of anticipated use by our

customers. It should not be construed as offering an approval for any specific use scenario.

### Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective

clothing., The type of protective equipment must be selected according to the

concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387)

respirator cartridges as a backup to engineering controls. If the respirator is the sole

means of protection, use a full-face supplied air respirator. Use respirators and

components tested and approved under appropriate government standards such as

NIOSH (US) or CEN (EU).

### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.



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## Section 9: Physical and Chemical Properties

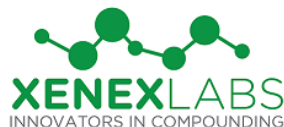
Form	Clear, Liquid
Color	Colorless
Odor	Pungent
Initial boiling point and boiling range	100 °C 212 °F at 1013 hPa
Flash point	56.11 °C (133.00 °F) - closed cup
Upper/lower flammability or explosive limits	Upper explosion limit: 70 %(V) Lower explosion limit: 7 %(V)
Vapour pressure	53 hPa at 39 °C (102 °F)
Partition coefficient: n-octanol/water	log Pow: 0.35
Auto-ignition temperature	420 °C (788 °F)

## Section 10: Stability and Reactivity

Possibility of hazardous reactions:	Not Available.
Chemical Stability:	Stable under recommended storage conditions. Contains the following stabiliser(s): Methanol (>10 - <15 %)
Conditions to Avoid:	Heat, flames and sparks.
Incompatible Materials:	Strong bases, Acids, Oxidizing agents, Alkali metals, Strong oxidizing agents, Amines, Strong acids, Acid chlorides, Acid anhydrides, Reducing agents, Peroxides, Isocyanates, Phenol, Aniline
Hazardous Decomposition Products:	Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available In the event of fire: see section 5

## Section 11: Toxicological Information

Routes of entry:	Not Available.
Potential Acute Health Effects:	Not Available.
Potential Chronic Health Effects:	Not Available.



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Other Toxic Effects on Humans: spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache

Carcinogenic Effects: IARC: 1 - Group 1: Carcinogenic to humans (Formaldehyde)  
1 - Group 1: Carcinogenic to humans (Formaldehyde)  
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Mutagenic Effects: Not Available.

Teratogenic Effects: Not Available.

Developmental Toxicity: Not Available.

Toxicity:

Ingredient	Route	Specification	Dose	Species
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## Section 12: Ecological Information

Ecotoxicity: Not Available.

Persistence and Degradability: Not Available.

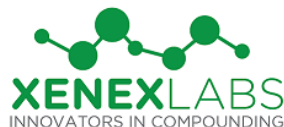
Bioaccumulative Potential: Not Available.

Mobility in Soil: Not Available.

## Section 13: Disposal Considerations

Waste Disposal: Product  
Offer surplus and non-recyclable solutions to a licensed disposal company.  
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Contact a licensed professional waste disposal service to dispose of this material.  
Contaminated packaging  
Dispose of as unused product.

## Section 14: Transportation Information



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DOT: UN number: 2209 Class: 8 Packing group: III  
Proper shipping name: Formaldehyde solutions  
Reportable Quantity (RQ): 263 lbs  
Poison Inhalation Hazard: No

TDG: Not Available.

IATA: UN number: 2209 Class: 8 Packing group: III  
Proper shipping name: Formaldehyde solution

## Section 15: Regulatory Information

Federal and State Regulations: Not Available.

Other Regulations: This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

## Section 16: Other Information

Preparation Date: 7/12/2019

Prepared By:

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Xenex Laboratories assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Xenex Laboratories assumes no responsibility for the completeness or accuracy of the information contained herein.