SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: JEEN INTERNATIONAL CORPORATION
24 MADISON ROAD Chemtrec Emergency Tel.# 800-424-9300
FAIRFIELD, NJ 07004 * Chemtrec Int'l Tel.# 703-527-3887
Tel#: 973-439-1401 * Collect Calls Accepted

PRODUCT: JEECHEM SHAMPOO CONCENTRATE #5
CHEMICAL DESCRIPTION: SODIUM LAURYL ETHER SULFATE, COCAMIDE DEA, COCAMIDOPROPYL BETAIN BLEND
SYNONYMS: SHAMPOO BLEND

SECTION 2 - HAZARDOUS INGREDIENTS

APPEARANCE SMOOTH PEARLESCENT LIQUID
ODOR NOT AVAILABLE
PRINCIPAL HAZARDS DANGER
CAUSES SEVERE SKIN IRRITATION
CAUSES EYE IRRITATION
MAY CAUSE RESPIRATORY TRACT IRRITATION

SEE SECTION 11 FOR COMPLETE HEALTH HAZARDS

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENTS</th>
<th>COMP</th>
<th>CAS NO.</th>
<th>PERCENTAGE (BY WT.)</th>
<th>CARCINOGEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Lauryl Ether Sulfate</td>
<td>68585-34-2</td>
<td>FROM 20 TO 29.9 PERCENT</td>
<td>N/E</td>
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</tr>
<tr>
<td>Coconut Diethanolamide</td>
<td>68603-42-9</td>
<td>FROM 10 TO 19.9 PERCENT</td>
<td>IARC SUSPECT CARCINOGEN</td>
<td></td>
</tr>
<tr>
<td>Glycerin</td>
<td>56-81-5</td>
<td>FROM 1 TO 4.9 PERCENT</td>
<td>N/E</td>
<td></td>
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<tr>
<td>Diethanolamine</td>
<td>111-42</td>
<td>0.7</td>
<td>IARC SUSPECT CARCINOGEN</td>
<td></td>
</tr>
<tr>
<td>(N/E) - NONE ESTABLISHED</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

SECTION 4 - HEALTH AND FIRST AID DATA

SKIN ABSORPTION: WASH WITH SOAP AND WATER. SEEK MEDICAL ATTENTION IF IRRITATION OCCURS. LAUNDER CONTAMINATED CLOTHING
INHALATION: REMOVE EXPOSED PERSON TO FRESH AIR IF ADVERSE EFFECTS ARE OBSERVED. IF BREATHING IS LABORATORIES ADMINISTER OXYGEN. IF BREATHING HAS STOPPED, APPLY ARTIFICIAL RESPIRATION. IF IRRITATION PERSISTS OR IF TOXIC SYMPTOMS ARE OBSERVED, GET MEDICAL ATTENTION.
EYES RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. IF EYE IRRITATION PERSISTS, GET MEDICAL ATTENTION.
ADDITIONAL NOTE TO PHYSICIAN: TREAT SYMPTOMATICALLY

SECTION 5 - FIRE AND EXPLOSION HAZARD

FLASH POINT: >213.8 DEG F, 101 Deg C
EXTINGUISHING MEDIA: CO2, DRY CHEMICAL, OR FOAM. WATER CAN BE USED TO COOL AND PROTECT
EXPOSED MATERIAL FIRE FIGHTING

JEECHEM SHAMPOO CONCENTRATE #5 PAGE 1 OF 7
PROCEDURES:  RECOMMEND WEARING SELF-CONTAINED BREATHING APPARATUS. WATER MAY CAUSE SPLATTERING.

SECTION 5 - FIRE AND EXPLOSION HAZARD CONTINUED
UNUSAL FIRE&EXPLOSION HAZARDS  MATERIAL WILL NOT BURN UNTIL WATER HAS BEEN EVAPORATED. CONTAINER MAY RUPTURE ON HEATING. SEE SECTION 10 FOR ADDITIONAL INFORMATION.

SECTION 6 – ACCIDENTAL RELEASE MEASURES
SPILL PROCEDURES  PERSONAL PROTECTIVE EQUIPMENT MUST BE WORN, SEE PERSONAL PROTECTION SECTION FOR PPE ECOMMENDATIONS. VENTILATE AREA IF SPILLED IN CONFINED SPACE OR OTHER POORLY VENTILATED AREAS. PREVENT ENTRY INTO SEWERS AND WATR WAYS, DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATION. PICK UP FREE LIQUID FOR RECYCLE AND/OR DISPOSAL. RESIDUAL LIQUID CAN BE ABSORBED ON INERT MATERIAL.

SECTION 7 – HANDLING AND STORAGE
PUMPING TEMPERATURE  NOT DETERMINED.
MAXIMUM HANDLING TEMPERATURE  NOT DETERMINED.
HANDLING PROCEDURES  KEEP CONTAINERS CLOSED WHEN NOT IN USE. DO NOT DISCHARGE INTO DREAINS OR THE ENVIRONMENT, DISPOSE TO AN AUTHORIZED WASTE COLLECTION POINT. USE APPROPRIATE CONTAINMENT TO AVOID ENVIRONMENTAL CONTAMINATION. WASH THROUGHLY AFTER HANDLING. EMPTY CONTAINER CONTAINS PRODUCT RESIDUE WHICH MAY EXHIBIT HAZARDS OF PRODUCT.
MAXIMUM STORAGE TEMP  48.89 C, 120 F
STORAGE PROCEDURES  TAKE PRECAUTIONS TO AVOID RELEASE TO THE ENVIORNMENT. KEEP FROM FREEZING. STORE IN A COOL, DRY, WELL VENTILATED AREA. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT STORE AT TEMPERATRES GREATER THAN 120 DEGRESS. DO NOT STORE IN OPEN, UNLABELED OR MISLABELED CONTAINERS. SEE SECTION 10 FOR INCOMPATIBLE MATIERALS.
MAXIMUM LOADING TEMP  NOT DETERMINED

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION
EXPOSURE LIMITS

<table>
<thead>
<tr>
<th>COMP</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>OTHER</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>TWA</td>
<td>STEL</td>
<td>TWA</td>
</tr>
<tr>
<td>GLYCERIN</td>
<td>15 MG/CU. M</td>
<td>N/E</td>
<td>10 MG/CU. M</td>
</tr>
<tr>
<td>DIETHANOLAMINE</td>
<td>N/E</td>
<td>N/E</td>
<td>1 MG/CU M</td>
</tr>
</tbody>
</table>

(S) – SKIN EXPOSURE  
(P) – PROPOSED LIMIT  
(C) – CEILING EXPOSURE  
(L) – RECOMMENDED EXPOSURE LIMIT  
(U) - SUPPLIER RECOMMENDED EXPOSURE LIMIT  
(N/E) – NONE ESTABLISHED
OTHER EXPOSURE LIMITS

THIS PRODUCT CONTAINS FORMALDEHYDE, WHICH HAS AN OSHA PEL TWA OF 0.75 PPM AND ACGIH TLV TWA OF 0.3PPM.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION CONTINUED

ENGINEERING CONTROLS

USE MATERIAL IN WELL VENTILATED AREA ONLY. ADDITIONAL VENTILATION OR EXHAUST MAY BE REQUIRED TO MAINTAIN AIR CONCENTRATIONS BELOW RECOMMENDED EXPOSURE LIMITS. PREVENT INHALATION BY PROVIDING EFFECTIVE GENERAL AND, WHEN NECESSARY, LOCAL EXHAUST VENTILATION TO DRAW SPRAY, AEROSOL, FUME, MIST, OR VAPOR AWAY FROM WORKERS.

GLOVES PROCEDURES

USE NITRILE OR NEOPRENE GLOVES.

EYE PROTECTION

SAFETY GLASSES OR FACE SHIELD

RESPIRATORY PROTECTION

USE NIOSH/MSHA APPROVED FULL FACE RESPIRATOR WITH A COMBINATION ORGANIC VAPOR AND DUST/MIST CARTRIDGE IF THE RECOMMENDED EXPOSURE LIMIT IS EXCEEDED. USE SELF-CONTAINED BREATHING APPARATUS FOR ENTRY INTO CONFINED SPACE, FOR OTHER POORLY VENTILATED AREAS AND FOR LARGE SPILL CLEAN-UP SITES.

CLOTHING RECOMMENDATION

LONG SLEEVE SHIRT IS RECOMMENDED. WEAR A CHEMICALLY PROTECTIVE APRON WHEN CONTACT WITH MATERIAL MAY OCCUR. USE NITRILE RUBBER BOOTS WHEN NECESSARY TO AVOID CONTAMINATING SHOES. DO NOT WEAR RINGS, WATCHES OR SIMILAR APPAREL THAT COULD ENTRAP THE MATERIAL AND CAUSE A SKIN REACTION. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

FLASH POINT  
>101°C, 213.8°F PMCC (MINIMUM)

VAPOR PRESSURE  
18 mm Hg (20 C)

PH  
8.5-9.2 10% in water

SPECIFIC GRAVITY  
1.04 (20°C)

BULK DENSITY  
8.67 LB/GAL, 1.04 KG/L

WATER SOLUBILITY  
material is miscible in water

PERCENT SOLID  
40-42% BY WEIGHT.

PERCENT VOLATILE  
58-60% BY WEIGHT.

VOLITILE ORGANIC COMPOUND  
NOT DETERMINED.

VAPOR DENSITY  
<1 AIR = 1

EVAPORATION RATE  
< 1 BUTYL ACETATE = 1

ODOR  
NOT AVAILABLE.

APPEARANCE  
SMOOTH PEARLSCEINT LIQUID

VIScosity  
< 5000 CENTIOISE (25 C)

ODOR THRESHOLD  
UNKNOWN.

BOILING POINT  
~100 C ~ 212 F (TYPICAL)

POUR POINT TEMPERATURE  
NOT DETERMINED.

MELTING/FREEZING POINT  
~ 0 C, ~ 32 F

THE ABOVE DATA ARE TYPICAL VALUES AND DO NOT CONSITUTE A SPECIFICATION. VAPOR PRESSURE DATA ARE CALCULATED UNLESS OTHERWISE NOTED.
## SECTION 10 – STABILITY AND REACTIVITY

**STABILITY**  
MATERIAL IS NORMALLY STABLE AT MODERATELY ELEVATED TEMPERATURES AND PRESSURES.

**DECOMPOSITION TEMP**  
NOT DETERMINED.

**INCOMPATIBILITY**  
STRONG OXIDIZING AGENTS.

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## SECTION 10 – STABILITY AND REACTIVITY CONTINUED

**POLYMERIZATION**  
WILL NOT OCCUR.

**THERMAL DECOMPOSITION**  
SMOKE, CARBON MONOXIDE, CARBON DIOXIDE, ALDEHYDES AND OTHER PRODUCTS OF INCOMPLETE COMBUSTION.

**CONDITIONS TO AVOID**  
DO NOT FREEZE

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## SECTION 11 – TOXICOLOGICAL INFORMATION

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### ACUTE EXPOSURE

**EYE IRRITATION**  
MODERATE TO STRONG EYE IRRITATION. BASED ON DATA FROM COMPONENTS OR SIMILAR MATERIAL.

**SKIN IRRITATION**  
SKIN IRRITANT. BASED ON DATA FROM COMPONENTS OR SIMILAR MATERIALS. PROLONGED OR REPEATED SKIN CONTACT AS FROM CLOTHING WET WITH MATERIAL MAY CAUSE DERMATITIS. SYMPTOMS MAY INCLUDE REDNESS, EDEMA, DRYING, AND CRACKING OF THE SKIN.

**RESPIRATORY IRRITATION**  
MAY CAUSE NOSE, THROAT AND LUNG IRRITATION. BASED ON DATA FROM COMPONENTS OR SIMILAR MATERIALS.

**DERMAL TOXICITY**  
THE LD50 IN RABBITS IS >2000 MG/KG. BASED ON DATA FROM COMPONENTS OR SIMILAR MATERIALS.

**INHALATION TOXICITY**  
NOT EXPECTED TO BE A TOXIC INHALATION HAZARD. BASED ON DATA AVAILABLE FROM COMPONENTS OR SIMILAR MATERIALS.

**ORAL TOXICITY**  
THE LD50 IN RATS IS >5000 MG/KG. BASED ON DATA FROM COMPONENTS OR SIMILAR MATERIALS. SWALLOWING MATERIAL MAY CAUSE IRRITATION OF THE GASTROINTESTINAL LINING, NAUSEA, VOMITING, DIARRHEA, AND ABDOMINAL PAIN.

**DERMAL SENSITIZATION**  
NO DATA AVAILABLE TO INDICATE PRODUCT OR COMPONENTS MAY BE A SKIN SENSITIZER.

**INHALATION SENSITIZATION**  
NO DATA AVAILABLE TO INDICATE PRODUCT OR COMPONENTS MAY BE RESPIRATORY SENSITIZERS.

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### CHRONIC EXPOSURE

**CHRONIC TOXICITY**  
NO DATA AVAILABLE TO INDICATE PRODUCT OR COMPONENTS PRESENT AT GREATER THAN 1% ARE CHRONIC HEALTH HAZARDS.

**CARCINOGENICITY**  
THIS PRODUCT CONTAINS GREATER THAN 0.1% BUT LESS THAN 1.0% FREE DIETHANOLAMINE. THE NATIONAL TOXICOLOGY PROGRAM RECENTLY COMPLETED STUDIES WHICH INDICATE THAT DERMALLY APPLIED DIETHANOLAMINE MAY HAVE CARCINOGENIC ACTIVITY IN LABORATORY ANIMALS. THERE ARE A NUMBER OF SCIENTIFIC ISSUES THAT RAISE QUESTIONS ABOUT THE VALIDITY AND RELEVANCE OF THESE STUDIES. RESEARCH IS EXPECTED TO CONTINUE ON THESE ISSUES.

**MUTAGENICITY**  
NO DATA AVAILABLE TO INDICATE PRODUCT OR ANY COMPONENTS PRESENT AT GREATER THAN 0.1% ARE MUTAGENIC OR GENOTOXIC.

**REPRODUCTIVE TOXICITY**  
NO DATA AVAILABLE TO INDICATE EITHER PRODUCT OR COMPONENTS PRESENT AT GREATER THAN 0.1% MAY CAUSE REPRODUCTIVE TOXICITY.
TERATOGENICITY NO DATA AVAILABLE TO INDICATE PRODUCT OR ANY COMPONENTS CONTAINED AT GREATER THAN 0.1% MAY CAUSE BIRTH DEFECTS.

OTHER NITROSAMINES MAY BE FORMED UNDER CERTAIN CONDITIONS. NITROSAMINES ARE CARCINOGENIC IN ANIMAL STUDIES.

SECTION 12 – ECOLOGICAL INFORMATION

-ENVIRONMENTAL TOXICITY--
FRESHWATER FISH TOXICITY THE ACUTE LC50 IS 1 – 10 MG/L BASED ON COMPONENTS DATA.
FRESHWATER INVERTEBRATES THE ACUTE EC50 IS 1 – 10 MG/L BASED ON COMPONENT DATA. TOXICITY CHRONIC EFFECTS EXPECTED AT<1 MG/L BASED ON COMPONENT DATA.
ALGAL INHIBITION THE ACUTE EC50 IS 10 – 100 MG/L BASED ON COMPONENT DATA.
SALTWATER FISH TOXICITY NOT DETERMINED.
SLATWATER INVERTEBRATES NOT DETERMINED.
BACTERIA TOXICITY NOT DETERMINED.
MISCELLANEOUS TOXICITY NOT DETERMINED.

--ENVIRONMENTAL FATE--
BIODEGRADATION AT LEAST 75% OF THE COMPONENTS IN THIS PRODUCT SHOW RAPID BIODEGRADATION BASED ON OECD 301-TYPE TEST DATA.
DIOACCUMULATION 25% OR GREATER OF THE COMPONENTS DISPLAY NO POTENTIAL TO BIOCONCENTRATE. SOIL MOBILITY NOT DETERMINED.

SECTION 13 – DISPOSAL CONSIDERATIONS
WASTE DISPOSAL THIS MATERIAL, IF DISCARDED, IS NOT A HAZARDOUS WASTE UNDER RCRA REGULATION 40 CFR 261. TREATMENT, STORAGE, TRANSPORTATION, AND DISPOSAL MUST BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE/PROVINCIAL, AND LOCAL REGULATIONS.

SECTION 14 – TRANSPORT INFORMATION

ICAO/IATA I NOT REGULATED.
ICAO/IATA II NOT REGULATED.
IMDG NOT REGULATED.
IMDG EMS FIRE NOT APPLICABLE.
IMDG EMS SPILL NOT APPLICABLE.
IMDG MFIG NOT APPLICABLE.
MARPOL ANNEX II NOT DETERMINED.
USCG COMPATIBILITY NOT DETERMINED.
U.S. DOT BULK UN3082 ENVIRONMENTAL HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIETHANOLAMINE) CLASS 9, PGIII, RQ.
U.S. DOT NON-BULK NOT REGULATED.
DOT NAERG 171
TDG BULK NOT REGULATED.
TDG NON-BULK NOT REGULATED.
MEXICO NOT REGULATED.
MEXICO NON-BULK NOT REGULATED.
BULK QUANTITY 85000 LITERS, 187391 GAL.
INTERMEDIATE QUANT 11000 KG, 24251
NON-BULK QUANTITY 400 KG, 882 LBS

REVIEW CLASSIFICATION REQUIREMENTS BEFORE SHIPPING MATERIALS AT ELEVATED TEMPERATURES.

---GLOBAL CHEMICAL INVENTORIES---
USA ALL COMPONENTS OF THIS MATERIAL ARE ON THE US TSCA INVENTORY OR ARE EXEMPT.
OTHER TSCA REG. NONE KNOWN.

---GLOBAL CHEMICAL INVENTORIES--- CONTINUED
EU ALL COMPONENTS ARE IN COMPLIANCE WITH THE EC SEVENTH AMENDMENDET DIRECTIVE 92/32/EEC.
JAPAN MAY REQUIRE NOTIFICATION IN JAPAN.
AUSTRALIA ALL COMPONENTS ARE IN COMPLIANCE WITH CHEMICAL NOTIFICATION REQUIREMENTS IN AUSTRALIA.
NEW ZEALAND ALL COMPONENTS ARE IN COMPLIANCE WITH CHEMICAL NOTIFICATION REQUIREMENTS IN NEW ZEALAND.
CANADA ALL COMPONENTS ARE IN COMPLIANCE WITH THE CANADIAN ENVIRONMENTAL PROTECTION ACT AND ARE PRESENT ON A DOMESTIC SUBSTANCES LIST.
SWITZERLAND ALL COMPONENTS ARE IN COMPLIANCE WITH THE ENVIRONMENTALLY HAZARDOUS SUBSTANCES ORDINANCE IN SWITZERLAND.
KOREA ALL COMPONENTS ARE IN COMPLIANCE IN KOREA.
PHILIPPINES ALL COMPONENTS ARE IN COMPLIANCE WITH THE PHILIPPINES TOXIC SUBSTANCES AND HAZARDOUS AND NUCLEAR WASTES CONTROL ACT OF 1990 (R.A. 6969).
CHINA ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE INVENTORY OF EXISTING CHEMICAL SUBSTANCES IN CHINA.
TAIWAN MAY REQUIRE NOTIFICATION BEFORE SALE IN TAIWAN
OTHER U.S. FEDERAL REGULATIONS
SARA HAZARD SUBSTANCE THIS PRODUCT DOES NOT CONTAIN GREATER THAN 1.0 OF ANY CHEMICAL SUBSTANCE ON THE SARA EXTREMELY HAZARDOUS SUBSTANCE LIST.
SARA SECTION 313 0.7% DIETHANOLAMINE, CAS no. 111-42-2
SARA 311 CLASSIFICATIONS
ACUTE HAZARD YES
CHRONIC HAZARD YES
FIRE HAZARD NO
REACTIVITY HAZARD NO
CERCLA HAZARDOUS SUBSTANCES
DIETHANOLAMINE 13892 LBS 6301 KG

-STATE REGULATIONS-
CAL. PROP. 65 THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND/OR BIRTH DEFECTS: 0.009% 1,4 DIOXANE, CAS No. 123-91-1 0.023% FORMALDEHYDE, CAS no. 50-00-0 0.721% DIETHANOLAMINE, CAS NO. 111-42-2 12.2% COCONUT DIETHANOLAMIDE, CAS NO. 68603-42-9
--PRODUCT REGISTRATIONS--

U.S. FUEL REGISTRATION NOT APPLICABLE  
FINNISH REGISTRATION NOT REGISTERED.  
SWEDISH REGISTRATION NOT REGISTERED.  
NORWEGIAN REGISTRATION NOT REGISTERED.  
DANISH REGISTRATION NOT REGISTERED.  

SECTION 15 – REGULATORY INFORMATION CONTINUED

SWISS REGISTRATION NOT REGISTERED.  
ITALIAN REGISTRATION NOT REGISTERED.  

TDG REGULATED LIMIT NONE KNOWN.  

SECTION 16 – OTHER INFORMATION

USNFPA CODES

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<tr>
<th>HEALTH</th>
<th>FIRE</th>
<th>REACTIVITY</th>
<th>SPECIAL</th>
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<tr>
<td>2</td>
<td>1</td>
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(N/E) – NONE ESTABLISHED.

HMIS CODES

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<thead>
<tr>
<th>HEALTH</th>
<th>FIRE</th>
<th>REACTIVITY</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

PRECAUTIONARY LABELS

- CAUSES EYE IRRITATION.  
- CAUSES SKIN IRRITATION. 
- MAY CAUSE RESPIRATORY TRACT IRRITATION.

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