

**OncoFix II****1. Identification****Product Name:** OncoFix II**Item #:** MA0102127, MA0102168, MA0102129,**Web****SDS:** S390**Synonyms:** N/A**Recommended Use:** Laboratory Reagent**Manufacturer:**BBC Biochemical
409 Eleanor Lane,
Mount Vernon, WA 98273
1-800-635-4477**Restrictions on Use:** Any use other than recommended**In Case of Emergency:**Chemtec US 1-800-424-9300
Chemtec International 703-527-3887**2. Hazards Identification****OSHA Hazard Classification(s):**

Acute Toxicity - Inhalation - Category 3

Skin Irritation - Category 2

Eye Irritation - Category 2

Sensitization - Skin - Category 1A

Germ Cell Mutagenicity - Category 2

Carcinogenicity - Category 1A

Signal Word: Danger**Hazard Statement(s):** Toxic if inhaled. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Suspect of causing genetic defects. May cause cancer.**Pictogram(s):****Precautionary Statement(s):** Prevention: Avoid breathing dust, vapors. Use only outdoors or in a well-ventilated area. Wash body thoroughly after handling. Wear protective gloves. Contaminated work clothing must not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection and face protection.

Response: If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a doctor. Specific treatment (see first aid section on this label). If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical attention. Take off all contaminated clothing and wash it before reuse. If exposed or concerned: Get medical attention. 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 attention.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container in accordance with local regulations.

Descriptions of Hazards not otherwise classified: N/A**Percent of mixture with unknown acute toxicity:** N/A**3. Composition and Information on Ingredients**

Chemical Name	Common Name	CAS #	Concentration %
Ethanol		64-17-5	25-30
Glyoxal		107-22-2	Less than 2
Hydroxyacetic Acid		79-14-1	Less than 2
Diazolidinylurea		78491-02-8	Less than 0.5

4. First Aid Measures



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Eye Contact: Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation: Move to fresh air. If not breathing, give artificial respiration.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth.

Symptoms: N/A

Recommendations for immediate medical care/special treatment: Treat symptomatically.

5. Fire- Fighting Measures

Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Fire Hazards (Chemical): N/A

Special Protective Equipment: N/A

Precautions for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Emergency Procedures: Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

Protective Equipment: See section 8

Environmental Precautions: See Section 12 for additional Ecological information.

Containment and Clean-Up Procedures: Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers.

7. Handling and Storage

Handling: Handle in accordance with good industrial hygiene and safety practice.

Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Products: Oxidizing agents. Peroxides. Alkali metals. Ammonia.

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs):

Reagent	CAS #	OSHA PEL TWA
Ethanol	64-17-5	1000ppm, 1900 mg/m ³

ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Ethanol	64-17-5		1000ppm
Glyoxal	107-22-2	0.1mg/m ³	

Engineering Controls: Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

Personal Protective Measures: Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

Special PPE Requirements: If ventilation hood not available wear respirator.

9. Physical and Chemical Properties Section

Appearance: Colorless, Liquid

Molecular Weight: N/A

Molecular Formula: N/A

pH: 3.51

Boiling Point and Boiling Range: N/A

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Melting Point/Freezing Point: N/A
Flash Point: N/A
Specific Gravity/Relative Density: 0.992
Odor: N/A
Odor Threshold: N/A
Color: Colorless
Flammability (solid/gas): N/A
Vapor Density: N/A
Upper/Lower flammability or explosive limits: N/A
Vapor Pressure: N/A
Evaporation Rate: N/A
Partition Coefficient: n-octanol/water: N/A
Viscosity: N/A
Auto-ignition temperature: N/A
Solubility: N/A
Decomposition Temperature: N/A

10. Stability and Reactivity

Reactivity: N/A
Chemical Stability: Stable
Conditions of Stability/Instability: Stable under recommended storage conditions.
Stabilizers needed: None
Safety issue indicated by appearance change: N/A
Other: N/A
Hazardous Reactions: None under normal processing.
Hazardous Polymerization: Does not occur
Conditions to avoid: Extremes of temperature and direct sunlight.
Classes of Incompatible Materials: Oxidizing agents. Peroxides. Alkali metals. Ammonia.
Hazardous Decomposition Products: Carbon oxides.

11. Toxicological Information**Likely Routes of Exposure**

Eyes: Irritating to eyes.
Skin: Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Inhalation: Toxic by inhalation.
Ingestion: Harmful if swallowed.

Signs or Symptoms of Exposure: N/A

Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea.

Acute Toxicity (Numerical Measures):

Ethanol CAS 64-17-5 LD50(oral)=7060mg/kg(rat), LC50(inh)=124.7mg/L(rat)4H
Glyoxal CAS 107-22-2 LD50(oral)=200mg/kg(rat), LD50(dermal)=12700mg/kg(rat), LC50(inh)=2.44mg/L(rat)4H
Hydroxyacetic acid CAS79-14-1 LD50(oral)=1950mg/kg(rat), LC50(in)=7100ug/m3(rat)4H
Diazolidinylurea CAS 78491-02-8 LD50(oral)=2600mg/kg(rat), LD50(dermal)=>2g/kg(rat)

Carcinogenicity (NTP, IARC, OSHA): Contains Ethanol CAS 64-17-5 IARC Group 1 carcinogen in beverages.

12. Ecological Information

Ecotoxicity: 28.296% of the mixture consists of component(s) of unknown hazards to the aquatic environment.
Ethanol CAS 64-17-5: Toxicity to Fish: 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L



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LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through. Crustacea: 9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50 Glyoxal CAS 107-22-2: Algae/Aquatic Plants: 500: 72 h Desmodesmus subspicatus mg/L EC50 348.59: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 500: 96 h Desmodesmus subspicatus mg/L EC50. Toxicity to Fish: 215: 96 h Pimephales promelas mg/L LC50 static 460 - 680: 96 h Leuciscus idus mg/L LC50 static. Crustacea: 404: 48 h Daphnia magna mg/L EC50. Hydroxyacetic acid CAS 19-14-1: Toxicity to Fish: 5000: 96 h Brachydanio rerio mg/L LC50 static

Persistence and degradability: N/A

Bioaccumulation Potential (octanol-water partition coefficient, BCF): Ethanol CAS 64-17-5: Partition coefficient: -0.32

Glyoxal CAS 107-22-2: Partition coefficient: -0.85 Hydroxyacetic acid CAS 79-14-1: Partition coefficient: -1.11

Mobility in the soil: N/A

Adverse Environmental Effects: N/A

13. Disposal Considerations

Recommended Disposal Containers: Dispose of material in accordance with all federal, state, and local regulations. Do not re-use empty containers.

Recommended Disposal Methods: Do not dispose of in drains, check with your local waste authorities.*

Physical/Chemical Properties affecting Disposal: See section 2 and section 9 applicable information.*

Special Precautions for Landfill and Incineration Activities: Check with your local waste authorities.*

Waste Stream: Consult your local or regional authorities.*

14. Transport Information

UN Number: Not regulated

UN Proper Shipping Name:

Transport Hazard Class(es):

Packing Group Number:

Environmental Hazards (IMDG code):

Marine Pollutant:

Transport in Bulk (IBC Code):

Special Transport Precautions:

15. Regulatory Information

OSHA: N/A

DOT: Not regulated

EPA: N/A

CPSC: N/A



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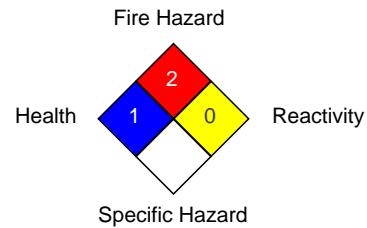
16. Other Information

Revision Date: 12/07/2015

NFPA

Health	1
Fire Hazard	2
Reactivity	0
Specific Hazard	

National Fire Protection Association (USA) NFPA



HMIS

Health	1
Flammability	2
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS

Health	1
Flammability	2
Physical Hazard	0
Personal Protection	

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