I PRODUCT IDENTIFICATION

MANUFACTURER'S NAME: General Dental Products, Inc.

REGULAR PHONE #: 1-775-289-4461
EMERGENCY TELEPHONE #: 1-775-289-4461

ADDRESS: 201 Ogden Avenue
CITY: Ely
STATE: Nevada
ZIP CODE: 89301-1888

TRADE NAME: Tru-Pak (TM) Orthodontic Acrylic Liquid, U.V. Stabilized, Clear, Pink, Blue

SYNONYMS: Stoelting Cement, Liquid

II HAZARDOUS INGREDIENTS

MATERIAL OR COMPONENT: Methacrylic Acid Ester Base
Monomers and Dimers 99+% D.O.T. Flammable Liquid
Aromatic Amine Less than 1.2% D.O.T. Poison. Class B

III PHYSICAL DATA

BOILING POINT, 760MM HG: 100-102 C. (214 F.)

SPECIFIC GRAVITY (H2O=1): .951 @ 72 F.

VAPOR DENSITY (AIR=1): Approximately 3.5

% VOLATILES BY WT.: 89.8

MELTING POINT: Not Applicable

VAPOR PRESSURE: Approximately 29 mm. Hg. (68 F.)

SOLUBILITY IN H2O, % BY WT.: 1.5% (68 F.)

EVAPORATION RATE (BUTYL ACETATE=1): Greater than 1, for more volatile monomer.

APPEARANCE AND ODOR: Characteristic monomer odor; Residue has aromatic amine odor.
I V  FIRE AND EXPLOSION DATA

FLASH POINT (TEST METHOD): 50 F. (Tagliabue Closed Cup)  
AUTOIGNITION TEMPERATURE: Approximately 790 F. (421 F.)

FLAMMABLE LIMITS IN AIR, % BY VOL.: LOWER: UPPER:

EXTINGUISHING MEDIA: Dry chemical (preferred), foam, carbon dioxide (if available in large enough quantity to suppress fire).

SPECIAL FIRE FIGHTING PROCEDURES: Same procedures as for any highly volatile water-immiscible solvent.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are explosive.

V  HEALTH HAZARD INFORMATION

HEALTH HAZARD DATA:

ROUTES OF EXPOSURE:

INHALATION: Most important route of entry into the body. 8 hour (air) OSHA TWA exposure average (monomer) is 100 ppm, 410 mg/m3.

SKIN CONTACT: Contact with skin removes oils by solvent action; major monomer component aids in the rapid absorption of aromatic amine (poison) by the skin.

SKIN ABSORPTION: Contact with the skin must be avoided. Aromatic amine (*HMIS moderate hazard; poison) is absorbed through the skin.

EYE CONTACT: Avoid splashing into eyes. Very irritating. Wear safety glasses.

INGESTION: LDLo (oral, rat, minor component amine) is .55 gm./kg. *LDLo (oral, rat, monomer only) is 7.9 gm./Kg. Ingestion of approx. 33.25 cc. of repair liquid cause severe poisoning.

EFFECTS OVEREXPOSURE: Headache; nausea.

ACUTE OVEREXPOSURE: Intoxication, possible rash (rare), severe headache, nausea.

CHRONIC OVEREXPOSURE:

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Flush with water for 15 minutes after contact.

SKIN: Wash thoroughly with soap and water; remove contaminated clothing.

INHALATION: Remove to fresh air.

INGESTION: Administer oxygen. Call physician at once.
NOTES TO PHYSICIAN: Call General Dental Products, Inc. at (775) 289-4461, immediately, for complete product information.

*TDLo is lowest dose, not introduced by inhalation, known to produce any toxic effect in humans or to produce a carcinogenic, teratogenic, or mutagenic effect in animals or humans.

VI REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY: Stable below 110 F. out of strong sunlight. Lack of air (inhibitor) over stored product for long periods can cause premature gelation and incomplete polymerization.

INCOMPATIBILITY: Oxidizers, peroxides, albumin, active metals such as Al, Fe, Zn, acids, alkalis (alkalis remove the inhibitor from the monomer)

HAZARDOUS DECOMPOSITION PRODUCTS: Acids, noxious gases.

CONDITIONS TO HAZARDOUS POLYMERIZATION: None known, for small quantities. Monomer contains 50 ppm. methyl ether of hydroquinone or hydroquinone. Removal of inhibitor would constitute a definite hazard.

VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Do not release into sewer. Absorb with sand or vermiculite and avoid using metallic tools or open flames.

NEUTRALIZING CHEMICALS: None necessary.

WASTE DISPOSAL METHOD: Burial or incineration (preferred).

VIII SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS: Good general mechanical ventilation (minimum capture velocity of 100 ft./min. at point of vapor release). Work under a laboratory hood to lower chronic exposure to monomer vapors.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY (SPECIFY IN DETAIL): Wear respirator rated at .1% concentration by NIOSH, suitable for greater than the OSHA TWA of 100 ppm, if adequate mechanical ventilation is not available. Note: Respirator program must comply with OSHA standard 29 CFR 1910.134.
EYE: Wear full face shield, compatible with, or integrated into, respirator protection.

GLOVES: Rubber, solvent-resistant gloves are necessary to protect against irritation and amine absorption. If gloves show signs of leakage or deterioration, replace.

OTHER CLOTHING AND EQUIPMENT: A solvent-resistant apron should be used to avoid clothing contamination. Direct contact with the skin should be avoided because of the possibility of amine absorption.

IX SPECIAL PRECAUTIONS

PRECAUTIONARY STATEMENTS: Use the Tru-Pak (TM) Pink, Cement, Liquid only in a well-ventilated room, taking the proper legal safety precautions. Avoid prolonged contact with the Cement Liquid. In the amounts that this product is normally used, no significant hazards exist. Careful professional handling and good housekeeping are all that is necessary. Remove and launder any clothing that becomes contaminated.

OTHER HANDLING AND STORAGE REQUIREMENTS: Do not transfer the Tru-Pak (TM) Cement from its' original container. Keep out of direct sunlight, because this destroys the inhibitor, hastening self-polymerization. Direct sunlight and unnecessary exposure to atmospheric oxygen also may cause a yellow coloring to be imparted to the Tru-Pak (TM) Pink Cement Liquid.

PREPARED BY: Quality Control Dept., General Dental Products, Inc.

ADDRESS: 201 Ogden Avenue, Ely, Nevada 89301-1888

DATE: August 23, 2000