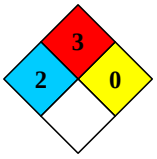
Polymer Chemistry Innovations, Inc.

2-Ethyl-2-Oxazoline

Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
	**Health Hazard** 2 **Fire Hazard** 3 **Physical Hazard** 0 **Personal Protection**	
For additional information on toxicity, please refer to Section 11		See Section 8

Section 1: Identification

Chemical Name:	2-ethyl-2-oxazoline		**Manufacturer:**
Synonyms:	ETOX		**Polymer Chemistry Innovations, Inc.** **4231 South Fremont Avenue** **Tucson, AZ 85714** **+1 520 746-8446 P** **+1 520 746-8876 F** **Chemtrec contract # 201299**
Uses	Organic intermediate or monomer for use in manufacturing water soluble polymer, specialty coatings, adhesives.		
Ingredient/Substance Name:	**%**	**CAS #**	**800-424-9300 outside USA +1 703-527-3887**
2-ethyl-2-oxazoline	99+	10431-98-8	In France: +33 1 45 42 59 59
ECHA Registration number	05-2117261242-54-0000		In Netherlands: +31 30 274 8888
			skw@polychemistry.com

Section 2: Hazards Identification

Hazard Classification	Flammable Liquid 3 H226 Irritant H315 H319	R10 Xi; R36 and R38
Signal Word	WARNING	
PBT or vPvB	No data available at this time.	
Hazard Statements	H226: Flammable liquid and vapor H315 + H319: Causes severe skin and eye irritation	

Section 2:	Hazards Identification (Continued)
Precautionary Statement Prevention	P210: Keep away from heat/sparks/open flames/hot surfaces.—No smoking P240: Ground/bond container and receiving equipment; flammable vapors may be present P241: Use explosion-proof equipment. P242: Use only non-sparking tools. P260: Do not breathe dust/fumes/gas/mist/vapors/spray P264: Wash thoroughly after handling P280: Use chemical resistant gloves and chemical safety goggles when handling.
Precautionary Statement Response	P301+P330+P331+P310: If swallowed, rinse mouth, DO NOT induce vomiting and seek medical attention. P305+P351+P338: If in eyes, rinse with running water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. P304+P340: If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. P303+P306+P353+P361+P362: If on skin, hair, or clothing; immediately remove clothing and wash skin under running water for several minutes. Wash contaminated clothing before reuse. P370+P378: In case of fire use water spray, chemical foam, carbon dioxide, and dry chemical for extinction.
Precautionary Statement Storage	P403+P404: Store in a well ventilated place. Store in a closed container.
Precautionary Statement Disposal	P501: Dispose of unusable product with a licensed waste facility in accordance with regulatory agencies. Dispose of empty containers in accordance with regulatory agencies.

Section 3: Composition/Information on Ingredients				
Chemical Name:	2-ethyl-2-oxazoline	99+ %	CAS #	10431-98-8
Synonyms:	ETOX			
Chemical Family:	Oxazoline			
Chemical Formula:	C_5H_9NO			

Section 4: First Aid Measures	
Eyes	Flush eyes with water for at least 15 minutes occasionally lifting the upper and lower lids. Seek medical attention immediately. Will cause severe irritation if left in the eye.
Skin	Wash skin with soap and water for 15 minutes. Remove contaminated clothing. Seek medical attention. Will cause severe irritation if left on the skin. Wash clothing before reuse.
Inhalation	In case of adverse reaction; remove from exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.
Ingestion	Wash mouth with water. Do not induce vomiting. Seek immediate medical attention, or call poison control.
Symptoms/Effects	Acute symptoms: Severe irritation to skin and mucus membrane. Chronic symptoms: None known.

Section 5: Fire and Explosion Hazards	
Extinguishing Media	Water spray, dry chemical, carbon dioxide, and chemical foam.
Special Fire Fighting Instructions	None available.

Section 6: Accidental Release Information	
Spill or Release	Absorb spill with inert material, (e.g., vermiculite, dry sand or earth), then place into a chemical waste container. Do not use combustible materials such as sawdust. Remove all sources of ignition. Use spark-proof tools.

Section 7: Handling and Storage	
Handling	Avoid contact with skin and clothing. Vapors can be irritating to mucous membrane if inhaled. Ground or bond containers. Keep from entering the environment.
Storage	Store in a cool, dry place, away from sources of ignition. Keep containers tightly closed when not in use.

Section 8: Exposure Controls/Personal Protection	
OSHA PEL	Not determined.
ACGIH TLV	Not determined.
Eyes	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.
Skin	Wear appropriate chemical resistant gloves to prevent skin exposure. Work experience has shown polyethylene or neoprene provide the best protection.
Ventilation	Use ventilation to keep airborne concentrations low.
Respirator	Not mandatory with proper ventilation. Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 136 (EN 141). Always use a NIOSH or European Standard EN 136 approved respirator when necessary. Cartridges should be organic vapor/acid gas combination.

Comment [S1]:

Comment [S2R1]:

Section 9: Physical and Chemical Information	
Physical State	Liquid
Appearance	Colorless liquid
Odor/Odor Threshold	Not characterized/Not determined
Melting Point	-62° C
Boiling Point	128.4° C @ 760.00 mm Hg
Solubility in Water	Miscible
Partition Coefficient: n-octanol/water	Not determined
Volatile Content	Not available
pH	~11
Flashpoint	29° C (84° F)
Auto-ignition Temp.	410° C (770° F)
Evaporation rate	Not determined
Flammability	Flammable class IC

Section 9: Physical and Chemical Information (Continued)	
Explosion limit lower	Not available
Explosion limit upper	Not available
Vapor Pressure	0.450 (PSIA)
Vapor Density	Not available
Decomposition Temp	Not available
Specific Gravity	.982 g/cm^3
Viscosity	Not available.
Molecular Weight	99.13
Molecular Formula	C_5H_9NO

Section 10: Stability and Reactivity	
Reactivity	Not determined.
Hazardous Reactions	Spontaneous hazardous polymerization will not occur.
Chemical Stability	Product is stable under normal conditions of storage and handling.
Conditions to Avoid	Incompatible materials. Sources of ignition.
Incompatibilities	Strong oxidizing agents, strong acids, copper alloys, copper.
Decomposition Products	Nitrogen oxides, carbon monoxide, carbon dioxide.

Section 11: Toxicology Information	
Carcinogen	Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, or OSHA.
Toxicity	Single exposure (acute) studies indicate: Inhalation – No conclusive data at this time Oral – rat LD50-2700 mg/kg, female, 3660 mg/kg, males. No human data. Eye irritation – Work experience has shown severe irritation, with reversible damage in humans. Skin irritation – Work experience has shown severe irritation, with reversible damage in humans.

Section 12: Ecological Information	
Ecotoxicity	Not determined
Persistence and degradability	Not determined
Bioaccumulative potential	Not determined
Mobility in soil	Not determined
Other adverse effects	Not determined

Section 13: Disposal Considerations	
Disposal	Dispose of in a manner consistent with Federal, state, and local regulations. Must be disposed of in a licensed waste facility. Incineration is recommended method of disposal. Containers may be disposed as scrap metal if they are RCRA clean.

Section 14: Transportation		
Shipping method	**IATA/DOT/ADR 2009**	**IMO**
UN Number	2924	2924
Proper shipping name	Flammable liquid, corrosive N.O.S.	Flammable liquid, corrosive N.O.S.
Hazard class	3, 8	3, 8
Packing group	III	III
Flash point		29° C
Marine Pollutant		No
Reportable Quantity	100 lbs.	
Bulk Transportation	Yes	Yes

Section 15: Regulatory Information	
Registration with regulatory agencies	DSL – Supplement to Canada Gazette, Part 1 January 26, 1991 ECL – KE-13993 Korean Existing Chemical List, January 1997 EINECS – 233-912-4 Annex to Official Journal of the European Communities, 15 June 1990 (Replaced by Reach registration 05-2117261242-54-0000) ENCS – 5-5627 Japanese Gazette PICCS – Philippines Inventory of Chemicals and Chemical Substances, 2000 TSCA – On TSCA inventory July 2003 Inventory Tape
Environmental special provisions	No data at this time

Section 16: Additional Information
Creation date: 03/05/01 Created by Polymer Chemistry Innovations, Inc.
Last revision date: 08/13/2013. Revision #8
This data sheet and recommendations presented in this data sheet concerning the use of our product and the materials contained therein are believed to be accurate and are based on information that is considered reliable as of the date hereof. However, the customer should determine the suitability of such materials for his or her purpose before adopting them on a commercial scale. Since the use of our products by others is beyond our control, no guarantee, expressed or implied, is made and no responsibility assumed for the use of this material or the results to be obtained therefrom. Information on the form is furnished for the purpose of compliance with Government Health and Safety Regulations and shall not be used for any other purpose. Moreover, the recommendations contained in this data sheet are not to be construed as a license to operate under, or a recommendation to infringe, any existing patents, nor should they be confused with state, municipal, or insurance requirements, or with national safety codes.