



I. Chemical Product and Company Identification

Product Name: Acid Inhibitor 2 (AI-2)
Identification #: 35-405-0002
Product Use/Class: Acid Corrosion Inhibitor
Supplier: Nabors Completion and Production Services
515 W. Greens Road, Suite 1100, Houston, TX 77067
Supplier Tracking Code: 398
Emergency Contact: CHEMTREC 1 (800) 424-9300
Prepared By: KLH
Date Prepared: 11/18/2011

II. Composition/Information on Ingredients

Chemical Name: Ethoxylated Nonylphenol
CAS Number: 68412-54-4
Percent by Mass Less Than: 7-13%

Exposure Limits

Threshold Limit Value - Time Weighted Average: N/A
Threshold Limit Value - Short Term Exposure Limit: N/A
Permissible Exposure Limit - Time Weighted Average: N/A
Permissible Exposure Limit - Ceiling: N/A
Company Threshold Limit - Time Weighted Average: N/A
Skin: N/A

Chemical Name: Tar bases, quinoline derivs, benzyl chloride-
quaternized
CAS Number: 72480-70-7
Percent by Mass Less Than: 5-10%

Exposure Limits

Threshold Limit Value - Time Weighted Average: N/A
Threshold Limit Value - Short Term Exposure Limit: N/A
Permissible Exposure Limit - Time Weighted Average: N/A
Permissible Exposure Limit - Ceiling: N/A
Company Threshold Limit - Time Weighted Average: N/A
Skin: N/A

Chemical Name: Propargyl Alcohol
CAS Number: 107-19-7
Percent by Mass Less Than: 15-40%

Exposure Limits

Threshold Limit Value - Time Weighted Average: N/A
Threshold Limit Value - Short Term Exposure Limit: N/A
Permissible Exposure Limit - Time Weighted Average: N/A
Permissible Exposure Limit - Ceiling: N/A
Company Threshold Limit - Time Weighted Average: N/A
Skin: N/A

Chemical Name: Glycol Ethers
CAS Number: 111-76-2
Percent by Mass Less Than: 15-40%

Exposure Limits

Threshold Limit Value - Time Weighted Average: N/A
Threshold Limit Value - Short Term Exposure Limit: N/A
Permissible Exposure Limit - Time Weighted Average: N/A
Permissible Exposure Limit - Ceiling: N/A
Company Threshold Limit - Time Weighted Average: N/A
Skin: N/A

Chemical Name: Isopropyl Alcohol
CAS Number: 67-63-0
Percent by Mass Less Than: 15-40%

Exposure Limits

Threshold Limit Value - Time Weighted Average: N/A
Threshold Limit Value - Short Term Exposure Limit: N/A
Permissible Exposure Limit - Time Weighted Average: N/A
Permissible Exposure Limit - Ceiling: N/A
Company Threshold Limit - Time Weighted Average: N/A
Skin: N/A

III. Hazardous Identification

Emergency Overview:	WARNING. TOXIC. FLAMMABLE LIQUID AND VAPOR. Toxic in contact with skin and if swallowed. Harmful if inhaled. Irritating to eyes, respiratory system and skin. Will be easily ignited by heat, spark or flames. Do not get this material in contact with skin or eyes. Do not breathe spray mist. Prolonged exposure may cause chronic effects.
Eye Contact:	Do not get this material in contact with eyes. Contact may irritate or burn eyes.
Skin Contact:	Do not get this material in contact with skin. Toxic in contact with skin. This product may be harmful if it is absorbed through the skin. Irritating to skin. Prolonged or repeated skin contact may result in redness, burning sensation or dermatitis.
Inhalation:	Do not breathe vapor. Harmful if inhaled. Prolonged inhalation may be harmful. May cause irritation of respiratory tract.
Ingestion:	Do not ingest. Toxic if swallowed. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.
Chronic Harards:	This product may be harmful if it is absorbed through the skin. Unconsciousness. Shortness of breath. Edema. Jaundice. Cyanosis. Liver injury may occur. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. May cause delayed lung damage.

Primary Route(s) of Entry:	<input type="checkbox"/> Skin Contact <input type="checkbox"/> Skin Absorbtion	<input type="checkbox"/> Eye Contact <input type="checkbox"/> Inhalation	<input type="checkbox"/> Ingestion
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IV. First Aid Measures

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
Skin Contact:	Wash off with soap and water. Get medical attention if irritation develops or persists.
Inhalation:	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.
Ingestion:	If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice.

V. Fire Fighting Measures

Flash Point:	85 F
Auto Ignition Temperature:	172.4 F
Lower Explosive Temp.:	1.1%
Upper Explosive Temp.:	12.0%
Extinguishing Media:	Alcohol foam. Dry chemical. Carbon dioxide (CO2).
Unusual Fire and Explosive Harards:	Fire may produce irritating, corrosive and/or toxic gases.
Special Fire Fighting Procedures:	In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Move containers from fire area if you can do it without risk. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

VI. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Should not be released into the environment. Large Spills: Dike far ahead of liquid spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly. Never return spills in original containers for re-use.

VII. Handling and Storage

Handling: Do not handle or store near an open flame, heat or other sources of ignition. All equipment used when handling the product must be grounded. Do not breathe vapors or spray mist. Use only with adequate ventilation. Wash thoroughly after handling. Avoid prolonged exposure.

Storage: Store in a closed container away from incompatible materials.

VIII. Exposure Controls/Personal Protection

Engineering Controls: Ensure adequate ventilation, especially in confined areas.

Respiratory Protection: Respiratory protection is required if the airborne concentration exceeds the TLV.

Skin Protection: Wear chemical protective equipment that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Wear appropriate chemical resistant gloves. Impervious gloves. Wear suitable protective clothing.

Eye Protection: Wear chemical goggles. Face-shield.

Other Protective Equipment: Where splashing is possible, full chemically resistant protective clothing (acid suit) and boots are required. Emergency eyewash stations and deluge showers should be available in the work area.

Hygienic Practices: Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not get this material on clothing. When using do not eat or drink. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice. Wash hands after handling and before eating.

IX. Physical and Chemical Properties

Boiling Point:	201.2 F estimated	Vapor Density:	ND
Odor:	Alcohol like.	Odor Threshold:	ND
Appearance:	Dark red or Purple	Evaporation Rate:	Faster than Butyl Acetate
Solubility in H2O:	Complete	Specific Gravity:	0.99
Freeze Point:	ND	pH at 50.0%:	2 - 3
Vapor Pressure:	ND	Viscosity:	ND
Physical State:	Liquid		
Coefficient of Water Oil Distribution:	ND		

X. Stability and Reactivity

Conditions to Avoid:	Heat, flames and sparks.
Incompatibility:	May form explosive mixtures with air. Amines. Isocyanates. Strong oxidizing agents. Strong acids. Caustics.
Hazardous Decomposition Products:	Carbon oxides.
Hazardous Polymerization:	Hazardous polymerization does not occur
Stability:	Risk of ignition. Stable at normal conditions.

XI. Toxicological Properties

Toxicological Properties:	N/A
Oral:	Acute LD50: 141 mg/kg estimated, Rat, Oral
Dermal:	Acute LD50: 113 mg/kg estimated, Rat, Dermal
Inhalation:	Acute LC50: 557 mg/l/4h estimated, Rat, Inhalation

XII. Ecological Information

Ecological Properties:	Components of this product have been identified as having potential environmental concerns.
Ecotoxicity:	LC50 10.28 mg/L estimated, Fish, 96.00 Hours, IC50 8562 mg/L estimated, Algae, 72.00 Hours, Components of this product have been identified as having potential environmental concerns.
Chemical Fate Information:	ND

XIII. Disposal Consideration

Disposal Method:	Dispose of this material and its container at hazardous or special waste collection point. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Dispose in accordance with all applicable regulations.
RCRA Status:	If discarded, this product is considered a RCRA ignitable waste, D001. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Dispose in accordance with all applicable regulations.

XIV. Transportation Information

DOT Proper Shipping Name:	Flammable liquids, toxic, n.o.s.
DOT Technical Name:	Contains Isopropanol and Propargyl Alcohol
DOT Hazard Class:	3
DOT Hazard Subclass:	
DOT UN/NA Number:	UN1992
Packing Group:	III
Resp. Guide Page:	

XV. Regulatory Information

OSHA: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

TSCA Status: All components are on the U.S. EPA TSCA Inventory List.

CERCLA SARA: Immediate Hazard - Yes; Delayed Hazard - Yes; Fire Hazard - Yes; Pressure Hazard - No; Reactivity Hazard - No

SARA Section 313 Required Reporting:	Chemical	CAS Number	WT/WT%
	Ethoxylated Nonylphenol	68412-54-4	7-13%
	Tar bases, quinoline derivs, benzyl chloride- quaternized	72480-70-7	5-10%
	Propargyl Alcohol	107-19-7	15-40%
	Glycol Ethers	111-76-2	15-40%
	Isopropyl Alcohol	67-63-0	15-40%

XVI. Other Information

Other Information: NA = Not applicable ND = Not Determined NI = No Information NE = Not Established

MSDS Updated: 12/9/2012

MSDS Printed: 1/9/2015

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, or when used in conjunction with other products, exposures must be evaluated by the user so that appropriate handling practices and training programs can be established to ensure safe workplace operations. This information is confidential to Nabors Completion & Production Services Company (Nabors) and intended solely for the use of the individual or entity to whom they are directly distributed. Distribution or use beyond the individual or entity is strictly prohibited without the consent of Nabors.