



MATERIAL SAFETY DATA SHEET

SECTION I - MATERIAL IDENTIFICATION AND GENERAL INFORMATION

CHEMICAL NAME & SYNONYMS	CALCIUM LIGNOSULFONATE
TRADE NAME & SYNONYMS	FLAMBINDER
CHEMICAL FAMILY	WOOD CHEMICALS
FORMULA	AMORPHOUS POLYMER
CAS NUMBER	8061-52-7
H.S. TARIFF CLASSIFICATION	3804.00.00
PROPER DOT SHIPPING NAME	LIGNIN LIQUOR STCC 26-112-15
DOT HAZARD CLASSIFICATION	NONE
MANUFACTURER	FLAMBEAU RIVER PAPERS LLC.
MANUFACTURER'S PHONE NUMBER	715-762-5235 715-762-3231
MANUFACTURER'S ADDRESS	200 1ST AVE NORTH, PO BOX 340, PARK FALLS, WI 54552

SECTION II - HAZARDOUS INGREDIENTS

PRINCIPAL HAZARDOUS COMPONENTS	NONE KNOWN
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SECTION III - PHYSICAL DATA

BOILING POINT	220 DEGREES F / 104 DEGREES C
SPECIFIC GRAVITY (H ₂ O=1)	1.225
VAPOR PRESSURE (mm Hg)	N/A
PERCENT VOLATILE BY VOLUME (%)	45.0 (WATER)
VAPOR DENSITY (AIR = 1)	N/A
EVAPORATION RATE (_____ = 1)	N/A
SOLUBILITY IN WATER	100%
pH	2.5 – 5.0
APPEARANCE & ODOR	BROWN VISCOUS LIQUID, WITH SLIGHT ODOR

SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT (TEST METHOD)	-NOT APPLICABLE
AUTO IGNITION TEMPERATURE	-NOT APPLICABLE
FLAMMABLE LIMITS	-NOT APPLICABLE
EXTINGUISHING MEDIA	-WATER SPRAY, CARBON DIOXIDE, DRY CHEMICAL, ALCOHOL-TYPE OF UNIVERSAL TYPE FOAMS APPLIED BY RECOMMENDED TECHNIQUES
SPECIAL FIRE FIGHTING PROCEDURES	-USE SUPPLIED BREATHING AIR AND PROTECTIVE CLOTHING
UNUSUAL FIRE & EXPLOSION HAZARDS	-NONE

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	-NONE KNOWN
OSHA THRESHOLD LIMIT VALUE	-NONE ESTABLISHED
ACGIH THRESHOLD LIMIT VALUE	-NONE ESTABLISHED
CARCINOGEN - NTP PROGRAM	-NOT A CARCINOGEN
CARCINOGEN - IARC PROGRAM	-NOT A CARCINOGEN
SYMPTOMS FROM ROUTINE EXPOSURE	-NO EFFECTS FROM EXPOSURE TO LIGNOSULFONATES KNOWN
SYMPTOMS FROM OVEREXPOSURE	-CONTACT MAY CAUSE SKIN IRRITATION TO SENSITIVE INDIVIDUALS
CONDITIONS AGGRAVATED BY EXPOSURE	-NONE CURRENTLY KNOWN
PRIMARY ROUTE(S) OR ENTRY	-SKIN CONTACT, EYE CONTACT, INGESTION
SENSITIZATION TO MATERIAL	-MAY CAUSE ALLERGIC REACTION IN RARE CASES
EMERGENCY FIRST AID	-EYES: IRRIGATE WITH POTABLE WATER. SKIN: FLUSH SKIN WITH CLEAN WATER. -INGESTION: GIVE WATER TO DILUTE



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SECTION VI – REACTIVITY DATA

STABILITY	STABLE - AVOID CONTACT WITH STRONG OXIDIZING AGENTS
INCOMPATIBILITY	NONE
MATERIALS TO AVOID:	NONE
HAZARDOUS POLYMERIZATION	WILL NOT OCCUR
HAZARDOUS DECOMPOSITION PRODUCTS	SULFUR DIOXIDE, CARBON DIOXIDE, CARBON MONOXIDE

SECTION VII - ENVIRONMENTAL PROTECTION PROCEDURES

SPILL RESPONSE	-DAM SPILL, RETRIEVE LIQUID WHERE POSSIBLE -FLUSH WITH WATER TO SEWER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS
WASTE DISPOSAL METHOD	-FLUSH TO SEWER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS

SECTION VIII - SPECIAL PROTECTION INFORMATION

EYE PROTECTION	-GOGGLES / FACE SHIELD RECOMMENDED
SKIN PROTECTION	-RUBBER GLOVES RECOMMENDED
RESPIRATORY PROTECTION	-N-95 RECOMMENDED WHEN CONDITIONS WARRANT
VENTILATION	-ADEQUATE FOR COMFORT IS RECOMMENDED
OTHER PROTECTION	-WEAR PROTECTIVE CLOTHING -AVOID PROLONGED EXPOSURE TO CLOTHING THAT CONTAINS PRODUCT

SECTION IX - SPECIAL PRECAUTIONS

HYGIENIC PRACTICES IN HANDLING & STORAGE	-DAILY CHANGING OF CLOTHING THAT CONTAINS PRODUCT IS RECOMMENDED
PRECAUTIONS FOR REPAIR & MAINTENANCE OF	-FLUSH WITH WATER UNTIL CLEAN AND USE GOOD MAINTAINENCE PRACTICES TO MAINTAIN EQUIPMENT

SECTION X – ADDITIONAL INFORMATION

NFPA RATING SYSTEM	HMIS RATING SYSTEM
HEALTH: 1	HEALTH: 1
FLAMMABILITY: 0	FLAMMABILITY: 0
REACTIVITY: 0	PHYSICAL HAZARD: 0
SPECIAL HAZARD: NONE	PERSONAL PROTECTION: B

SECTION XI – PERMITTED USES OF LIGNOSULFONATES

21 CFR 172.715 PESTICIDES FORMULATIONS	21 CFR 176.210 COMPONENTS OF PAPER
21 CFR 173.310 BOILER WATER ADDITIVES	21 CFR 177.1210 GASKETS FOR FOOD ADDITIVES
21 CFR 175.105 COMPONENTS OF ADHESIVES	21 CFR 178.3120 ADJUVANT FOR GLUE
21 CFR 176.120 COMPONENTS OF PAPER	21 CFR 182.99 PESTICIDES FORMULATIONS
21 CFR 176.170 COMPONENTS OF PAPER	21 CFR 573.600 ANIMAL FEEDS
21 CFR 176.180 COMPONENTS OF PAPER	40 CFR 180.910 PESTICIDES FORMULATIONS

JANUARY 2012

IMPORTANT

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