

MATERIAL SAFETY DATA SHEET
NAME OF PRODUCT: ANTI FOULING MOORING LINE PAINT

FILE NO.: MSDS MOORING LINE PAINT
MSDS DATE: 11/12/2007

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MOORING LINE ANTIFOULING PAINT
SYNONYMS:
PRODUCT CODES: 51101; 51201; 51102; 51202

MANUFACTURER: Flexabar Corporation
DIVISION:
ADDRESS: 1969 Rutgers University Blvd.
Lakewood, NJ 08701 USA

EMERGENCY PHONE: 1-800-424-9300
CHEMTREC PHONE: 1-800-424-9300
OTHER CALLS: 1-732-901-6500
FAX PHONE: 1-732-901-6504

CHEMICAL NAME:
CHEMICAL FAMILY:
CHEMICAL FORMULA:

PRODUCT USE: Water base impregnation agent for mooring ropes.
PREPARED BY: Hamdi Latif

SECTION 1 NOTES:

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: CUPROUS OXIDE (CUPRIC OXIDE / METALLIC COPPER)

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
1317-39-1	10.00 – 12.00	3.0 - 4.0	YES

	<u>ppm</u>	<u>mg/m3</u>
OSHA PEL-TWA: ?		
OSHA PEL STEL :		
OSHA PEL CEILING:	SEE NOTES AT SECTION END	

ACGIH TLV-TWA:
ACGIH TLV STEL:
ACGIH TLV CEILING:

INGREDIENT: ACRYLIC COPOLYMER

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
- - - - -	5.0 – 15.0	9%	NO

	<u>ppm</u>	<u>mg/m3</u>
OSHA PEL-TWA:		
OSHA PEL STEL :		
OSHA PEL CEILING:		

ACGIH TLV-TWA:
ACGIH TLV STEL:
ACGIH TLV CEILING:

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS CONTINUED

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INGREDIENT: ETHYLENE GLYCOL

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
107-21-1	0.5 - 1.0	.8	YES
	<u>ppm</u>	<u>mg/m3</u>	
OSHA PEL-TWA:		10	
OSHA PEL STEL :			
OSHA PEL CEILING:			
ACGIH TLV-TWA:		2	
ACGIH TLV STEL:			
ACGIH TLV CEILING:			

INGREDIENT: PROPYLENE GLYCOL

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
57-55-6	0.58 - 0.62	.56	NO
	<u>ppm</u>	<u>mg/m3</u>	
OSHA PEL-TWA:			
OSHA PEL STEL :			
OSHA PEL CEILING:			
ACGIH TLV-TWA:			
ACGIH TLV STEL:			
ACGIH TLV CEILING:			

No occupational exposure limits have been established for this material or it's components

INGREDIENT: ZINC OXIDE

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
1314-13-2	2.0 – 2.9	.4	NO
	<u>ppm</u>	<u>mg/m3</u>	
OSHA PEL-TWA:			
OSHA PEL STEL :			
OSHA PEL CEILING:			
ACGIH TLV-TWA:			
ACGIH TLV STEL:	As a powder: 10mg/M3	As a fume: 5mg/M3	
ACGIH TLV CEILING:			

INGREDIENT: OCTYLPHENOXPOLYTHOXYETHANOL (Non Ionic Surfactant)

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
NA; A MIXTURE	.24 – .26	.1	NO
	<u>ppm</u>	<u>mg/m3</u>	
OSHA PEL-TWA:			
OSHA PEL STEL :			
OSHA PEL CEILING:			
ACGIH TLV-TWA:			
ACGIH TLV STEL:			
ACGIH TLV CEILING:			

No occupational exposure limits have been established for this material or it's components

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS CONTINUED

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INGREDIENT: MONYLPHENOXY POLY (ETHYLENOXY) ETHANOL, BRANCHED (Non Ionic Surfactant)

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
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NA; A MIXTURE	.24 – .26	.1	NO
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<u>ppm</u>	<u>mg/m3</u>
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OSHA PEL-TWA:
OSHA PEL STEL :
OSHA PEL CEILING:

No occupational exposure limits have been established for this material or it's components

ACGIH TLV-TWA:
ACGIH TLV STEL:
ACGIH TLV CEILING:

SECTION 2 NOTES:

There is no ACGH TLV or OSHA PEL for cuprous oxide or cupric oxide. Exposure is governed by the 8 hour TWA established for finely divided copper in dusts and mists. Cuprous oxide, cupric oxide, and copper are not carcinogenic materials as listed by OSHA (29CRF 1910) or ACGIH (Appendix A, Threshold limit Values for Chemical Substances 1995-1996).

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

ROUTES OF ENTRY: EYES, SKIN AND INGESTION

POTENTIAL HEALTH EFFECTS

EYES: MAY CAUSE REDNESS, BURNING AND IRRITATION.

SKIN: MAY CAUSE IRRITATION, PROLONGED OR REPEATED CONTACT MAY CAUSE RASH OR REDNESS.

INGESTION: WILL CAUSE IRRITATION AND SORENESS OF MOUTH AND THROAT, MAY BE TOXIC.

INHALATION: NOT PROBABLE.

ACUTE HEALTH HAZARDS: DERMATITIS, TOXIC IF INGESTED IN LARGE QUANTITIES.

CHRONIC HEALTH HAZARDS: REPEATED OR PROLONGED CONTACT WILL CAUSE DRYING AND DEFATTING OF THE SKIN.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: ANY DERMAL SENSITIVITY.

CARCINOGENICITY

OSHA: NO	ACGIH: NO	NTP: NO	IARC: NO
OTHER:			

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: FLUSH EYES WITH LARGE QUANTITIES OF WATER. IF IRRITATION PERSISTS, SEE A PHYSICIAN.

SKIN: WASH AFFECTED AREA THOROUGHLY WITH SOAP AND WATER. IF IRRITATION PERSISTS OR RASH DEVELOPES SEE A PHYSICIAN.

INGESTION: IF SWALLOWED, GIVE A LARGE QUANTITY OF WATER TO DRINK. CONSULT A PHYSICIAN.

INHALATION: NOT PROBABLE.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: FOR FURTHER INFORMATION, CALL CHEMTREC NUMBER IN SECTION ONE.

SECTION 4 NOTES:

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SECTION 5: FIRE-FIGHTING MEASURES

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FLAMMABLE LIMITS IN AIR, UPPER:
(% BY VOLUME) NA LOWER: NA

FLASH POINT:

F: NA

C: NA

METHOD USED:

AUTOIGNITION TEMPERATURE:

F: NA

C: NA

NFPA HAZARD CLASSIFICATION

HEALTH:

FLAMMABILITY:

REACTIVITY:

OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH: 1

FLAMMABILITY: 0

REACTIVITY: 0

PROTECTION: D

EXTINGUISHING MEDIA: DRY CHEMICAL/FOAM/CARBON DIOXIDE.

SPECIAL FIRE FIGHTING PROCEDURES: TREAT AS LATEX PAINT (NON FLAMMABLE). FOR DRIED FILM FIRE FIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS. PERSONS NOT WEARING SIUTABEL BREATHING PROTECTION SHOULD LEAVE THE AREA TO PREVENT SIGNIFICANT EXPOSURE TO TOXIC COMBUSTION GASSES.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

HAZARDOUS DECOMPOSITION PRODUCTS: TOXIC GAS GENERATION (CO₂,CO)

SECTION 5 NOTES:

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: PREVENT SPREAD OF SPILLED MATERIAL.
PREVENT MATERIAL FROM ENTERING WATERWAYS OR SEWERS.
PREVENT FROM CONTAMINATING SOIL. ONCE MATERIAL IS CONTAINED ALLOW TO DRY THEN COLLECT MATERIAL FOR DISPOSAL.
ADVISE ENVIROMENTAL AUTHORITIES IF LIQUID PRODUCT ENTERS WATERWAYS OR SEWERS.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: HANDLE AS A LATEX COATING PRODUCT CONTAINING TOXIC MATERIALS.
USE APPROPRIATE PERSONAL PROTECTION.
STORE IN A COOL DRY AREA.
PROTECT FROM FREEZING.

OTHER PRECAUTIONS:

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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ENGINEERING CONTROLS: NONE

VENTILATION: LOCAL

RESPIRATORY PROTECTION: USE NIOSH APPROVED RESPIRATOR FOR CHEMICAL VAPORS.

EYE PROTECTION: SPLASH PROOF GOGGLES OR FACE SHIELD.

SKIN PROTECTION: USE LATEX OR RUBBER GLOVES, CHEMICAL APRON AND LONG SLEEVE SHIRT

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: FACILITIES USING THIS PRODUCT SHOULD BE EQUIPPED WITH AN EYEWASH STATION.

WORK HYGIENIC PRACTICES: WASH WELL AFTER CONTACT WITH THIS PRODUCT.

EXPOSURE GUIDELINES: SEE SECTION 1

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: RED VISCOUS LIQUID

ODOR: TYPICAL LATEX, SLIGHT AMMONIA ODOR

PHYSICAL STATE: LIQUID

pH AS SUPPLIED: 8.5 - 9.5

pH (Other):

BOILING POINT:

F: 212 WATER

C: 100 WATER

MELTING POINT:

NA F:

C:

FREEZING POINT:

F: 32 WATER

C: 0 WATER

VAPOR PRESSURE (mmHg):

@

F: 17mm Hg @ 68° WATER

C: 17 mm Hg @ 20° WATER

VAPOR DENSITY (AIR = 1):

@

F: <1 @ 68° WATER

C: <1 @ 20° WATER

SPECIFIC GRAVITY (H2O = 1):

1.10 @

68° F:

20° C:

EVAPORATION RATE:

B_{Ac} (=1): <1

SOLUBILITY IN WATER: DILUTABLE

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABLE

UNSTABLE

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STABILITY: STABLE

CONDITIONS TO AVOID (STABILITY): PROTECT FROM FREEZING

INCOMPATIBILITY (MATERIAL TO AVOID: STRONG OXIDIZING AGENTS, (HYDROGEN PEROXIDE / PERMANGANATES / PERCHLORATES, DEPENDING ON THE AMOUNT, CONTACT CAN RESULT IN INTENSE HEAT/EXPLOSION.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: TOXIC GAS GENERATION (CO₂CO)

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

CONDITIONS TO AVOID (POLYMERIZATION): NA

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: INHALATION OF CONCENTRATED VAPORS MAY IRRITATE THE RESPIRATORY SYSTEM

REPEATED OR PROLONGED SKIN CONTACT MY CAUSE IRRITATION AND DEVELOP SECONDARY ALLERGIC REACTIONS. MAY DRY OUT AND DEFAT SKIN TISSUE.

WILL CAUSE EYE IRRITATION AND REDNESS.

INGESTION MAY CAUSE VOMITING AND STOMACH PAINS.

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: THIS PRODUCT IS SOLUBLE IN WATER AND TOXIC TO THE MARINE ENVIROMENT. PREVENT LIQUID PRODUCT FROM ENTERING SEWERS OR WATERWAYS.

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: MATERIAL MUST BE DISPOSED OF IN ACCORDANCE WITH NATIONAL AND LOCAL REGULATIONS.

RCRA HAZARD CLASS:

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

US DOT HAZARD CLASS:.....NON REGULATED

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION
