

## 1 . Product and company identification

<b>Product name</b>	: NE-900
<b>Supplier</b>	: Baker Hughes, Inc. 12645 W. Airport Blvd. Sugar Land, TX 77478 For Product Information/MSDSs Call: 281-351-8131
<b>Material Uses</b>	: Special: Non-emulsifier.
<b>Code</b>	: 488496
<b>Validation date</b>	: 12/5/2011.
<b>Print date</b>	: 12/5/2011.
<b>Version</b>	: 1
<b>Responsible name</b>	: Global Regulatory Affairs - Telephone 281-276-5400 or 800-231-3606
<b>In case of emergency</b>	: CHEMTREC 800-424-9300 (U.S. 24 hour) (001)281-276-5400 CANUTEC 613-996-6666 (Canada 24 hours)CHEMTREC Int'l 01-703-527-3887 (International 24 hour)

## 2 . Hazards identification

<b>Physical state</b>	: Liquid.
<b>Odor</b>	: Sweet.
<b>Color</b>	: Clear. Colorless.
<b>OSHA/HCS status</b>	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>Emergency overview</b>	: WARNING!  FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY CAUSE BLINDNESS IF SWALLOWED. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE BIRTH DEFECT HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA. POSSIBLE DEVELOPMENTAL HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE ADVERSE DEVELOPMENTAL EFFECTS, BASED ON ANIMAL DATA.  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. Avoid exposure during pregnancy. 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.
<b>Routes of entry</b>	: Dermal contact. Inhalation.
<b>Potential acute health effects</b>	
<b>Inhalation</b>	: Toxic by inhalation. Can cause central nervous system (CNS) depression. Irritating to respiratory system.
<b>Ingestion</b>	: Toxic if swallowed. Can cause central nervous system (CNS) depression. May cause blindness if swallowed.
<b>Skin</b>	: Toxic in contact with skin. Irritating to skin. Defatting to the skin.
<b>Eyes</b>	: Severely irritating to eyes. Risk of serious damage to eyes.
<b>Potential chronic health effects</b>	

## 2. Hazards identification

- Chronic effects** : Contains material that may cause target organ damage, based on animal data. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Teratogenicity** : Contains material which may cause birth defects, based on animal data.
- Developmental effects** : Contains material which may cause developmental abnormalities, based on animal data.
- Target organs** : Contains material which may cause damage to the following organs: gastrointestinal tract, upper respiratory tract, skin, eyes, central nervous system (CNS).

### Over-exposure signs/symptoms

- Inhalation** : respiratory tract irritation, nausea or vomiting, coughing, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness
- Ingestion** : None known.
- Skin** : irritation, redness, dryness, cracking
- Eyes** : pain or irritation, watering, redness
- Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

## 3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Methanol	67-56-1	10 - 30
Oxyalkylated alkylphenol	9016-45-9	5 - 10

## 4. First aid measures

- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. 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** : 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.

## 5. Fire-fighting measures

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

## 5 . Fire-fighting measures

- 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
- 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.

## 6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Dike spill area and do not allow product to reach sewage system or surface or ground water. Notify any reportable spill to authorities. (See section 12 for environmental risks and 13 for disposal information.) Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

If RQ (Reportable Quantity) is exceeded, report to **National Spill Response Office at 1-800-424-8802**.

## 7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8 . Exposure controls/personal protection

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			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	Notations
Methanol	US ACGIH	200	262	-	250	328	-	-	-	-	[1]
	OSHA PEL	200	260	-	-	-	-	-	-	-	
	OSHA PEL 1989	200	260	-	250	325	-	-	-	-	[1]

[1]Absorbed through skin.

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 the 11th Circuit Court of Appeals, Baker Hughes 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.

**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 rubber

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

**Skin** : Wear long sleeves and other protective clothing to prevent repeated or prolonged skin contact.

## 9 . Physical and chemical properties

**Physical state** : Liquid.

**Flash point** : Closed cup: 33.89°C (93°F)

**Auto-ignition temperature** : Not available.

**Flammable limits** : Lower: 6%  
Upper: 36%

**Color** : Clear. Colorless.

**Odor** : Sweet.

**pH** : 9.09

**Boiling/condensation point** : Not available.

**Initial Boiling Point** : Not available.

**Melting/freezing point** : -34.44°C (-30°F)

**Relative density** : 0.97

**Density** : 8.13 (lbs/gal)

**Vapor density** : Not available.

**Odor threshold** : Not available.

**Evaporation rate** : Not available.

## 9 . Physical and chemical properties

VOC	: Not available.
Viscosity	: Not available.
Solubility (Water)	: Complete.
Vapor pressure	: Not available.
Pour Point	: Not available.
Partition coefficient (LogKow)	: Not available.

## 10 . Stability and Reactivity

Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
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.
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.

## 11 . Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Methanol	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rabbit	14200 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	8 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LC50 Inhalation Gas.			

### Chronic toxicity Remarks

1) Methanol

Not available.

2) Oxyalkylated alkylphenol

Not available.

## 12 . Ecological information

### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Methanol	Acute LC50 2500000 ug/L water	Marine Crustaceans - Common shrimp, sand shrimp - Crangon crangon - Adult	48 hours
	Acute LC50 3289 mg/L water	Fresh Daphnia - Water flea - Daphnia magna - Neonate - <24 hours	48 hours
	Acute LC50 >100000 ug/L water	Fresh Fish - Fathead minnow - Pimephales promelas - Juvenile	96 hours

## 12 . Ecological information

Oxyalkylated alkylphenol	Acute LC50 1 to 2 ug/L Fresh water	(Fledgling, Hatchling, Weanling) - 0.2 to 0.5 g Crustaceans - Fairy shrimp - 48 hours Thamnocephalus platyurus - Nauplii - 24 hours
	Acute LC50 4800 ug/L Fresh water	Daphnia - Water flea - Daphnia pulex - LARVAE - <=24 hours 48 hours
	Acute LC50 1300 ug/L Fresh water	Fish - Bluegill - Lepomis macrochirus - 1 g 96 hours

**Conclusion/Summary** : Not available.

### Biodegradability

**Conclusion/Summary** : Not available.

## 13. 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 by-products 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 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14 . Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>DOT Classification</b>	UN1993	FLAMMABLE LIQUID, N.O.S. (Contains: Methanol)	3	III		-
<b>TDG Classification</b>	UN1993	FLAMMABLE LIQUID, N.O.S. (Contains: Methanol)	3	III		-
<b>IMDG Class</b>	UN1993	FLAMMABLE LIQUID, N.O.S. (Contains: Methanol)	3	III		-
<b>IATA-DGR Class</b>	UN1993	FLAMMABLE LIQUID, N.O.S. (Contains: Methanol)	3	III		-

PG\* : Packing group

**DOT Reportable Quantity** Methanol, 2733 gal of this product.

**Marine pollutant** Not applicable.

**North-America NAERG** : 128

## 15 . Regulatory information

**HCS Classification** : Flammable liquid  
Toxic material  
Irritating material  
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**: Methanol  
**SARA 311/312 MSDS distribution - chemical inventory - hazard identification**: NE-900: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard  
CERCLA: Hazardous substances.: Methanol: 5000 lbs. (2270 kg);  
**Clean Water Act (CWA) 307**: No products were found.  
**Clean Water Act (CWA) 311**: 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

	<u>Product name</u>	<u>CAS number</u>	<u>Concentration</u>
<b>Supplier notification</b>	: Methanol	67-56-1	10 - 30

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

### Canada

**WHMIS (Canada)** : Class B-2: Flammable liquid  
Class D-1B: Material causing immediate and serious toxic effects (Toxic).  
Class D-2A: Material causing other toxic effects (Very toxic).  
Class D-2B: Material causing other toxic effects (Toxic).

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

## 16 . Other information

**Label requirements** : FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED, ABSORBED THROUGH SKIN OR SWALLOWED. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY CAUSE BLINDNESS IF SWALLOWED. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE BIRTH DEFECT HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA. POSSIBLE DEVELOPMENTAL HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE ADVERSE DEVELOPMENTAL EFFECTS, BASED ON ANIMAL DATA.

**Hazardous Material Information System (U.S.A.)** :

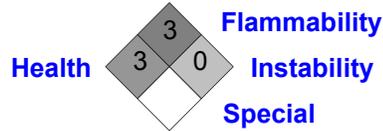
Health	3
Flammability	3
Physical hazards	0
Personal protection	9

**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.**

## 16 . Other information

The customer is responsible for determining the PPE code for this material.

National Fire Protection :  
Association (U.S.A.)



Date of printing : 12/5/2011.

☑ Indicates information that has changed from previously issued version.

### Notice to reader

**NOTE:** The information on this MSDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This MSDS was prepared and is to be used for this product. If the product is used as a component in another product, this MSDS information may not be applicable.