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**MATERIAL SAFETY DATA SHEET**

No. 181

<b>PRODUCT NAME</b> DryWash Production Mix	<b>CAS #</b> Inertly pressurized propriety mixture
<b>TRADE NAME AND SYNONYMS</b> Ethane, Methylnmethane, Dimethyl, Ethyl Hydride	<b>DOT I.D. No.:</b> UN 11956
	<b>DOT Hazard Class:</b> 2.2
<b>CHEMICAL NAME AND SYNONYMS</b> Ethane, compressed (D.O.T)	<b>Formula</b> Inertly pressurized propriety mixture
<b>ISSUE DATES AND REVISIONS</b> Revised January 1995	<b>Chemical Family:</b> Inertly pressurized proprietary mixture of odorized alcohols & detergents

**HEALTH HAZARD DATA**

<b>TIME WEIGHTED AVERAGE EXPOSURE LIMIT</b> TWA: Ceiling Value = 25 PPM (ACIH 1998). OSHA, 1998 does not list a PEL (8Hr. TWA) or a Ceiling Value for this mixture; how ever, OSHA 1910.1200, (C) considers this mixture a hazardous chemical
<b>SYMPTOMS OF EXPOSURE</b> Inhaling the vapor from this mixture may cause respiratory tract irritation and discomfort in nose and throat. Prolonged inhalation could cause coughing and nasal discharge.  Vapors may irritate the eyes causing discomfort and lachrymation. Skin contact can cause irritation leading to redness after extended contact.
<b>TOXICOLOGICAL PROPERTIES</b> No adverse effects have been shown in humans LD <sub>50</sub> (oral rat) = 400mg/kg LD <sub>50</sub> (dermal rabbit) = 13,000 mg/kg Neither the mixture or its inert pressurizing media are listed in the IARC, NTP or by OSHA as a carcinogen or potential carcinogen.  Persons in ill health where such illness would be aggravated by exposure to this mixture should not be allowed to work with or handle this product.
<b>RECOMMENDED FIRST AID TREATMENT</b> PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO THIS MIXTURE. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS AND BE COGNIZANT OF EXTREME FIRE AND EXPLOSION HAZARD.  <u>Inhalation:</u> Conscious persons should be assisted to an uncontaminated area and inhale fresh air.  <u>INGESTION:</u> Remove the mixture from the digestive system as rapidly as possible. induce vomiting or use a gastric lavage. One to three percent sodium bicarbonate solution in the lavage solution has bee recommended  <u>SKIN OR EYE CONTACT:</u> Flush affected areas with copious quantities of water. Part eye-lids with fingers to insure complete flushing

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 Since the Company shall have no control of the use of the product described herein, the Company assumes no liability for loss or damage incurred from the proper or improper use of such product.

**DryWash Production Mix**

<b>HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES</b>	
None	
<b>PHYSICAL DATA</b>	
BOILING POINT <212°F (<100°C)	LIQUID DENSITY AT BOILING POINT Specific Gravity 20/4 = approx. 0.95
VAPOR PRESSURE @ 68°F (20°C) = 0.2 psia (1.4 kPa)	GAS DENSITY AT 70°F, 1 atm N/A Liquid
SOLUBILITY IN WATER Soluble	FREEZING POINT <-60°F (-50°C)
EVAPORATION RATE (Butyl Acetate = 1) <1	SPECIFIC GRAVITY (AIR=1) N/A Liquid
APPEARANCE AND ODOR Colorless, orderless gas	

**FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT (Method used) 190°F (88°C)	AUTO IGNITION TEMPERATURE Not determined	FLAMMABLE LIMITS % BY VOLUME (See Page 4) LE Not determined UEL Not determined
EXTINGUISHING MEDIA Water, spray, carbon dioxide, dry chemical.		ELECTRICAL CLASSIFICATION In accordance with codes
SPECIAL FIRE FIGHTING PROCEDURES Do not use a stream of water since this will spread the flammable liquid.		
UNUSUAL FIRE AND EXPLOSION HAZARDS None		

**REACTIVITY DATA**

STABILITY Unstable		CONDITIONS TO AVOID None
Stable	X	
INCOMPATIBILITY (Materials to avoid) None		
HAZARDOUS DECOMPOSITION PRODUCTS Carbon Monoxide		
HAZARDOUS POLYMERIZATION May Occur		CONDITIONS TO AVOID None
Will Not Occur	X	

**SPILL OR LEAK PROCEDURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Evacuate all personnel from affected area. Use appropriate protective equipment. Be cautious of extremely slippery surfaces where spill occurred. Adsorb on high surface area compound such as Vermiculite, or if small quantity flush away with plenty of water.
WASTE DISPOSAL METHOD Follow all local, state and federal requirements.

### SPECIAL PROTECTION INFORMATION

<b>RESPIRATORY PROTECTION</b> (Specify type)	Positive pressure air line with mask or self-contained breathing apparatus should be available for emergency use.		
<b>VENTILATION</b> To prevent accumulation of harmful vapor levels.	<b>LOCAL EXHAUST</b> See ventilation	<b>SPECIAL</b>	N/A
	<b>MECHANICAL (Gen.)</b> In accordance with electrical codes	<b>OTHER</b>	N/A
<b>PROTECTIVE GLOVES</b> Plastic or rubber			
<b>EYE PROTECTION</b> safety goggles or glasses			
<b>OTHER PROTECTIVE EQUIPMENT</b> Safety shoes, safety shower, eyewash "fountain:", Face shield			

### SPECIAL PRECAUTIONS\*

<b>SPECIAL LABELING INFORMATION</b> DOT Shipping Name: Compressed Gas, n.o.s.                      DOT Hazard Class: Division 2.2 DOT Shipping Label: Nonflammable Compressed Gas    I.D. No. UN 1956
<b>SPECIAL HANDLING RECOMMENDATIONS</b> Use only in well-ventilated areas. Do not drag, slide, or roll cylinders. Do not drag, slide or roll cylinders. During the removal of product, keep cylinder in a strict upright position. Close valve after each use. Cylinder is empty when liquid no longer flows from the opened valve.
<b>SPECIAL STORAGE RECOMMENDATIONS</b> Protect cylinders from physical damage. Store in cool, dry, well-ventilated area away from heavily trafficked areas and emergency exits. Do not allow the temperature where cylinders are stored to exceed 125°F (52°C). Cylinders should be stored upright and firmly secured to prevent falling or being knocked over. Full and empty cylinders should be segregated.
<b>SPECIAL PACKAGING RECOMMENDATIONS</b>  This mixture is noncorrosive to most metals. avoid the use of lead, aluminum and zinc coated (galvanized) metals.
<b>OTHER RECOMMENDATIONS OR PRECAUTIONS</b> This mixture is not subject to the reporting requirements of SARA, Title III, Section 313 NFPA 704 NO. for this mixture = 1 2 0 None

\*Various Government Agencies (i.e. Department of Transportation, Occupational Safety and Health Administration, Food and Drug Administration and others) may have specific regulations concerning the transportation, handling, storage or use of this product which will not be reflected in this data sheet. The customer should review these regulations to ensure that he is in full compliance.

HEALTH HAZARD DATA NOTE: This cylinder contains a liquid mixture and a “dip” tube leading from the valve to near the bottom of the cylinder. It also has an inert pressurizing media above the liquid. When the valve is opened the inert pressurizing media will force the liquid in the container out through the valve. Therefore, the health hazard data and much of the other data in this document describes the liquid mixture in the cylinder and not the inert pressurizing media.