# MATERIAL SAFETY DATA SHEET

# BondTAC™ 1600

## VOC-FREE WATERPROOF ELASTOMERIC ADHESIVE MEMBRANE

### 1. PRODUCT & MANUFACTURER IDENTIFICATION

| | |
|---|---|
| **Manufacturer Information:**<br>**Bondtac Technologies Incorporated**<br>**1 Imperial Court**<br>**Brampton, Ontario, Canada L6T 5A8**<br>**905-458-1295**<br>**www.bondtac.com**<br>**Prepared by:** Peter Edwards<br>**Sources used:** Raw material supplier MSDS | **Emergency Contact:**<br>**Chemical Emergency (Canutec): 613-996-6666** |
| **HMIS Codes: H=2, F=3, R=0, P=D** | **Issue Date: November 2010** |

**Product Name: BondTAC™ 1600 VOC-FREE WATERPROOF ELASTOMERIC ADHESIVE MEMBRANE**
**Product Use:** Waterproof Coating & Construction Adhesive

### 2. COMPOSITION & INFORMATION ON HAZARDOUS INGREDIENTS

| COMPONENT | APPROX % | UN # | CAS # |
|---|---|---|---|
| tert-Butyl Acetate (VOC-exempt) | 40-60 | 1123 | 540-88-5 |
| | | | |

### EMERGENCY OVERVIEW

**Flammable liquid and vapour. Vapour may cause headache, loss of coordination, nausea, respiratory, eye and skin irritation. Can be fatal if swallowed, may cause abdominal spasm and chemical pneumonitis.**
**Health rating: 2 – Moderate (Life)**
**Flammability rating: 3 – Severe (Flammable)**
**Reactivity rating: 0 – Stable**

### 3. HAZARD IDENTIFICATION

**Effects of exposure: Eyes:** Vapour may cause irritation.
**Skin:** May cause mild irritation. There is low toxicity from skin contact. Frequent or prolonged contact may cause irritation, dermatitis.
**Inhalation:** Inhalation of high levels of vapour s may cause headache and dizziness; may be anesthetic and may cause other central nervous system effects.
**Ingestion:** Minimal toxicity form ingestion but aspiration may cause severe health effects (eg. Bronchopneumonia or pulmonary edema).
**Effects of acute exposure to material:** May cause mild irritation to skin & respiratory tract.
**Chronic exposure:** It is unlikely but possible kidney disorders and or damage may occur from repeated overexposure. Health studies showed petroleum hydrocarbons pose potential risks, which vary person to person. As a precaution, exposure to liquids or vapours should be minimized.

## 4. FIRST AID MEASURES

**Skin Contact:** Remove contaminated clothing and accessories (and thoroughly clean before re-use or discard). Wash with mineral spirits followed by soap and water. If irritation develops, get medical attention immediately.
**Ingestion:** Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Obtain medical attention immediately. If breathing stops, administer artificial respiration.
**Inhalation:** Ensure your own safety first. Remove victim to fresh air. If necessary, trained personnel should administer artificial respiration. Obtain medical attention immediately. USE ONLY IN WELL-VENTILATED AREAS.
**Eye Contact**: Flush eyes immediately with water for at least 20 minutes. If irritation occurs, seek medical attention immediately.

## 5. FIRE EXPLOSION HAZARD

| | |
|---|---|
| **Flash Point**: 4.4$^{o}$C (T.C.C.) | **Autoignition temp**: 517$^{o}$C |
| **Impact sensitivity:** Insensitive | **Sensitivity to static discharge**: Vapours sensitive |
| **Flammable limits (% by volume) - Lower**: 1.26 | **Flammable limits (% by volume) - Upper**: 6.88 |
| **Unusual fire and explosion hazards:** Vapours may cause flash fire. Vapours may travel along ground to remote ignition source where they can ignite, flashback or explode. | |
| **Fire extinguishing media:** Dry chemical, Foam, $CO_2$. Use protective clothing and self-contained breathing apparatus. | |

## 6. ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible into container or use proper inert adsorbing material and place in a chemical safe waste container. Use non-sparking tools and equipment. Conditions to avoid: Excessive heat, sparks, open flames and contact with strong-oxidizing materials.
Report excessive spill released to soil to Ministry of Environment.

## 7. HANDLING AND STORAGE

**Handling:** Keep containers closed when not in use. Keep out of the reach of children. Protect against physical damage. Containers should be bonded and grounded for transfers to avoid static sparks.
**Storage:** Protect from excessive heat. Store in a cool, dry, ventilated area at ambient temperature. Storage in non-smoking room. Containers of this material may be hazardous when empty – observe all warnings and precautions listed for the product.

## 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

| | tert-Butyl Acetate |
|---|---|
| OSHA - Short term Exposure Limit (STEL) | 150 ppm |
| ACGIH TWA | 200 ppm |

Inhalation of high levels of vapour s may cause headache and dizziness; may be anesthetic and may cause other central nervous system effects. There is low toxicity from skin contact. Exposure to high concentrations of vapour and to liquid is irritating to the eyes. Frequent or prolonged contact may cause irritation, dermatitis. Minimal toxicity form ingestion but aspiration may cause severe health effects (eg. Bronchopneumonia or pulmonary edema).

**Respiratory Protection:** Not required if ventilation is sufficient to keep vapours below TLV. If in doubt, under normal conditions of use, employ a NOSH/MSHA approved chemical cartridge respirator. Consult your safety equipment supplier.

**Ventilation:** Use local exhaust. Provide sufficient mechanical ventilation to maintain exposure below TLV's.

**Skin Protection:** Wear vitro, nitrile rubber, gloves if such contact with material is likely.

**Eye Protection:** Wear safety glasses or protective goggles to avoid splashes.

**Other Protective Equipment:** In instances of very high vapour concentrations, such as large spills in confined area, do not venture without a self-contained breathing apparatus with full-face piece. Wash hands thoroughly with soap and water, if in contact with material.

**Spill Procedures:** Restrict access. Remove or extinguish all sources of ignition, local and remote. Provide adequate ventilation. Avoid breathing vapours. Scrape up spillage. Final clean up with non-flammable solvent. Do not allow into sewers, waterways or low areas. Promptly report significant spills to appropriate authorities. Consult local regulations.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Initial Boiling Point**: 97$^{o}$C | **Freezing Point**: N/A |
| **Specific Gravity ($H_20$=1):** 0.92 | **Physical State**: Liquid |
| **pH:** Not Available | **Evaporation Rate (Ethyl Ether=1):** Slower |
| **Odour Threshold (ppm):** Not available | **Evaporation Rate (Butyl Acetate=1):** Slower |
| **Vapour Density (Air=1)**: Not Available | **% Volatiles:** 53 |
| **Vapour Pressure (mm of mercury)**: 41.5 mm Hg@25$^{o}$C | **Solubility in water:** Insoluble |
| **Appearance and Odour**: Clear or coloured liquid with fruity odour | **Chemical type:** Mixture |

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable

**Freeze-Thaw-Stability:** Will not freeze.

**Hazardous combustion products:** Smoke, fumes CO, $CO_2$ $NO_x$.

**Hazardous Polymerization:** Will not occur.

**Condition to avoid**: Extreme temperatures, keep away from ignition sources, heat and flames;

## 11. TOXICOLOGICAL INFORMATION

**General Info:** Toxicological testing has not been conducted for the overall product. The data shown below are available for individual ingredients:

tert-Butyl acetate is **Not Classified as a Carcinogen**

| COMPONENT | $LD_{50}$ | $LC_{50}$ |
|---|---|---|
| tert-Butyl acetate | 4,500 mg/g, oral Rat | 4,200 ppm rat – 6 hours |

## 12. ECOLOGICAL INFORMATION

No data available.

## 13. DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an approved waste or incineration facility. Dried material only may be land filled. Disposal in accordance with applicable local or other government regulations.

## 14. TRANSPORT INFORMATION

TDG and DOT classification:
UN 1133 ADHESIVES containing flammable liquid
Class 3
P.G. II

## 15. REGULATORY INFORMATION

**Canadian Regulatory Information**:
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS and contains all the information required by the CPR.
**W.H.M.I.S Classification: B2, D2A, D2B**

**Ingredients – U.S. Regulatory Information**
SARA Title III Section 313 Form "R"/TRI Reportable Chemical

Other Regulations: EPA 40 CFR 51.100 Definition of VOC - (tert-Butyl acetate is excluded solvent)

SOR/2009-264 CEPA VOC Concentration Limits for Architectural Coatings Regulations: (VOC Free)

## 16. OTHER INFORMATION

**Keep out of Reach of children.**

**Before using, the user shall determine the suitability of the product for its intended use and the user alone assumes all risks and liabilities whatsoever in connection therewith. Bondtac Technologies Incorporated assumes no responsibility for personal injury or property damage to vendees or users or third parties, caused by the improper use of this product. Such vendees or users assume all risks with the use of the material.**

**The manufacturer believes the data contained herein are accurate as of the date hereof. This data is given without warranty or guarantee of any kind, expressed or implied and the manufacturer expressly disclaims all liability for reliance.**

**WHMIS Pictogram**