

MATERIAL SAFETY DATA SHEET

MSDS #: 166

BLACK LIQUOR SOAP

## 1. PRODUCT AND COMPANY IDENTIFICATION



EMERGENCY CONTACTS/TELEPHONE NUMBERS:  
CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300  
INTERNATIONAL EMERGENCY PHONE NUMBER: (703) 527-3887

DATE PREPARED: 11/20/2000  
ISSUE DATE: 07/16/2002

PRODUCT NAME: BLACK LIQUOR SOAP (INTERNATIONAL PAPER)

CHEMICAL TYPE: MIXTURE

MSDS NUMBER: 166

SYNONYMS:  
SOAP  
TALL OIL SOAP  
BLACK LIQUOR SOAP SKIMMINGS

## 2. COMPOSITION/INFORMATION ON INGREDIENTS



COMPONENT: BLACK LIQUOR SOAP  
CAS NUMBER: 65997-01-5  
PERCENTAGE: 50-65

COMPONENT: SODIUM HYDROXIDE  
CAS NUMBER: 1310-73-2  
PERCENTAGE: <1

COMPONENT: HYDROGEN SULFIDE  
CAS NUMBER: 7783-06-4  
PERCENTAGE: <0.1

COMPONENT: METHYL MERCAPTAN  
CAS NUMBER: 7483-06-4  
PERCENTAGE: <0.1

COMPONENT: METHYL DISULFIDE  
CAS NUMBER: 624-92-0  
PERCENTAGE: <0.1

COMPONENT: WATER  
CAS NUMBER: 7732-18-5  
PERCENTAGE: 35-50

## 3. HAZARDS IDENTIFICATION



NFPA RATINGS(SCALE 0-4): HEALTH=3 FIRE=1 REACTIVITY=0

## EMERGENCY OVERVIEW

COLOR: DARK, BLACK

PHYSICAL FORM: LIQUID

ODOR: PUNGENT ODOR

MAJOR HEALTH HAZARDS: LIQUOR SOAP MAY CAUSE RESPIRATORY TRACT BURNS, SKIN BURNS, EYE BURNS, MUCOUS MEMBRANE BURNS

### POTENTIAL HEALTH EFFECTS

#### INHALATION:

SHORT TERM EXPOSURE: LIQUOR SOAP MAY CAUSE: BURNS

LONG TERM EXPOSURE: SAME AS EFFECTS REPORTED IN SHORT TERM EXPOSURE

#### SKIN CONTACT:

SHORT TERM EXPOSURE: LIQUOR SOAP MAY CAUSE: BURNS, ALLERGIC REACTIONS

LONG TERM EXPOSURE: SAME AS EFFECTS REPORTED IN SHORT TERM EXPOSURE

#### EYE CONTACT:

SHORT TERM EXPOSURE: LIQUOR SOAP MAY CAUSE: BURNS, EYE DAMAGE

LONG TERM EXPOSURE: SAME AS EFFECTS REPORTED IN SHORT TERM EXPOSURE

#### INGESTION:

SHORT TERM EXPOSURE: LIQUOR SOAP MAY CAUSE: BURNS

LONG TERM EXPOSURE: SAME AS EFFECTS REPORTED IN SHORT TERM EXPOSURE

AVOID EXPOSURE TO ACIDIC MATERIALS. RESIDUAL SULFUR COMPOUNDS MAY RELEASE TOXIC GASES SUCH AS HYDROGEN SULFIDE, METHYL MERCAPTAN AND DIMETHYL DISULFIDE.

## 4. FIRST AID MEASURES



#### INHALATION:

IF ADVERSE EFFECTS OCCUR, REMOVE TO UNCONTAMINATED AREA. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. IF BREATHING IS DIFFICULT, OXYGEN SHOULD BE ADMINISTERED BY QUALIFIED PERSONNEL. GET IMMEDIATE MEDICAL ATTENTION.

#### SKIN CONTACT:

WASH SKIN WITH SOAP AND WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. GET IMMEDIATE MEDICAL ATTENTION. THOROUGHLY CLEAN AND DRY CONTAMINATED CLOTHING AND SHOES BEFORE REUSE. DESTROY CONTAMINATED SHOES.

#### EYE CONTACT:

IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. THEN GET IMMEDIATE MEDICAL ATTENTION.

#### INGESTION:

IF SWALLOWED, DRINK PLENTY OF WATER, DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION.

#### NOTE TO PHYSICIAN:

FOR INHALATION, CONSIDER OXYGEN. AVOID GASTRIC LAVAGE OR EMESIS.

## 5. FIRE FIGHTING MEASURES



#### FIRE AND EXPLOSION HAZARDS:

SLIGHT FIRE HAZARD

**EXTINGUISHING MEDIA:**

CARBON DIOXIDE, REGULAR DRY CHEMICAL, REGULAR FOAM, WATER

**FIREFIGHTING:**

MOVE CONTAINER FROM FIRE AREA IF IT CAN BE DONE WITHOUT RISK. COOL CONTAINERS WITH WATER SPRAY UNTIL WELL AFTER THE FIRE IS OUT. DO NOT GET WATER DIRECTLY ON MATERIAL. AVOID INHALATION OF MATERIAL OR COMBUSTION BY-PRODUCTS. STAY UPWIND AND KEEP OUT OF LOW AREAS.

FLASH POINT: >200 F (>93.3 C) (SCC)

FLAMMABILITY CLASS (OSHA): IIIB

## **6. ACCIDENTAL RELEASE MEASURES**



DO NOT TOUCH SPILLED MATERIAL. STOP LEAK IF POSSIBLE WITHOUT PERSONAL RISK. SMALL SPILLS: ABSORB WITH SAND OR OTHER NON-COMBUSTIBLE MATERIAL. SMALL DRY SPILLS: COLLECT SPILLED MATERIAL IN APPROPRIATE CONTAINER FOR DISPOSAL. KEEP UNNECESSARY PEOPLE AWAY, ISOLATE HAZARD AREA AND DENY ENTRY. NOTIFY LOCAL EMERGENCY PLANNING COMMITTEE AND STATE EMERGENCY RESPONSE COMMISSION FOR RELEASE GREATER THAN OR EQUAL TO RQ(U.S. SARA SECTION 304). IF RELEASE OCCURS IN THE U.S. AND IS REPORTABLE UNDER CERCLA SECTION 103, NOTIFY THE NATIONAL RESPONSE CENTER AT (800)424-8802 (USA) OR (202)426-2675 (USA).

## **7. HANDLING AND STORAGE**



**STORAGE:**

STORE AND HANDLE IN ACCORDANCE WITH ALL CURRENT REGULATIONS AND STANDARDS. STORE WITH BASES. SEE ORIGINAL CONTAINER FOR STORAGE RECOMMENDATIONS.

**HANDLING:**

SUBJECT TO HANDLING REGULATIONS: U.S. OSHA 29 CFR 1910.119. HANDLE AS A CORROSIVE LIQUID. WHEN MIXING, SLOWLY ADD TO WATER TO MINIMIZE HEAT GENERATION AND SPATTERING. KEEP EMERGENCY SPILL KIT NEAR STORAGE AND USE AREAS.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**



**EXPOSURE LIMITS**

**HYDROGEN SULFIDE:**

20 PPM OSHA CEILING

50 PPM OSHA PEAK 10 MINUTE(S) (ONCE IF NO OTHER MEASURABLE EXPOSURE OCCURS)

10 PPM (14 MG/M3) OSHA TWA (VACATED BY 58 FR 35338, JUNE 30, 1993)

15 PPM (21 MG/M3) OSHA TWAL (VACATED BY 58 FR 35338, JUNE 30, 1993)

10 PPM ACGIH TWA

15 PPM ACGIH STEL

**METHYL MERCAPTAN:**

10 PPM (20 MG/M3) OSHA CEILING

0.5 PPM (1 MG/M3) OSHA TWA (VACATED BY 58 FR 35338, JUNE 30, 1993)

0.5 PPM ACGIH TWA

**VENTILATION:**

PROVIDE LOCAL EXHAUST OR PROCESS ENCLOSURE VENTILATION SYSTEM AS NECESSARY TO ENSURE COMPLIANCE WITH APPLICABLE EXPOSURE LIMITS.

**EYE PROTECTION:**

WEAR SPLASH RESISTANT SAFETY GOGGLES WITH A FACESHIELD. PROVIDE AN EMERGENCY EYE WASH FOUNTAIN AND QUICK DRENCH SHOWER IN THE IMMEDIATE WORK AREA.

**CLOTHING:**

WEAR APPROPRIATE CHEMICAL RESISTANT CLOTHING.

**GLOVES:**

WEAR APPROPRIATE CHEMICAL RESISTANT GLOVES.

**PROTECTIVE MATERIAL TYPES:**

NEOPRENE, NITRILE, POLYVINYL CHLORIDE (PVC)

**RESPIRATOR:**

RESPIRATORS SHOULD BE SELECTED BY AND USED UNDER THE DIRECTION OF A TRAINED HEALTH AND SAFETY PROFESSIONAL, FOLLOWING REQUIREMENTS FOUND IN OSHA'S RESPIRATOR STANDARD (29 CFR 1910.134).

## **9. PHYSICAL AND CHEMICAL PROPERTIES**



PHYSICAL STATE: LIQUID

COLOR: DARK, BLACK

TEXTURE: VISCOUS

ODOR: PUNGENT ODOR

BOILING POINT: 212 F (100 C)

FREEZING POINT: 32.0 F (0 C)

VAPOR PRESSURE: 18 MMHG @ 20 C

VAPOR DENSITY: (AIR=1) 0.6

SPECIFIC GRAVITY: (WATER=1) 1.07

WATER SOLUBILITY: SOLUBLE

PH: >11

VOLATILITY: 35 % BE WEIGHT

ODOR THRESHOLD: NOT AVAILABLE

EVAPORATION RATE: 0.33 (BUTYL ACETATE=1)

COEFFICIENT OF WATER/OIL DISTRIBUTION: NOT AVAILABLE

SOLVENT SOLUBILITY: SOLUBLE IN METHANOL

## **10. STABILITY AND REACTIVITY**



**REACTIVITY:**

STABLE AT NORMAL TEMPERATURES AND PRESSURE.

CONDITIONS TO AVOID:

AVOID HEAT, FLAMES, SPARKS AND OTHER SOURCES OF IGNITION. MAY IGNITE OR EXPLODE ON CONTACT WITH COMBUSTIBLE MATERIALS.

INCOMPATIBILITIES: ACIDS, OXIDIZING MATERIALS

HAZARDOUS DECOMPOSITION:

THERMAL DECOMPOSITION PRODUCTS OR CONTACT WITH ACIDS: HYDROGEN SULFIDE, OXIDES OF CARBON, OXIDES OF SULFUR

POLYMERIZATION: WILL NOT POLYMERIZE

## 11. TOXICOLOGICAL INFORMATION



BLACK LIQUOR SOAP

LOCAL EFFECTS

CORROSIVE: INHALATION, SKIN, EYE, INGESTION

## 12. ECOLOGICAL INFORMATION



BLACK LIQUOR SOAP:

DUE TO THE HIGH pH OF THIS PRODUCT, LARGE SPILLS MAY PRODUCE SIGNIFICANT TOXICITY TO AQUATIC ORGANISMS. LARGE SPILLS OR CONCENTRATED DISCHARGES OF THIS PRODUCT TO WATER MAY RESULT IN SUSPENDED OR SETTLEABLE SOLIDS WHICH LOWER THE DISSOLVED OXYGEN CONTENT OF THE WATER BODY. SEDIMENTATION TO THE BOTTOM OF A BODY OF WATER MAY RESULT IN DETRIMENTAL EFFECTS TO FISH LIFE BY REDUCING THEIR GROWTH RATE, PREVENTING THE SUCCESSFUL DEVELOPMENT OF FISH EGGS AND LARVAE, OR REDUCING THE ABUNDANCE OF FOOD AVAILABLE TO FISH.

IMMOBILIZATION STUDIES:

(DAPHNIA MAGNA) EC50 (4 HOURS)= 2MG/L

MINIMUM LETHAL CONCENTRATION IN MINNOWS, WITHIN FIVE DAYS, WAS DETERMINED TO BE 5.0 PPM.

## 13. DISPOSAL CONSIDERATIONS



DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. IF pH IS >12.5, THEN SUBJECT TO DISPOSAL REGULATIONS: U.S. EPA 40 CFR 262. HAZARDOUS WASTE NUMBER(S): D002

## 14. TRANSPORT INFORMATION



U.S. DEPARTMENT OF TRANSPORTATION: NOT REGULATED

## 15. REGULATORY INFORMATION



U.S. REGULATIONS

CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4)

SODIUM HYDROXIDE: 1000 LBS RQ

HYDROGEN SULFIDE: 100 LBS RQ  
METHYL MERCAPTAN: 100 LBS RQ

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30):  
NOT REGULATED.

SARA TITLE III SECTION 304 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.40):  
NOT REGULATED.

SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):  
ACUTE: YES  
CHRONIC: NO  
FIRE: NO  
REACTIVE: NO  
SUDDEN RELEASE: NO

SARA TITLE III SECTION 313 (40 CFR 372.65): NOT REGULATED.

OSHA PROCESS SAFETY (29CFR1910.119)  
HYDROGEN SULFIDE: 1500 LBS TQ  
METHYL MERCAPTAN: 5000 LBS TQ

STATE REGULATIONS  
CALIFORNIA PROPOSITION: NOT REGULATED.

NATIONAL INVENTORY STATUS  
US INVENTORY (TSCA): ALL COMPONENTS OF THIS PRODUCT ARE IN COMPLIANCE.

TSCA 12(b) EXPORT NOTIFICATION  
METHANETHIOL  
CAS NUMBER: 74-93-1  
SECTION 4

## 16. OTHER INFORMATION



THE INFORMATION SET FORTH HEREIN IS OFFERED AS A SERVICE TO INTERNATIONAL PAPER CUSTOMERS AND IS NOT INTENDED TO RELIEVE A CUSTOMER FROM ITS RESPONSIBILITY TO DETERMINE THE SUITABILITY OF THIS INFORMATION FOR THEIR PARTICULAR PURPOSES, TO COMPLY WITH ALL LAWS AND PROCEDURES REGARDING THE SAFE USE OF THESE MATERIALS, AND TO USE THESE MATERIALS IN A SAFE MANNER.