FILE

NO.:TAN06RCS NAME OF PRODUCT

MSDS DATE: 02/12

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 6 MHz RC silver coated Quartz Crystal Sensor

SYNONYMS:

PRODUCT CODES: TANO6RCS

MANUFACTURER: Phillip Technologies

DIVISION:

ADDRESS: 2003 Perimeter Rd, Suite E, Greenville, South Carolina 29605-5276

EMERGENCY PHONE: 864.277.1560

CHEMTREC PHONE: OTHER CALLS: FAX PHONE:

CHEMICAL NAME: Quartz with thin silver electrode

CHEMICAL FAMILY: CHEMICAL FORMULA:

PRODUCT USE: Thin Film Vacuum Process Control

PREPARED BY:

SECTION 1 NOTES: This is a solid state sensor comprised of single crystal quartz with a thin film metallic silver electrode

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:

<u>CAS NO.</u> <u>% WT</u> <u>% VOL</u> <u>SARA 313 REPORTABLE</u>

ppm mg/m3 OSHA PEL-TWA: N/A N/A **OSHA PEL STEL:** N/A N/A **OSHA PEL CEILING:** N/A N/A **ACGIH TLV-TWA:** N/A N/A **ACGIH TLV STEL:** N/A N/A **ACGIH TLV CEILING:** N/A

SECTION 2 NOTES:

No toxicity with this product.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This is a quartz product. A disc 0.010" thick. The only hazard would be if one actually tried to eat one

since they are glass like.

ROUTES OF ENTRY: None

POTENTIAL HEALTH EFFECTS
EYES: None

SKIN: Could cut if broken and pushed against skin

INGESTION: Could scratch throat if ingested

INHALATION: None

ACUTE HEALTH HAZARDS: None

CHRONIC HEALTH HAZARDS: None

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MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:None

CARCINOGENICITY

OSHA: Unknown ACGIH: Unknown NTP: Unknown IARC: Unknown

OTHER:

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: If broken pieces enter eye, wash with water, until clear.

SKIN: If cut, wash and treat as normal cut

INGESTION: See a doctor

INHALATION:

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

Treat as a glass ingestion or exposure

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: None (% BY VOLUME) LOWER: None

FLASH POINT:

F: None

C: None

METHOD USED:

AUTOIGNITION TEMPERATURE:

F: None

C: None

NFPA HAZARD CLASSIFICATION

HEALTH: N/A FLAMMABILITY: N/A REACTIVITY: N/A

OTHER: N/A

HMIS HAZARD CLASSIFICATION

HEALTH: N/A FLAMMABILITY: N/A REACTIVITY: N/A

PROTECTION:N/A

EXTINGUISHING MEDIA: N/A

SPECIAL FIRE FIGHTING PROCEDURES:N/A

UNUSUAL FIRE AND EXPLOSION HAZARDS: N/A

HAZARDOUS DECOMPOSITION PRODUCTS: N/A

SECTION 5 NOTES:

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SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: N/A

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store in a cool, dry place. Do not touch surface during handling (damages sensors)

OTHER PRECAUTIONS:

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: N/A

VENTILATION: N/A

RESPIRATORY PROTECTION: N/A

EYE PROTECTION: N/A

SKIN PROTECTION: Latex gloves or similar

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

WORK HYGIENIC PRACTICES: N/A

EXPOSURE GUIDELINES: N/A

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Circular solid disk, silver color

ODOR: None

PHYSICAL STATE:

pH AS SUPPLIED: Neutral

pH (Other):

BOILING POINT:

F: N/A

C: N/A

MELTING POINT:

F: >2000

C: >2000

FREEZING POINT:

F: N/A C: N/A

VAPOR PRESSURE (mmHg):

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FILE

MATERIAL SAFETY DATA SHEET NO.:TAN06RCS NAME OF PRODUCT **MSDS DATE: 02/12** F: N/A C: N/A **VAPOR DENSITY (AIR = 1):** F: N/A C: N/a SPECIFIC GRAVITY (H2O = 1): 2.0 F: 70 C: 20 **EVAPORATION RATE:N/A BASIS** (=1): SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't) **SOLUBILITY IN WATER: Insoluble PERCENT SOLIDS BY WEIGHT:100** PERCENT VOLATILE: BY WT/ BY VOL @ F: 0 C:0 **VOLATILE ORGANIC COMPOUNDS (VOC):** WITH WATER: 0 LBS/GAL WITHOUT WATER: 0 LBS/GAL **MOLECULAR WEIGHT:**

NA (SiO2 is a crystal) VISCOSITY:

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F: N/A C:NAa

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABLE UNSTABLE

STABILITY: Х

CONDITIONS TO AVOID (STABILITY): None

INCOMPATIBILITY (MATERIAL TO AVOID): None

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None

HAZARDOUS POLYMERIZATION: None

CONDITIONS TO AVOID (POLYMERIZATION):

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

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TOXICOLOGICAL INFORMATION: N/A Non Toxic

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: N/A Quartz is pervasive in nature

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: General Waste Stream

RCRA HAZARD CLASS: N/A

SECTION 13: DISPOSAL CONSIDERATIONS (con't)

SECTION 13 NOTES:None

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION PROPER SHIPPING NAME: Quartz Crystals

HAZARD CLASS: ID NUMBER: PACKING GROUP: LABEL STATEMENT:

WATER TRANSPORTATION

PROPER SHIPPING NAME: Quartz Crystals

HAZARD CLASS: ID NUMBER: PACKING GROUP: LABEL STATEMENTS:

AIR TRANSPORTATION

PROPER SHIPPING NAME: Quartz Crystals

HAZARD CLASS: ID NUMBER: PACKING GROUP: LABEL STATEMENTS:

OTHER AGENCIES:

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): N/A

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): N/A

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SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):N/A

311/312 HAZARD CATEGORIES:N/A

313 REPORTABLE INGREDIENTS:N/A

STATE REGULATIONS:

INTERNATIONAL REGULATIONS:

SECTION 15 NOTES:

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: None

PREPARATION INFORMATION:

DISCLAIMER: