

MATERIAL SAFETY DATA SHEET

1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: ID-280 Universal Recirculation Wash

Product Code: 195-7745

MSDS Date: April 5, 2006

2: COMPOSITION, INFORMATION ON INGREDIENTS

No.	Component CAS REG. NO.	Amount %	OSHA		ACGIH	
			PEL	STEL	TLV	STEL
1	Limonene 5989-27-5	10 - 20	NE	NE	300	NE
2	2-Butoxyethanol 111-76-2	10 - 15	50	SKIN	20	
2	Ethylene Glycol Ethers Mixture	30 - 40	NE		NE	

3: HAZARDS IDENTIFICATION

EMERGENCY RESPONSE INFORMATION

HAZARDS	HMIS	NFPA
Toxicity	1	1
Fire	2	2
Reactivity	0	0
Special	B	

RATING	DEGREE OF HAZARD
4	Extreme
3	High
2	Moderate
1	Slight
0	Insignificant

SPECIAL EQUIPMENT LEGEND			
A	Safety Glasses	F	C + Dust Mask
B	A + Gloves	G	B + Respirator
C	B + Apron	H	F + Goggles
D	C + Face Shield	I	B + Respirator
E	B + Dust Mask	X	Ask Supervisor

Caution! Potentially combustible liquid and vapor. May be harmful if inhaled. High vapor concentrations may cause dizziness. May cause skin irritation. Causes eye irritation. Harmful if swallowed. Pulmonary aspiration hazard: can enter lungs and cause damage.

HEALTH EFFECTS FROM OVEREXPOSURE

Primary Routes of Exposure

Skin Contact

Eye Contact

Inhalation

Ingestion

Eye Contact:

Direct contact with material can cause severe irritation.

Skin Contact:

May cause irritation with prolonged or repeated contact. Removes natural oils and fats from skin.

Inhalation:

Inhalation of mist or spray can cause irritation to nose, throat and lungs, and higher concentrations may cause coughing, shortness of breath and intoxication.

Ingestion:

This material is of a low order of toxicity. It may cause headache, dizziness, gastrointestinal distress.

4: FIRST AID MEASURES**Inhalation:**

Remove subject to fresh air. Keep subject at rest. If not breathing, give artificial respiration. Obtain medical assistance.

Eye Contact:

Immediately flush eyes with a large amount of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Remove contact lenses if worn. Consult a physician.

Skin Contact:

Wash affected skin areas thoroughly with soap and water for 15 minutes until no odor remains. If redness or swelling develops, consult a physician. Immediately remove contaminated clothing and wash before reuse.

Ingestion:

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Have person drink several glasses of water. Do not induce vomiting. Keep airway clear. Keep subject at rest. Obtain Emergency Medical Attention.

5: FIRE FIGHTING MEASURES**FIRE AND EXPLOSIVE PROPERTIES:**

Flash Point:	135°F TCC
Auto-ignition Temperature:	442°F Estimated
Lower Explosion Limit:	1.1 % Volume Estimated
Upper Explosion Limit:	24.0 % Volume Estimated

Unusual Hazards:

Potentially combustible liquid; Toxic gasses will form upon combustion. Material can accumulate static charges which can cause an incendiary electrical discharge. Material will emulsify and partially disperse and then float on water.

Extinguishing Agents:

Water spray, regular foam, dry chemical, carbon dioxide are appropriate. Use extinguishing media appropriate for surrounding media. Avoid spraying water directly into storage containers due to danger of boilover. Use water spray to cool adjacent fire exposed containers to avoid rupture and spattering.

Personal Protective Equipment:

Keep personnel removed and upwind. As in any fire, wear self contained breathing apparatus (pressure demand, MSHA/NIOSH approved or equivalent) and full protective gear.

Special Procedures:

Water may spread the fire.

6: ACCIDENTAL RELEASE MEASURES**Personal Protection:**

Appropriate protective equipment must be worn when handling a spill of this material. See the **PERSONAL PROTECTION MEASURES** Section for recommendations. If exposed to material during clean-up operations, see the **FIRST AID PROCEDURES** Section for appropriate actions.

Procedures:

Prevent ignition; stop leak; ventilate area; keep spectators away;

Flush small spills to sewer with plenty of water.

For large spills, contain spill immediately with inert noncombustible materials (e.g. sand, earth, absorbent).

Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. Soak material with water to prevent any tendency of spontaneous combustion.

Use water spray to disperse vapors.

7: HANDLING AND STORAGE

Handling:

Avoid contact with skin, eyes or clothing. Avoid breathing of mist or vapor.

Remove and wash contaminated clothing before reuse.

Practice good personal hygiene: Wash after handling; shower at end of work period.

Storage Conditions:

Keep away from heat, sparks and open flame. Protect from storage temperatures above 140°F.

Keep in a well ventilated space that is NFPA Class II. Consult NFPA and OSHA codes.

Keep Out of Reach of Children.

Store upright in original closed container.

"Empty" containers retain product residue (liquid and/or vapor) that can be dangerous. Do NOT pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity or other sources of ignition due to explosion or fire hazard. Empty drums should be completely drained and properly bunged and promptly returned to a reconditioner or other proper disposal.

8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection:

A respiratory program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Use of this product does not require respiratory protection under normal operating conditions but use of local exhaust ventilation is recommended, especially for confined spaces.

Eye Protection:

Wear chemical splash goggles (ANSI Z87.1 or approved equivalent), or full face shield.

Hand Protection:

Wear gloves resistant to solvent permeation: neoprene, nitrile, polyvinyl alcohol, viton.

Other Protection:

None required.

FACILITY CONTROL MEASURES:

Ventilation:

Use with adequate ventilation. Local exhaust ventilation is recommended for confined spaces.

Other Protective Equipment:

Facilities storing or utilizing this material should be equipped with eyewash facilities.

9: PHYSICAL AND CHEMICAL PROPERTIES

TYPICAL

State	Liquid
Appearance	Clear
Color	Colorless to very pale amber
Odor	Characteristic pleasant glycol
Viscosity	Thin < 5 cSt @ 25°C = 77°F
pH as is	Slightly acidic in water
Specific Gravity @ 60°F	0.919
Density @ 60°F	7.65 Lbs/Gal
Vapor Density (Air = 1)	< 1
Vapor Pressure	< 1 mm Hg @ 20°C = 68°F
Freezing Point	< -73°C = -100°F
Boiling Point	301°F initial
Solubility in Water	55% appreciable
Percent Volatility	100%
Evaporation Rate (BAc = 1)	0.2
VOC %	95% = 7.27 Lbs/Gal
HAP %	38% = 2.9 Lbs/Gal

10: STABILITY AND REACTIVITY

Instability:

This material is considered stable.

Hazardous Decomposition Products:

There are no known hazardous decomposition products for this material except for Carbon Dioxide, Carbon Monoxide if burned.

Hazardous Polymerization:

This product will not undergo polymerization.

Incompatibility:

This product is not compatible with strong acids and strong oxidizing agents.

11: TOXICOLOGICAL INFORMATION

Inhalation of large quantities of vapor for extended periods is presumed to be harmful: Overexposure to high concentrations can cause eye, nose, throat, lung irritation; dizziness, difficulty in breathing, unconsciousness. Information available on the chronic health effects from long term exposure is limited.

Skin contact can incur absorption. Repeated or prolonged contact is irritating.

Eye contact is irritating.

Oral consumption is harmful if swallowed. Pulmonary aspiration can enter lungs and cause damage.

12: ECOLOGICAL INFORMATION

Toxic to fish and food organisms.

13: DISPOSAL CONSIDERATIONS

Procedure:

Incinerate liquid and contaminated solids in accordance with local, state and federal regulations.

14: TRANSPORTATION INFORMATION

Proper Shipping Name: Combustible Liquid, n.o.s. [Not DOT Regulated below 110 gal]
Hazard Class: Combustible Liquid
Identification No.: NA1993
Packing Group: III
Label: Combustible Liquid
Emergency Response Guide No.: 27 / 128 Use as a guideline.
RQ: None

15: REGULATORY INFORMATION

WORKPLACE CLASSIFICATIONS

This product is considered to be hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

EMERGENCY PLANNING AND COMMUNITY RIGHT - TO KNOW (SARA TITLE III)

Section 311/312 Categorizations (40 CFR 370)

This product is a hazardous material under 29 CFR 1910.1200, and therefore is covered by Title III of SARA.

Section 313 Information (40 CFR 372)

This product does contain a chemical which is listed in Section 313 at or above the de minimis concentrations.

Glycol Ethers 52%

CERCLA INFORMATION (40 CFR 302.4)

Releases of this material to air, land or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to the state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.

RCRA INFORMATION

When a decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability.

CHEMICAL CONTROL LAW STATUS

All components of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

This Mixture is not considered to be a carcinogen by IARC or NTP.

This Solvent does NOT contain and is NOT manufactured with any of the Class I or Class II ozone depleting substances listed under the US Clean Air Act of 1990.

16: OTHER SUPPLEMENTAL INFORMATION

ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety and Health Administration
TLV	Threshold Limit Value
PEL	Permissible Exposure Limit
TWA	Time Weighted Average
STEL	Short Term Exposure Limit
BAc	Butyl acetate
NE	Not Established

ND	Not Determined
NA	Not Applicable

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