



### M A T E R I A L   S A F E T Y   D A T A   S H E E T

**PRODUCT NAME:** ECOPOL-ASC-1  
**REVISION DATE:** OCTOBER 5, 2011

**For Chemical Emergency (Spill, Leak, Fire, Exposure or Accident)**  
**CALL CHEMTREC Day or Night 800-424-9300**  
**For International, Call 703-527-3887 (Collect Calls Accepted)**

**\*\* FOR INDUSTRIAL USE ONLY \*\***

#### Section I - Product Information and Company Identification

**Chemical Name:** Mixture **Product Use:** Corrosion Inhibitor  
**DOT Hazard Class:** UN3286, Flammable Liquid, Toxic, Corrosive, N.O.S. (Contains Propargyl alcohol, Methanol, 3 (6.1, 8), PG II)

#### Section II – Composition, Information on Ingredients

Material	Cas #	Percent
1) Methyl Alcohol	67-56-1	15-40
2) Propargyl Alcohol	107-19-1	5-15

**Physical state :** Liquid. [Clear.]

**Odor :** Pungent. Alcohol.

**Color :** Light yellow to Amber. [Light]

**OSHA/HCS status :** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Emergency overview :** DANGER!

FLAMMABLE LIQUID AND VAPOR. MAY BE FATAL IF ABSORBED THROUGH SKIN OR IF SWALLOWED. CAUSES EYE AND SKIN BURNS. HARMFUL IF INHALED. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE BLINDNESS IF SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flashback. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

**Routes of entry :** Dermal contact. Eye contact. Inhalation.

**Potential acute health effects**

**Economy**  
**Polymers & Chemicals**

P.O. Box 450246  
Houston, TX 77245-0246  
USA Toll free: (800) 231-2066  
Phone: (713) 723-8416  
Fax: (713) 723-1845  
URL: [www.EconomyPolymers.com](http://www.EconomyPolymers.com)  
E-mail: [economy@economypolymers.com](mailto:economy@economypolymers.com)



# Economy<sup>®</sup>

## POLYMERS & CHEMICALS

**Inhalation** Toxic by inhalation. Can cause central nervous system (CNS) depression. Irritating to respiratory system.

**Ingestion** : Very toxic if swallowed. Can cause central nervous system (CNS) depression. May cause burns to mouth, throat and stomach. May cause blindness if swallowed.

**Skin** : Corrosive to the skin. Causes burns. Very toxic in contact with skin.

**Eyes** : Corrosive to eyes. Causes burns.

### **Potential chronic health effects**

**Chronic effects** : Contains material that may cause target organ damage, based on animal data.

**Carcinogenicity** : Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

**Target organs** : Contains material which may cause damage to the following organs: kidneys, the nervous system, liver, mucous membranes, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

### **Over-exposure signs/symptoms**

**Inhalation** : respiratory tract irritation, nausea or vomiting, coughing, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness

**Ingestion** : stomach pains

**Skin** : pain or irritation, redness, blistering may occur

**Eyes** : pain, watering, redness

**Medical conditions aggravated by overexposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

### **Section IV – First Aid Measures**

**Eye contact** : Call medical doctor or poison control center immediately. Get medical attention immediately. Immediately flush the eye(s) continuously with lukewarm, gently flowing water for at least 20-60 minutes while holding the eyelid(s) open.

**Skin contact** : Call medical doctor or poison control center immediately. Wash affected area with soap and mild detergent for at least 20 - 60 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

**Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**Ingestion** : Call medical doctor or poison control center immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wear suitable protective clothing and gloves. Remove contaminated clothing and shoes.

### **Section V - Fire & Explosion Hazard Data**

**Flammability of the product** : Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

### **Extinguishing media**

**Suitable** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Economy**  
**Polymers & Chemicals**

P.O. Box 450246  
Houston, TX 77245-0246  
USA Toll free: (800) 231-2066  
Phone: (713) 723-8416  
Fax: (713) 723-1845  
URL: [www.EconomyPolymers.com](http://www.EconomyPolymers.com)  
E-mail: [economy@economypolymers.com](mailto:economy@economypolymers.com)



# Economy<sup>®</sup>

## POLYMERS & CHEMICALS

**Not suitable :** Do not use water jet.

**Special exposure hazards :** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Hazardous thermal decomposition products :** carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides

**Special protective equipment for fire-fighters :** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**Special remarks on explosion hazards:** Will violently decompose above 140C.

### Section VI – Accidental Release Measures

**PERSONAL PRECAUTION IN SPILL:** Wear suitable protective clothing, gloves and safety goggles.

**PRECAUTIONS TO PROTECT ENVIRONMENT:** Dyke to prevent entering any sewer or waterway.

**SPILL CLEANUP METHODS:** Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers.

### Section VII- Handling and Storage

**USAGE PRECAUTIONS:** Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Avoid spilling, skin and eye contact.

**STORAGE PRECAUTIONS:** The drums should be stored, with their seals intact, in conditions that avoid extremes of temperatures. Bulk deliveries should be stored in carbon steel tanks. Under these conditions the shelf life of the product should be approximately two years.

**STORAGE CRITERIA:** Flammable liquid storage. Toxic storage.

### Section VIII – Exposure Controls/Personal Protection Information

Occupational Exposure Limits		TWA (8 hour)			STEL (15 min)			Ceiling		
Ingredients	List name	ppm	mg/m <sup>3</sup>	other	ppm	mg/m <sup>3</sup>	other	ppm	mg/m <sup>3</sup>	other
Propargyl	US ACGIH	1	2.3	-	-	-	-	-	-	-
Alcohol [1]	OSHA PEL 1989	1	2	-	-	-	-	-	-	-
Methanol [1]	US ACGIH	200	262	-	250	328	-	-	-	-
	OSHA PEL	200	260	-	-	-	-	-	-	-
	OSHA PEL 1989	200	260	-	250	325	-	-	-	-

[1] Absorbed through skin. [3] Skin sensitization

**Consult local authorities for acceptable exposure limits.**

**Only components of this product with established exposure limits appear in the box above.**

**If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated by the 11th Circuit Court of Appeals, Economy Polymers recommends that these lower exposure levels be observed as reasonable worker protection.**

**Recommended monitoring procedures :** If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Economy**  
Polymers & Chemicals

P.O. Box 450246  
Houston, TX 77245-0246  
USA Toll free: (800) 231-2066  
Phone: (713) 723-8416  
Fax: (713) 723-1845  
URL: [www.EconomyPolymers.com](http://www.EconomyPolymers.com)  
E-mail: [economy@economypolymers.com](mailto:economy@economypolymers.com)



# Economy<sup>®</sup>

## POLYMERS & CHEMICALS

**Engineering measures :** Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Use explosion-proof ventilation equipment.

**Hygiene measures:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Take off contaminated clothing and wash before reuse.

### Personal protection

**Respiratory :** If a risk assessment indicates it is necessary, use a properly fitted supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Hands :** Chemical-resistant gloves: Nitrile or Neoprene gloves. Viton gloves.

**Eyes :** Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.

**Skin :** Wear long sleeves and chemical resistant apron to prevent repeated or prolonged skin contact.

### Section IX - Physical Data

<b>APPEARANCE:</b>	Liquid	
<b>COLOUR:</b>	Amber	
<b>ODOUR/TASTE:</b>	Alcohol	
<b>SOLUBILITY DESCRIPTION:</b>	Dispersible in water	
<b>MELT./FREEZ. POINT (°C, interval):</b>	Not determined	
<b>DENSITY/SPECIFIC GRAVITY (g/ml):</b>	Approx. 0.896	TEMPERATURE (°C): 20
<b>pH-VALUE, DILUTED SOLUTION:</b>	Not Determined	CONCENTRATION (%M):
<b>VISCOSITY:</b>	Not determined	TEMPERATURE (°C):
<b>FLASH POINT (°C):</b>	Min. 10	METHOD: PM Closed cup.

### Section X - Reactivity Data

**Chemical stability :** The product may not be stable under certain conditions of storage or use. See "Possibility of Hazardous Reactions" for further information.

**Possibility of hazardous reactions :** Under normal conditions of storage and use, hazardous reactions will not occur. Will violently decompose above 140C.

**Hazardous polymerization :** Under normal conditions of storage and use, hazardous polymerization will not occur.

**Conditions to avoid :** Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

**Materials to avoid :** Reactive or incompatible with the following materials: oxidizing materials, reducing materials and acids. Reacts with heavy metals and metallic salts.

**Hazardous decomposition products :** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Conditions of reactivity :** Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat. Will violently decompose above 140C.

### Section XI – Toxicological Information

**Economy**  
Polymers & Chemicals

P.O. Box 450246  
Houston, TX 77245-0246  
USA Toll free: (800) 231-2066  
Phone: (713) 723-8416  
Fax: (713) 723-1845  
URL: [www.EconomyPolymers.com](http://www.EconomyPolymers.com)  
E-mail: [economy@economypolymers.com](mailto:economy@economypolymers.com)



# Economy<sup>®</sup>

## POLYMERS & CHEMICALS

**INHALATION:** Toxic by inhalation. Prolonged exposure to methanol vapor may cause shortness of breath and a sense of drunkenness. In extreme cases, ocular damage and visual disturbances may occur.

**INGESTION:** Toxic if swallowed. Ingestion of methanol may result in a feeling of intoxication and can cause visual disturbances and, in extreme cases, ocular damage.

**SKIN:** Propargyl alcohol causes moderate to severe irritation on contact with skin and is readily absorbed through the skin in toxic quantities. Brief, intermittent skin contact may cause moderate to severe irritation resulting in skin rashes.

**EYES:** Contact with eyes may cause moderate to severe irritation.

### Chronic toxicity Remarks

#### 1) Propargyl alcohol

Propargyl alcohol is a component of this product. Exposure may damage the liver and kidneys. This component has been shown to cause internal bleeding from acute oral and dermal exposure to animals. It has produced in vitro mutagenicity in animal studies. (Blakey, D.H. et al, 1994) and (Basu, A.K. and L.J. Marnett, 1984) Chronic inhalation of propargyl alcohol has caused nasal tumors and mononuclear cell leukemia in laboratory animals. National Toxicology Program Technical Report (2008).

#### 2) Methanol

Methanol is a component of this product. Because methanol is eliminated from the body more slowly than ethanol, it can have cumulative toxicity with repeated exposures (ACGIH, 1992).

Acute dermal, oral, and inhalation exposure to methanol can cause Central Nervous System effects, optic nerve effects, diminished vision, and brain effects (necrosis and hemorrhaging). (Bennett, I.L. et al, 1953) Ingestion of methanol can cause Central Nervous System depression, metabolic acidosis, blurred vision and blindness, gastrointestinal effects, and coma and death. (Clayton, G.D. and Clayton, F.E., 1982, Patty's Industrial Hygiene and Toxicology, Vol2C) Dermal exposure to methanol can cause Central Nervous System depression, blurred vision, and gastrointestinal effects. (Downie, A et al, 1992, Occupational Medicine, 42, pp 47-9) Chronic inhalation of methanol can cause Central Nervous System depression, blurred vision, and gastrointestinal effects. (Frederick, L.J. et al, 1984, AIHA Journal, 45, pp 51-5) Chronic inhalation of methanol has caused liver effects in laboratory animals. (Poon, R et al, 1994, Toxicology and Industrial Health 10: 231-245) Chronic oral exposure has caused Central Nervous System effects and eye effects in laboratory animals. [Youssef, A. F. et al (1993) Neurotoxicology and Teratology 15: 223-227; Baumbach, G.L. et al (1977) Archives of Ophthalmology 95: 1859-1865; Hayreh, M.S. et al (1977) Archives of Ophthalmology 95: 1851-1858; Hayreh, M.S. et al (1980) Ocular toxicity of methanol: An experimental study – Raven Press, New York, pages 35-53; and Martin-Amat, G. et al (1977) Archives of Ophthalmology 95: 1847-1850]

Methanol has produced in vivo mutagenicity in animal studies. (Pereira, M.A. et al, 1982) and (Ward, J. B. et al, 1983)

Methanol was mutagenic in yeast (RTECS). Methanol has caused chromosome aberrations in yeast (RTECS) and grasshoppers (Saha & Khudabaksh, 1974).

Methanol has caused birth defects in rats exposed by the oral (Infurna et al, 1981) and inhalation (Nelson et al, 1984; Nelson et al, 1985) routes. Exencephaly (a defect in the skull bone structure that leaves the brain exposed) and cleft palate (a fissure or unformed bone structure in the roof of the mouth (palate), lip, or facial area, occurring during the embryonic stage of development) were increased in fetal mice exposed to methanol at an airborne concentration of 5,000 ppm or higher for 7 hours/day on days 6 to 15 of gestation.

**Economy**  
**Polymers & Chemicals**

P.O. Box 450246  
Houston, TX 77245-0246  
USA Toll free: (800) 231-2066  
Phone: (713) 723-8416  
Fax: (713) 723-1845  
URL: [www.EconomyPolymers.com](http://www.EconomyPolymers.com)  
E-mail: [economy@economypolymers.com](mailto:economy@economypolymers.com)



# Economy<sup>®</sup>

## POLYMERS & CHEMICALS

Embryotoxicity and fetotoxicity were seen with maternal exposure to airborne concentrations of 7,500 ppm and above, and reduced fetal weights with concentrations of 10,000 ppm or greater. The NOAEL was 1,000 ppm. Effects similar to those seen in the 10,000 ppm dosage group were also seen in offspring of mice given a dose of 4 g/kg orally (Rogers et al, 1993).

### Section XII – Ecological Information

#### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Propargyl alcohol	Acute LC50 1530 to 1560 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas – Juvenile (Fledgling, Hatchling, Weanling) - 29 to 33 days - 19.7 mm - 119 mg	96 hours
Methanol Acute	LC50 2500000 ug/L Marine Water	Crustaceans - Common shrimp, 48 hours sand shrimp - Crangon crangon - Adult	
	Acute LC50 3289 to 4395 mg/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate - <24 hours	48 hours
	Acute LC50 >100000 ug/L Fresh Water	Fish - Fathead minnow - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 0.2 to 0.5 g	96 hours

**Conclusion/Summary :** Not available.

**Biodegradability Conclusion/Summary :** Not available.

### Section XIII – Disposal Considerations

**Waste disposal :** The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any byproducts should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Disposal should be in accordance with applicable regional, national and local laws and regulations.**

**Refer to Section VII: HANDLING AND STORAGE and Section VII: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.**

### Section XIV – Transport Information

**DOT:** UN3286, Flammable Liquid, Toxic, Corrosive, N.O.S. (Contains Propargyl alcohol, Methanol, 3 (6.1, 8), PG II

**IATA:** UN3286, Flammable Liquid, Toxic, Corrosive, N.O.S. (Contains Propargyl alcohol, Methanol, 3 (6.1, 8), PG II

**IMDG:** UN3286, Flammable Liquid, Toxic, Corrosive, N.O.S. (Contains Propargyl alcohol, Methanol, 3 (6.1, 8), PG II

### Section XV – Regulatory Information

**Economy**  
Polymers & Chemicals

P.O. Box 450246  
Houston, TX 77245-0246  
USA Toll free: (800) 231-2066  
Phone: (713) 723-8416  
Fax: (713) 723-1845  
URL: [www.EconomyPolymers.com](http://www.EconomyPolymers.com)  
E-mail: [economy@economypolymers.com](mailto:economy@economypolymers.com)





# Economy<sup>®</sup>

## POLYMERS & CHEMICALS

**HCS Classification :** Flammable liquid  
Highly toxic material  
Corrosive material  
Carcinogen  
Target organ effects

**U.S. Federal regulations : United States inventory (TSCA 8b):** All components are listed or exempted.

**SARA 302/304/311/312 extremely hazardous substances:** No products were found.

**SARA 302/304 emergency planning and notification:** No products were found.

**SARA 302/304/311/312 hazardous chemicals:** Prop-2-yn-1-ol; Methanol

**SARA 311/312 MSDS distribution - chemical inventory - hazard identification:** Fire hazard, reactive, Immediate (acute) health hazard, Delayed (chronic) health hazard

**CERCLA:** Hazardous substances.: Prop-2-yn-1-ol: 1000 lbs. (454 kg); Methanol: 5000 lbs. (2270 kg)

**Clean Water Act (CWA) 311:** No products were found

**Clean Air Act (CAA) 112 accidental release prevention:** No products were found.

**Clean Air Act (CAA) 112 regulated flammable substances:** No products were found.

**Clean Air Act (CAA) 112 regulated toxic substances:** No products were found.

**Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) :** Listed

**SARA 313**

	<b>Product name</b>	<b>CAS number</b>	<b>Concentration</b>
<b>Supplier notification :</b>	Propargyl alcohol	107-19-7	3 - 15
	Methanol	67-56-1	15 -40

**United States inventory**

**(TSCA 8b):** All components are listed or exempted.

**Canada**

**WHMIS (Canada) :** Class B-2: Flammable liquid

Class D-1A: Material causing immediate and serious toxic effects (Very toxic).

Class D-2A: Material causing other toxic effects (Very toxic).

Class E: Corrosive material

**Canada (CEPA DSL): :** All components are listed or exempted.

### Section XVI – Miscellaneous

**NFPA (USA): Health -3 Flammability -3 Reactivity -3**

Disclaimer: \*\*This information is furnished without warranty, expressed or implied, as to accuracy for completeness. This information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user

**Economy**  
**Polymers & Chemicals**

P.O. Box 450246  
Houston, TX 77245-0246  
USA Toll free: (800) 231-2066  
Phone: (713) 723-8416  
Fax: (713) 723-1845  
URL: [www.EconomyPolymers.com](http://www.EconomyPolymers.com)  
E-mail: [economy@economypolymers.com](mailto:economy@economypolymers.com)