Material Safety Data Sheet

| | PSR-4000 GF5 |
|--|--|
| | Identity (Trade Name As Used On Label) |
| TAIWAN TAIYO INK CO.,LTD | MSF-00174-03 |
| Manufacturer | MSDS Number* |
| No.7,Ta Tung 2nd Rd.,Kuan-Yin Industry | |
| Address | CAS Number* |
| Park Taoyuan, Taiwan, R.O.C. | May. 21th,2003 |
| | Date Prepared |
| 886-3-483-3234 | Takehara Eiji |
| Phone Number (For Information) | Prepared By* |
| 886-3-483-3234 | Note: Blank spaces are not permitted. If any item is |
| Emergency Phone Number | not applicable, or no information is avaliable |
| | , the space must be marked to indicate that. |

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

| COMPONENTS - Chemical Name & Common Names (Hazardous Components 1% or greater: Carcinogens 0.1% or greater) | | % | OSHA PEL | ACGIH TLV | OTHER LIMITS RECOMMENDED |
|---|--------------------|------|-------------|--------------|-----------------------------|
| Heavy aromatic solvent naphtha(petroleum) CAS No. 64742-94-5 | | 14 | N.A. | N.A. | N.A. |
| Silica crystalline | CAS No. 14808-60-7 | 13 | N.A. | N.A. | N.A. |
| | | | | | |
| | | | | | |
| | | | | | |
| Non-Hazardous Ingredients | | > 70 | | | |
| Total | | 100 | | | |

SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

| Boiling Point | N.E. | Specific Gravity (H ₂ O = 1) | 1.30 |
|---|-----------------------------|---|------|
| Vapor Pressure (mm Hg and Temperature) | N.E. | Melting Point | N.E. |
| Vapor Density (Air = 1) | 1 | Evaporation Rate (= 1) | < 1 |
| Solubility in Water | 11 wt% | Water Reactive | NIL. |
| Appearance and Odor | Green liquid with Mild Odor | | |

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

| Flash Point and | 73 | Auto-I | gnition | Flammability Limits in | LEL N.E. | UEL N.E. |
|---------------------|---|--------------|---------|------------------------|----------|----------|
| Method Used | (closed cup) | Temp. | N.E. | Air % by Volume | N.E. | |
| Extinguisher | Carbon dioxide, Foam, Dry chemical | | | | | |
| Media | Carbon Gloxide, I ou | in, Bry enem | icui | | | |
| Special Fire | Remove sealed containers from vicinity of fire; Normal procedures for buring liquids; | | | | | |
| Fighting Procedures | Use self-contained breathing apparatus | | | | | |
| Unusual Fire and | Sealed containers; If heated by flame or high temperature, can rupture due to build | | | | | |
| Explosion Hazards | up of internal press | sure. | | | | |

| SECTION 4 - REAC | CTIVITY HAZAR | D DATA | | | |
|--|----------------------|-------------------------|--------------------|--|------------------------|
| STABILITY | Condition | ns To Avoid | NIII. | | |
| * Stable Unstab | ole | | NIL. | | |
| Incompatability (Materia Avoid) | lls to Strong | Acids, Alkalies | and oxdizing ag | gents. | |
| Hazardous Decompo | ositioin Burnin | g release oxides | of carbon and/or | r Carbon Dioxide, Ald | lehydes. |
| HAZARDOUS POLYM | ERIZATION | Conditions | NIL. | | |
| May Occur Wil | ll Not Occur | To Avoid | NIL. | | |
| SECTION 5 - HEAL | TH HAZARD DA | ATA | | | |
| PRIMARY ROUTES | * Inhalation | Ingestion | CARCINOGEN | NTP | OSHA |
| OF ENTRY | Skin Absorption | Not Hazardous | LISTED IN | IARC Monograph | Not Listed |
| HEALTH HAZARDS | Acute | N.E. | | <u> </u> | |
| HEALTH HAZARDS | Chronic | N.E. | | | |
| SECTION 6 - EXPC | SURE CONTRO | LS AND PERS | SONAL PROTI | ECTION | |
| Signs and Symptoms of l | Exposure | Skin and/or | Eyes may be irr | itated | |
| Medical Conditions Gene Exposure | erally Aggravated by | Pre-existti | ng dermatitis. | | |
| SECTION 7 - FIRST | Γ AID MEASURE | ES | | | |
| EMERGENCY FIRST A | AID PROCEDURES | Seek medi support if | | or further treatment, | , observation and |
| Eye Contact | Flushing with water | er immediately a | t least 15 mins. | If irritation persists, se | eek medical attention. |
| Skin Contact | Wash with plenty | of soap and wate | er. Do not use or | ganic solvent. | |
| Inhalation | | | | | |
| Obtain medical advice immediately. It's not recommend that vomiting be induced except on medical advice. | | | | | |
| SECTION 8 - CONT | TROL AND PROT | TECTIVE MEA | ASURES | | |
| Respiratory Protection (Type) | (Specify To wear | r suitable mask | to avoid inhaling | g the vapor. | |
| Protective Gloves | Chemical resista | ant gloves | Eye | Protection Safty g | lasses |
| VENTILATION TO BE | Local Exhaust | * Mechanica | ıl(general) | Special | |
| USED | *Other (specify) | General roo | om ventilation | | |
| Other Protective Clothing equipment | Apron a | nd Boots, if open | ration is subject | to splashing. | |
| Hygienic Work Practices | | | | | |
| SECTION 9 - PREC | CAUTIONS FOR S | SAFE HANDL | ING AND USI | E/LEAK PROCEDU | JRES |
| Steps to be Taken if Material is Spilled Or Released Wear noish-approved respirstor. Scoop up or absorb with combustible material, Dispose in accordance with the local regulations. | | | | | |
| Waste Disposal Methods | • | | e to the local reg | | |
| SECTION 10 - HAN | NDING AND STO | RAGE | | | |
| Precautions to be Taken Handling and Storage | 11,010 | | kin and eyes, pr | rotectivve goggies, a | prons etc |
| Other Precautions and/or Hazards | Special This pro | duct should be s | tored, handled a | nd used in accordance rmity with any legal r | • |
| NFPA Rating Health U | J.K. Falmmability | <u>U.K.</u> | HMIS Hea | alth <u>U.K.</u> Falmma activity <u>U.K.</u> Person | bility <u>U.K.</u> |
| • | • | | | | _ |

| SECTION 11 - | FIRE | FIGHTING | MFA | STIRES |
|--------------|------|----------|-----|--------|
| | | | | |

| Extinguishing media | Dry chemical,CO ₂ ,foam,water spray |
|--------------------------------|---|
| Special advice in case of fire | Firefighters should wear self-contained breathing apparatus and eye protection in |
| | fighting significant fires in which this materials is involved. |

SECTION 12 - STABILITY AND REACTIVITY

| Stability | The product is stable (ambient temperatures). |
|----------------------|---|
| Conditiones to avoid | Heat, sunlight. |
| Materrials to avoid | Acids, alkalines, amines, peroxides, oxdizing agents. |
| | |

SECTION 13 - DISPOSAL CONSIDERATIONS

Local regulations should be adhered to.

Disposal of empty containers.

SECTION 14 - TOXICOLOGICAL INFORMATION

PRIMARY ROUTE(S) OF ENTRY

DERMAL INRALATION INGESTION

TOXICITY STUDIES Toxicity studies have not been carried out on this product. Toxicity information available for the ingredients listed in section 2 is given below.

HEATH HAZARDS

ACUTE INGESTION TOXICITY N.E.

ACUTE SKIN IRRITATION Slightly irrotant

MUTAGENICITY NONE

CARCINOGENICITY

NTP IARC OSHA NOT LISTED

Silica crystailine (or carbon black) mentioned at Section 2 is classified to a carcinogen, because of the specific state furnished in a pc from and which causes lung cancers, due to the direct inhalation. This case, it is mixed together with other substances and which is furnished in a liquid preparation, having no capability of allowing any direct inhalation of silica crystalline (or carbon black) itself. I material furnished in a liquid preparation has no potential to cause any lung cancers.

SYMPTOMS OF OVER EXPOSURE

INHALATION Slight irritation to respiratory tract. Highly concentrated vapor may cause headaches, dizziness, and nau

EYE Moderately irritation SKIN Moderately irritation

INGESTION Expected to have a low order of toxicity.

SECTION 15 - ECOLOGICAL INFORMATION

ACUTE FISH TOXICITY Ecological data are not available

BIODEGRADABILITY U.K.

SECTION 16 - TRANPORT INFORMATION

ADR Inflammable Liquid

IMDG-CODE Free IATA Free

US DOT Combustible Liquid

UN Free

FLASH POINT 73 (closed cup)

SECTION 17 - REGULATORY INFORMATION

APPLICATION of LAW Occupational Health and Safety Law

SECTION 18 - OTHER INFORMATION

Product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulation. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should therefore not be construed as guaranteeing specific properties.

Optional U.K.= Un-Known N.E.= Not Established N.A.= Not Applicable