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MATERIAL SAFETY DATA SHEET
TORBOT Bonding Cement

COMPANY DETAILS:

TORBOT GROUP, INC.
1367 Elmwood Ave
Cranston, RI 02910

EMERGENCY TELEPHONE NO.

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DATE OF PREPARATION:

08/03/08 Supersedes: 08/03/06

INFORMATION TELEPHONE NO.

(401) 780-8737

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NUMBER: TT410, TT411

PRODUCT NAME: TORBOT Bonding Cement

PRODUCT CLASS: Solvent-based Natural Rubber Cement

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT(S):

PERCENT: OCCUPATIONAL VAPOR
EXPOSURE LIMITS: PRESSURE:
TLV PEL

Hexane

CAS# 110-54-3

80.79

50 ppm

50 ppm

150 mmHg @ 20°C.

SECTION III - PHYSICAL DATA

Evaporation Rate: Faster than Ether
 X Slower than Ether

Vapor Density: X Heavier than Air
 Lighter than Air

BOILING RANGE: 151-281°F. **WT/GAL:** 6.28 # **NONVOLATILES:** 17.0 % Wt.

LBS V.O.C./GAL COATING AS SUPPLIED: 5.07

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Classification: OSHA: Flammable Liquid
 DOT: Flammable Liquid

Flash Point: -7° F., TCC
 LEL: 1

EXTINGUISHING MEDIA:

X FOAM

X CO2

WATER FOG

"ALCOHOL FOAM"

X DRY CHEMICAL

OTHER

I-575296 C-411 ORM-D
I-630449 C-TT410 ORM-D

I-670198 C-TT411 ORM-D

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UNUSUAL FIRE AND EXPLOSION HAZARDS:

Flashback along vapor trail may occur. This material is extremely flammable and may be ignited by heat, sparks, flame or static electricity.

SPECIAL FIREFIGHTING PROCEDURES:

The use of a SCBA is recommended for fire fighters. Water spray may be useful in minimizing vapors and cooling containers exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVER EXPOSURE:

EYE CONTACT:

This material is an eye irritant. Direct contact with the liquid or exposure to its vapors or mists may cause burning, tearing, redness and swelling.

SKIN CONTACT:

This material may cause skin irritation. Prolonged or repeated contact may cause redness, burning, and drying and cracking of the skin. This product may be absorbed through the skin. Contact may result in skin absorption but symptoms of toxicity are not anticipated by this route alone under normal conditions of use. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

INHALATION (BREATHING):

Inhalation of excessive concentrations of vapors or mists may cause: irritation of the nose and throat. Signs of nervous system depression (E.G., drowsiness, dizziness, loss of coordination, and fatigue). Prolonged or repeated exposure to vapors or mists may cause: liver damage, kidney damage. Persons with impaired lung function or asthma-like conditions may experience additional breathing difficulties due to the irritant properties of this material.

INGESTION:

While this material has a low degree of toxicity, ingestion of excessive quantities may cause irritation of the digestive tract. Signs of nervous system depression (E.G., drowsiness, dizziness, loss of coordination, and fatigue). Aspiration Hazard - this material can enter lungs during swallowing or vomiting and cause lung inflammation and damage.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE:

Preexisting eye, skin, and respiratory disorders, or preexisting impaired peripheral nerve function may be aggravated by exposure to this product.

PRIMARY ROUTE(S) OF ENTRY:

X DERMAL
INGESTION

X INHALATION
EYE(S)

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EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT:

Move victim away from exposure to vapors and into fresh air. If irritation or redness develops, seek medical attention. For direct contact, hold eyelids apart and flush the affected eye(s) with clean water for at least 15 minutes. Seek medical attention.

SKIN CONTACT:

Remove contaminated clothing. Cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops and persists, seek medical attention.

INHALATION (BREATHING):

If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air. If respiratory symptoms or other symptoms of exposure develop, seek medical attention. If victim is not breathing, artificial respiration should be administered. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek medical attention.

INGESTION (SWALLOWING):

Aspiration Hazard - **DO NOT INDUCE VOMITING** or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious, place on the left side with head down. If possible, do not leave victim unattended. Seek medical attention.

* Note to physician:

Epinephrine and other sympathomimetic drugs may potentiate cardiac arrhythmias in persons exposed to this chemical. These drugs should be administered cautiously, if at all, and only with cardiac monitoring.

SECTION VI - REACTIVITY DATA

STABILITY: UNSTABLE X STABLE

HAZARDOUS POLYMERIZATION: MAY OCCUR X WILL NOT OCCUR

HAZARDOUS DECOMPOSITION PRODUCTS:

Combustion may yield carbon monoxide and/or carbon dioxide.

CONDITIONS TO AVOID:

Keep product away from heat, sparks, pilot lights, static electricity, and open flame.

INCOMPATIBILITY (MATERIALS TO AVOID):

This product is incompatible with strong acids or bases, oxidizing agents and selected amines.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Shut off and eliminate all ignition sources. Keep people away. Recover free product. Add sand, earth or other suitable absorbent to spill area. Minimize breathing vapors. Minimize skin contact. Ventilate confined spaces. Open all windows and doors. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas. Assure conformity with applicable governmental regulations. Continue to observe precautions for volatile, flammable vapors from absorbed material.

WASTE DISPOSAL METHOD:

Dispose of in accordance with local, state and federal regulations.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION:

Avoid prolonged or repeated breathing of vapors. If exposure may or does exceed occupational exposure limits use a NIOSH approved respirator to prevent overexposure.

VENTILATION:

If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section II), additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, systems safe for such locations should be used.

PROTECTIVE GLOVES:

The use of gloves impermeable to the specific material handled is advised to prevent skin contact, possible irritation and absorption.

EYE PROTECTION:

Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended.

OTHER PROTECTIVE EQUIPMENT:

It is suggested that a source of clean water be available in work area for flushing eyes and skin. Impervious clothing should be worn as needed.

HYGIENIC PRACTICES:

Wash with soap and water.

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SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Keep containers tightly closed. Keep containers cool, dry and away from sources of ignition. Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with the product. Use good personal hygiene practice. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition; they may explode and cause injury or death. "Empty" containers should be completely drained, properly bunged and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

SECTION X - REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.
TSCA STATUS:

All chemicals found in this product comply with the Toxic Substance Control Act inventory reporting requirements.

EPA SARA TITLE III CHEMICAL LISTINGS:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME:	CAS NUMBER:	CONCENTRATION:
Hexane	110-54-3	80.79
Polyisoprene	9003-31-0	10%-15%
Rosin Ester	85026-55-7	1%-4%
Zinc Oxide	8051-03-4	1%-3%
Petroleum Oil	8042-47-5	1%-3%
Lanolin	8044-50-6	0.5%-2%

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