SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ANTI-FOULANT TRANSDUCER SPRAY
SYNONYMS:
PRODUCT CODES: 72201

MANUFACTURER: Flexabar Corporation
DIVISION:
ADDRESS:

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: NA
CHEMICAL FAMILY: NA
CHEMICAL FORMULA: NA

PRODUCT USE: ANTI-FOULANT TOP COAT FOR TRANSDUCERS
PREPARED BY: Hamdi Latif

SECTION 1 NOTES:

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: ACETONE

CAS NO.	% WT	% VOL	SARA 313 REPORTABLE
67-54-1	11.00 – 16.00		NO
	ppm	mg/m3	
OSHA PEL-TWA:			
OSHA PEL STEL :	1000.00 PPM		
OSHA PEL CEILING:			
ACGIH TLV-TWA:	500.00 PPM		
ACGIH TLV STEL:	750.00 PPM		
ACGIH TLV CEILING:			

INGREDIENT: Acrylic Copolymer

CAS NO.	% WT	% VOL	SARA 313 REPORTABLE
Proprietary	11.00 – 19.00		NO
	ppm	mg/m3	
OSHA PEL-TWA:	NONE		
OSHA PEL STEL :	NONE		
OSHA PEL CEILING:	NONE		
ACGIH TLV-TWA:	NONE		
ACGIH TLV STEL:	NONE		
ACGIH TLV CEILING:	NONE		

INGREDIENT: METHYL ETHYL KETONE

CAS NO.	% WT	% VOL	SARA 313 REPORTABLE
78-93-3	11.00 – 16.00		YES
	ppm	mg/m3	
OSHA PEL-TWA:	200.00		
OSHA PEL STEL :	300.00		
OSHA PEL CEILING:			
ACGIH TLV-TWA:	200.00		
ACGIH TLV STEL:	300.00		
ACGIH TLV CEILING:			

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS - CONTINUED

INGREDIENT: XYLENE

CAS NO.	% WT	% VOL	SARA 313 REPORTABLE
1330-20-7	8.00 – 12.00		YES
	ppm	mg/m3	
OSHA PEL-TWA:			
OSHA PEL STEL :	100.00 PPM		
OSHA PEL CEILING:			
ACGIH TLV-TWA:			
ACGIH TLV STEL:			
ACGIH TLV CEILING:			

INGREDIENT: TOLUENE

CAS NO.	% WT	% VOL	SARA 313 REPORTABLE
108-88-3	8.00 – 12.00	<3	YES
	ppm	mg/m3	
OSHA PEL-TWA:	200		
OSHA PEL STEL :			
OSHA PEL CEILING:			
ACGIH TLV-TWA:	50		
ACGIH TLV STEL:			
ACGIH TLV CEILING:			

INGREDIENT: COPPER THIOCYANATE

CAS NO.	% WT	% VOL	SARA 313 REPORTABLE
1111-67-7	5.00 – 8.00		YES
	ppm	mg/m3	
OSHA PEL-TWA:			
OSHA PEL STEL :			
OSHA PEL CEILING:			
		NO DATA AVAILABLE	
ACGIH TLV-TWA:			
ACGIH TLV STEL:			
ACGIH TLV CEILING:			

INGREDIENT: METHYL ISOBUTYL KETONE

CAS NO.	% WT	% VOL	SARA 313 REPORTABLE
108-10-1	3.00 – 10.00		YES
	ppm	mg/m3	
OSHA PEL-TWA:	50	205	
OSHA PEL STEL :	75	300	
OSHA PEL CEILING:			
ACGIH TLV-TWA:	50	205	
ACGIH TLV STEL:	75	307	
ACGIH TLV CEILING:			

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS - CONTINUED

INGREDIENT: **POLYTETRAFLUOROETHYLENE**

CAS NO.	% WT	% VOL	SARA 313 REPORTABLE
9002-84-0	3.00 – 6.80		NO

	ppm	mg/m3
OSHA PEL-TWA:		10 total dust 5 respirable dust
OSHA PEL STEL :		
OSHA PEL CEILING:		
ACGIH TLV-TWA:		
ACGIH TLV STEL:		
ACGIH TLV CEILING:		

INGREDIENT: **n - Butane**

CAS NO.	% WT	% VOL	SARA 313 REPORTABLE
106-97-8	9.0 – 14.0		NO

	ppm	mg/m3
OSHA PEL-TWA:		
OSHA PEL STEL :		
OSHA PEL CEILING:		
ACGIH TLV-TWA:	1000	
ACGIH TLV STEL:		
ACGIH TLV CEILING:		

INGREDIENT: **Propane**

CAS NO.	% WT	% VOL	SARA 313 REPORTABLE
108-65-6	9.0 – 14.0		NO

	ppm	mg/m3
OSHA PEL-TWA:		
OSHA PEL STEL :		
OSHA PEL CEILING:		
ACGIH TLV-TWA:	1000	
ACGIH TLV STEL:		
ACGIH TLV CEILING:		

SECTION 2 NOTES:

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: **Warning! Flammable liquid and vapor.**
Color: Clear, White, Gray or Black Form: Liquid Odor; Sweet, Ester

Overexposure may cause nervous system effects. May cause serious disturbances of heart rhythm. May cause skin irritation. Causes eye irritation. Causes respiratory tract irritation. Harmful or fatal if swallowed. Pulmonary aspiration hazard. After ingestion, may enter lungs and produce damage

ROUTES OF ENTRY:……: skin contact from liquid and aerosols (spray application). Inhalation.

POTENTIAL HEALTH EFFECTS:

EYES:
ACUTE EYE CONTACT…Liquid, aerosols or vapors are irritating and can cause tearing, reddening and swelling. If left untreated, corneal damage can occur and is slow to heal. However damage is usually reversible. See first aid measures for treatment.

CHRONIC EYE CONTACT…None Found

SECTION 3: HAZARDS IDENTIFICATION - CONTINUED

SKIN: May be absorbed through the skin in harmful amounts. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash) Prolonged or repeated skin contact may cause irritation.

INGESTION: Moderately toxic. Irritating to mouth, throat, and stomach. May produce central nervous system effects, which may include dizziness, loss of balance and coordination, unconsciousness, coma and even death? Product may be harmful or fatal if swallowed. Pulmonary aspiration hazard. After ingestion may enter lungs and produce damage.

INHALATION: High concentrations may lead to central nervous system effects (drowsiness, dizziness, nausea, headaches, paralysis, loss of consciousness and even death). Repeated overexposure can cause a hearing loss in laboratory animals. Repeated overexposure has produced toxic effects in developing and young laboratory animals. Solvent "huffing/snuffing" (abuse) or intentional prolonged overexposure to high levels of vapors can produce abnormal behavior, convulsions, hallucinations, delirium, nervous system damage, serious disturbances of heart rhythm and sudden death. Prolonged or repeated exposure may cause liver and kidney damage.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
The following diseases or disorders may be aggravated by exposure to this product: skin, eye, liver, kidney, nervous system, respiratory system, lung (asthma-like conditions)

CARCINOGENICITY

OSHA:	ACGIH:	NTP:	IARC:
Not Listed	Not Listed	Not Listed	Not Listed

OTHER:

SECTION 3 NOTES:
Xylene and all components thereof are listed on ACGIH
Benzene is listed on the OSHA List of Regulated Carcinogens and The OSHA List of Select Carcinogens also on the NTP List and the IARC Group 1 list.
Ethyl Benzene is listed on The IARC Group 3 list

SECTION 4: FIRST AID MEASURES

EYES: Flush with copious amounts of water (warm if possible) for at least 15 minutes, holding eyelids open at all times. Refer to a physician or ophthalmologist for immediate follow-up.

SKIN: Remove all contaminated clothing. Wash affected skin thoroughly with soap and water. Wash contaminated clothing thoroughly with soap an water before reuse. See physician if irritation develops or persists after washing.

INGESTION: DO NOT INDUCE VOMITING. Do not give liquids. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

INHALATION: Move to an area free from further exposure. If not breathing administer artificial reparation as needed. If breathing is difficult give oxygen and monitor. Seek immediate medical attention. Asthmatic – type symptoms may develop and may be immediate or delayed for several hours. Consult a physician should this occur.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: 6.6
(% BY VOLUME) XYLENE
LOWER: 1.1

FLASH POINT:
F: -156 (Butane)
C:

METHOD USED: Open Cup

AUTOIGNITION TEMPERATURE:

F: 869 ACETONE
C:

NFPA HAZARD CLASSIFICATION

SECTION 5: FIRE-FIGHTING MEASURES - CONTINUED

HEALTH: **FLAMMABILITY:** **REACTIVITY:**
OTHER:

HMIS HAZARD CLASSIFICATION
HEALTH: 3 **FLAMMABILITY: 3** **REACTIVITY: 0**
PROTECTION: G

EXTINGUISHING MEDIA: Dry chemical, Foam, Carbon dioxide or Water spray

SPECIAL FIRE FIGHTING PROCEDURES: Full emergency equipment with self contained breathing apparatus and full protective clothing should be worn by firefighters. During a fire, highly toxic gasses may be generated by thermal decomposition or combustion. (See Stability and Reactivity).

UNUSUAL FIRE AND EXPLOSION HAZARDS: . Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent build up of vapors or gasses to explosive concentrations.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.

SECTION 5 NOTES:

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Evacuate and ventilate the spill area; dike spill to prevent entry into water system; wear full protective equipment. Prevent ignition, Remove all ignition sources, stop leak and ventilate the area. Contain spilled liquid with sand or earth DO NOT use combustible materials such as saw dust. Vapor can be controlled using a water fog. Keep personnel upwind from leak Use appropriate protection equipment as stated in section 8 of this MSDS. Advise EPA and appropriate state agencies if required. Absorb spill wit inert material (dry sand or earth) and place in a chemical waste container for disposal.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Use only in a well ventilated area. Ground and bond containers when transferring material. Avoid breathing (dust, vapor, mist gas). Avoid prolonged or repeated contact with skin. Avoid contact with eyes, wash thoroughly after handling. Store away from heat, sparks, and flame. Store in a cool dry place

OTHER PRECAUTIONS:

SHELF LIFE…… 12 months in tightly closed full containers @ 77° F (25° C)

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION : Use with adequate ventilation. local exhaust may be necessary to control any contaminants to within their TLV's during the use of this product. Use explosion proof ventilation equipment. Standard reference sources regarding industrial ventilation (ie.,ACGIH Industrial Ventilation) should be consulted for guidance about adequate ventilation.

RESPIRATORY PROTECTION: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health. An approved respirator must be worn. Respirator selection, maintenance and use should be in accordance with the requirements or the OSHA Respiratory Protection Standard, 29 CRF 1910.134.

Types of respirators to be considered in the selection process include:
Air-Purifying for Organic Vapors, Supplied-Air Respirator, Self Contained Breathing Apparatus (SCBA)
For use in environments with unknown concentrations or emergency situations.

EYE PROTECTION: Liquid chemical goggles. If contact lenses are worn vapor resistant goggles should be worn. If a splash hazard exists chemical goggles should used in conjunction with a full face shield.

SKIN PROTECTION: Chemical/solvent resistant gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Where splashing is possible full chemical protective clothing should be worn,.

WORK HYGIENIC PRACTICES: Safety showers and eyewash stations should be available. Wash promptly after working with this Product. Remove and wash or dispose of all contaminated clothing and or equipment. Follow all label Precautions.

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, White Gray or Black Liquid

ODOR: Sweet Ester

PHYSICAL STATE: liquid

pH AS SUPPLIED: NA
pH (Other): NA
BOILING POINT:
F: NE
C: NE
MELTING POINT:
F: NE
C: NE
FREEZING POINT:
F: NE
C: NE
VAPOR PRESSURE (mmHg): NE
@
F:
C:
VAPOR DENSITY (AIR = 1): NE
@
F:
C:
SPECIFIC GRAVITY (H2O = 1):
@ .92
F: 77
C:
EVAPORATION RATE: NE MIXTURE

MIXTURE

BASIS (=1):

SOLUBILITY IN WATER: Insoluble

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABLE **UNSTABLE**

STABILITY: Stable

CONDITIONS TO AVOID (STABILITY):

INCOMPATIBILITY (MATERIAL TO AVOID): Contact with amines, strong oxidizing agents, alcohols, bases or halogenated materials.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon Dioxide, Carbon Monoxide and oxides of Nitrogen.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID (POLYMERIZATION): Will not Polymerize.

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No Data Available

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Waste must be disposed of in accordance with federal, state and local environmental control regulations. This product contains components that are RCRA hazardous waste. Do not flush material to drain or storm sewer. Contract to authorized disposal service. Empty containers must be handled with care due to product residue.

RCRA HAZARD CLASS:

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
PROPER SHIPPING NAME: FLAMMABLE GAS (AEROSOL), 2
HAZARD CLASS: 3
ID NUMBER: UN 1950
PACKING GROUP: II
LABEL STATEMENT: Flammable Gas

WATER TRANSPORTATION
PROPER SHIPPING NAME: FLAMMABLE GAS (AEROSOL), 2
HAZARD CLASS: 3
ID NUMBER: UN 1950
PACKING GROUP: III
LABEL STATEMENTS: Flammable Gas

AIR TRANSPORTATION
PROPER SHIPPING NAME: FLAMMABLE GAS (AEROSOL), 2
HAZARD CLASS: 3
ID NUMBER: UN 1950
PACKING GROUP: II
LABEL STATEMENTS: Flammable Gas

OTHER AGENCIES:

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): **All components of this product are listed.**

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Not Listed

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): Not Listed

311/312 HAZARD CATEGORIES: FLAMMABLE LIQUID

313 REPORTABLE INGREDIENTS:

XYLENE		**CAS # 133-20-7**
METHYL	**ISOBUTYL KETONE**	**CAS # 108-10-1**
TOLUENE	**CA**	**S #108-88-3**
METHYL	**ETHYL KETONE**	**CAS #1111-67-7**

STATE REGULATIONS:

INTERNATIONAL REGULATIONS:

SECTION 15 NOTES:

SECTION 16: OTHER INFORMATION

ABREVIATIONS: **ACGIH = American Conference of Governmental Industrial Hygienists**
OSHA = Occupational Safety and Health Administration
TLV = Threshold Limit Value
TWA = Time Weighted Average
PEL = Permissible Exposure Limit
STEL = Short Term Exposure Limit
NA = Not Applicable
NE = Not Established

PREPARATION INFORMATION: **HMIS Hazard Ratings Scale 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Extreme**

Check with supervisor for appropriate personal protection in accordance with rating.

DISCLAIMER:

The information contained herein relates only to the specific material identified. Flexabar Corporation believes that the information is accurate and reliable as of the preparation date of this material safety data sheet, but no representation, guarantee or warranty expressed or implied is made as to the accuracy, reliability or completeness of the information. Flexabar Corporation urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.