

# TRICARD

TRIANGLE CHEMICAL COMPANY – P.O. BOX 4528, MACON, GEORGIA 31213  
CARDINAL CHEMICALS, INC. – KINSTON, NC

IN CASE OF EMERGENCY, CALL CHEMTREC  
UNITED STATES: 1-800-424-9300  
INTERNATIONAL: 1-202-483-7616

## MATERIAL SAFETY DATA

### 1. PRODUCT IDENTIFICATION

PRODUCT NAME: **DW SURFACTANT 90**  
SYNONYMS: Nonionic Surfactant  
GENERIC DESCRIPTION: Low Foam Surface Active Agent

### 2. HAZARDOUS INGREDIENTS

OSHA REGULATED COMPONENTS

COMPONENT	CAS. NO.	WT %	EXPOSURE LIMITS
Ethanol, 2, 2-oxybis	111-46-6	-	Not Established

Maximum of 1 ppm Ethylene Oxide (EO) (75-21-8) May be present in the product.  
The OSHA PEL and ACGIH TLV for EO is 1 ppm.

### 3. EFFECTS OF OVEREXPOSURE

EYE CONTACT: May cause eye irritation.  
SKIN CONTACT: Prolonged contact may cause irritation to skin with local redness on skin.  
INGESTION: May cause abdominal discomfort. Aspiration may occur during swallowing, resulting in lung damage.  
INHALATION: Avoid breathing vapors or spray mist. Use respiratory protection device when handling.

### 4. EMERGENCY FIRST AID

**Call a poison control center or doctor immediately for treatment advice.**

IF SWALLOWED: Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth if possible.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present, after the first 5 minutes, then continue rinsing eye. Have the product container with you when calling a poison control center or doctor, or going for treatment.

### 5. REACTIVITY DATA

STABILITY: Stable.  
CONDITIONS TO AVOID: None.  
POLYMERIZATION: Will not occur.  
INCOMPATIBILITY: Strong oxidizing agents such as hydrogen peroxide, bromine and chromic acid.  
DECOMPOSITION: None known.  
SUBJECT TO HEAT: Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning. Heating in air may produce irritating aldehydes, acids and ketones.

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## 6. NFPA HAZARD RATING (National Fire Protection Association)

Flammability	Health:	Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
Health 2	2	0
Instability	Flammability:	Must be moderately heated or exposed to relatively high temperature before ignition can occur.
Special Hazard	Instability:	Normally stable, even under fire exposure conditions, and are not reactive with water.

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## 7. PHYSICAL PROPERTIES

APPEARANCE AND ODOR:	Golden liquid, Mild odor.
BOILING POINT:	NA
VAPOR PRESSURE (mmg of_Hg):	NA
SPECIFIC GRAVITY:	1.022 (+/- .05)
VAPOR DENSITY (AIR=1):	>1
% VOLATILE (BY WGT.%):	<25
pH (@ 0.25%):	4.8 – 5.8
SOLUBILITY IN WATER:	Soluble

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## 8. FIRE AND EXPLOSION HAZARD INFORMATION

FLASHPOINT:	>109 °F (COC)
FLAMMABLE LIMITS:	Not Available
FIRE FIGHTING:	According to NFPA guide, use water spray, dry chemical, foam, or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop the leak.
UNUSUAL FIRE HAZARD:	None

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## 9. SPECIAL PRECAUTIONS

HANDLING AND STORAGE:	Empty containers can be hazardous if used to store toxic, flammable or reactive material. Do not use with Aluminum equipment at temperatures above 120 °F. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container in cool storage place with closed drum bungs.
OTHER PRECAUTIONS:	Keep out of reach of children.

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## 10. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:	None required for normal use.
VENTILATION:	Normal room ventilation (mechanical) should be satisfactory.
PROTECTIVE GLOVES:	PVC-coated.
EYE PROTECTION:	Wear safety glasses with side shields or goggles.
OTHER PROTECTION:	Eye wash station and safety shower.

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## 11. SPILL OR LEAK PROCEDURES

SPILLS OR RELEASES:	Material should be collected and disposed in proper manner. Wear suitable protective equipment.
WASTE DISPOSAL:	Do not contaminate water, food or feed by storage or disposal. Dispose of in an approved waste disposal facility in accordance with all Federal, State and Local Regulations.
CONTAINER DISPOSAL:	Triple rinse (or equivalent) adding rinse water to application tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by local regulations.

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## 12. REGULATORY INFORMATION

### COMPOUNDS WHICH REQUIRE REPORTING UNDER SARA TITLE III

Sara regulated compounds	Section	CAS NO.	Percent
Diethylene glycol is not listed.	Sect. 302		

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## 13. OTHER INFORMATION

WARNING! This product contains a detectable amount of ethylene oxide, which is known to the State of California to cause cancer and/or reproductive toxicity.

Ethoxylated products may contain residual amounts of ethylene oxide (EO) which can accumulate in the container headspace and be released into the ambient environment. This process is enhanced when the product is agitated, as during tank car loading and unloading, and blending operations. Ethylene oxide causes tumors in laboratory animals. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Level (PEL) for EO is 1 ppm for an eight-hour time weighted average exposure. The standard regulates occupational exposure to EO from all sources, including products containing residual EO. It is the responsibility of the employer to comply with OSHA ethylene oxide standard (29) CFR 1910.1047).

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The recommendation for safe handling and protection procedures are believed to be generally suitable for the standard uses of this compound. However, each user should identify his intended uses of this material and determine whether they are appropriate. All data included in this document is released as typical values and should not be utilized to determine the suitability of this material for a particular use or purpose. No warranty, either expressed or implied, is hereby made, nor do we give permission, inducement, or recommendations to practice any patented invention without a license. All data is offered for consideration, investigation and verification purposes only.