

7048051

# HOTMELT TECHNICAL DATA

TEC-BOND 260/12

## GENERAL DESCRIPTION

TEC-BOND 260/12 is a brown high performance hotmelt formulated to provide tough and resilient bonds on substrates that previously could not be boned using hotmelts. Excellent on plastics, glass ceramic, metals.

## SUITABLE APPLICATORS

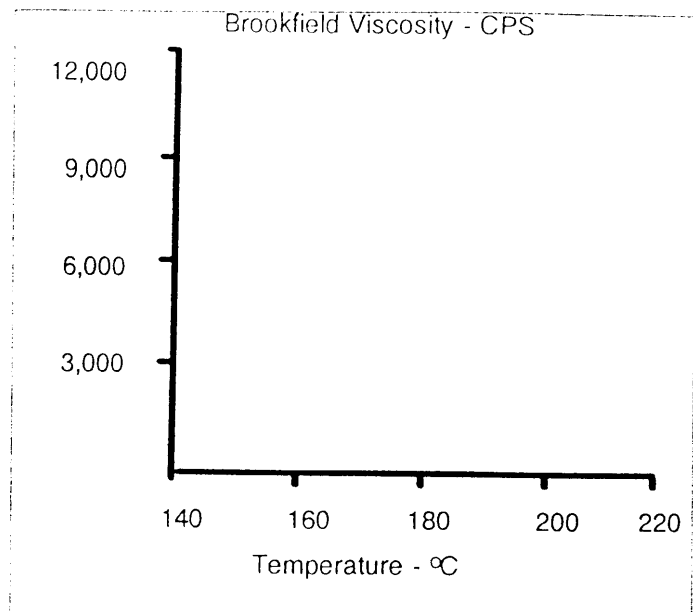
TEC 601

TEC 901

TEC-BOND 260/12 will run in a large proportion of 12mm applicators, however due to the flexibility of this product, some applicators are not suitable.

Please call for advice and/or samples.

## TEMPERATURE - VISCOSITY



## TYPICAL PERFORMANCE DATA

Adhesive Type:

Synthetic polymer based hotmelt.

Colour:

Pale Brown

Brookfield Viscosity (ASTM D3236):

160°C - 11,650 c.p.s

180°C - 6,790 c.p.s.

200°C - 3,920 c.p.s.

220 °C - 2,425 c.p.s.

Also see graph.

Ring & Ball Softening Point (ASTM E28);

84°C

Heat Resistance ( BS5350 Part H3):

70°C

Open Time: (BS5350 Part H4):

40 secs.

Suggested Application Temperature:

160-200°C

Molten Tack:

Very High

All constituent parts of this adhesive have been approved by the American F.D.A. under the following Section:-

C.F.R.21 175-105 and 176-180.

## **SPECIAL FEATURES**

TEC-BOND 260/12 has been formulated for use on difficult product assembly applications. The adhesive features a very long open time allowing complex assembly operations to be completed without the risk of a "cold bond". Once set this adhesive provides a tough rubber like bond that is extremely shock resistant. TEC-BOND 260/12 should be recommended when other hotmelts fail to do the job.

## **HEALTH AND SAFETY**

Take normal precautions when using hot liquids as molten adhesive temperatures range from 150°C - 220°C.

**BURNS:** Immediately cool affected area with cold water. Do not remove cold adhesive from skin, seek medical attention.

**FUMES:** Do not inhale. Use in a well ventilated area.

**FIRES:** Not normally a hazard but in a fire hotmelts are combustible, use dry powder or CO<sup>2</sup> Extinguishers.

DO NOT USE WATER.

## **PHYSICAL FORM**

Quoted Nominal 12mm.

Actual 11.5mm + 0.2mm

Length 300mm

Approx 34 Sticks/Kilo

## **THERMAL STABILITY**

All our hotmelt adhesives are formulated to minimise the risk of degradation at elevated temperatures. To ensure clear running keep to the suggested application temperature.

(See Typical Performance)

## **PACKAGING**

Packed in 5kg TEC-BOND Cartons.

500kg/pallet.

L 1200 - W 1000 - H 920mm including pallet.

## **STORAGE**

Store in a clean dry place at temperatures between 5 and 30°C with boxes closed. Do not expose to direct sunlight and use oldest stock first.

Further information is always available to help solve your adhesive problems. Should you require any further information on our adhesives or applicators please contact your local distributor (Name and address below).

The information contained on this data sheet is for guidance only. It is the result of careful laboratory evaluations by trained and qualified staff using British Standard or similar test methods. However, no warranty is expressed or implied regarding the accuracy of this data or the suitability of the adhesive for any specific purpose. In every case we strongly recommend that the user shall make their own tests to determine to their own satisfaction the suitability of the adhesive for their particular purpose. Neither seller or manufacturer shall be liable for any injury, loss, damage. Direct or consequential arising out of the use or inability to use the product.



# **POWER ADHESIVES**

# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE PREPARATION AND COMPANY

**Product Name and Code:** TEC-BOND 260/12/300 (7048051) Hot Melt Adhesive

**Intended Use:** To be used as an adhesive for various industrial end uses

**Name, full address and phone No. of company:**  
Power Adhesives Limited  
Unit 5, New England Estate  
Gascoigne Road  
Barking  
Essex IG11 7LN England  
Tel: 0181 507 8433 Fax: 0181 507 8407

**Emergency phone number of company:** 0181 507 8433

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Substances representing a health hazard within the meaning of the Dangerous Substances Directive 67/548/EEC -

<u>NAME:</u>	<u>CONC. RANGE</u>	<u>SYMBOL</u>	<u>RISK PHRASES</u>
Vinyl acetate	< 0.3%	F	R11

The above is present as an impurity.

## 3. HAZARDS IDENTIFICATION OF THE PREPARATION

Not classified under the Chemicals (Hazard Information and Packaging) Regulations (CHIP) 1994.

### FIRST AID MEASURES

**GENERAL:** Hotmelt adhesives pose virtually no hazards to health when used in normal industrial practice, but because they are used in a molten state at high temperatures there is a risk of thermal burns. Skin contact with molten melt should be avoided and precautions taken against accidental splashes of adhesive. The use of hinged guards and the insulation of hot pipes, tanks etc. minimises the risk of burns.

**INHALATION:** Noxious and irritating fumes may be released from heating hotmelts. Vapours given off during operation are not considered toxic, but if overheated chemical breakdown of the components may occur releasing a complex mixture of organic materials, some of which may be toxic or irritant. Remove to fresh air, keeping patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Give nothing by mouth. Treat any irritation symptomatically. If unconscious place in recovery position and seek medical advice.

**EYE CONTACT:** For solid treat as inert particles and irrigate copiously with clean fresh water. For molten hotmelt irrigate with cold water and seek medical advice immediately.

**SKIN CONTACT:** Solid cold hotmelt is harmless to the skin. Wash hands with soap and water. Skin affected by molten hotmelt should be plunged into cold water immediately and left until the burning sensation subsides. If no tap is available have a bucket of clean cold water available. If coated with hotmelt move fingers to prevent a tourniquet effect as it cools. Do not remove the adhesive when molten as it might remove skin to quite a depth leaving a raw wound. Even when solid remove with care as the above may still occur. If difficult to remove, with medical approval, olive oil or liquid paraffin should be soaked into a cottonwool pad and placed over the affected area. This will slowly soften the adhesive into the pad. When hotmelt is removed treat as a normal burn. In isolated circumstances as allergic reaction may occur and direct contact with the adhesive and its vapour should be avoided.

**INGESTION:** If accidentally swallowed obtain immediate medical attention. Keep at rest. Do **NOT** induce vomiting. Give large quantities of water but never give anything by mouth to an unconscious person.

## 5. FIRE FIGHTING MEASURES

A solid or when heated viscous liquid with no flash point. The product is combustible and will burn in the event of a small fire but has no unusual fire or explosion hazards. If a fire does occur extinguish with dry agent, foam or CO<sub>2</sub>. Water should not be allowed to come into contact with molten hotmelt adhesives. Fire will produce dense black smoke and toxic gases e.g. carbon monoxide which must not be inhaled.

## 6. ACCIDENTAL RELEASE MEASURES

Sweep up granules of solid material and place in a container for disposal according to local regulations (see section 13). Allow melt to cool and solidify. Scrape up and dispose of as above. Do not allow to enter drains or water courses.

## 7. HANDLING AND STORAGE

**HANDLING:** Do not heat hotmelt above recommended temperatures. Avoid overheating hotmelts as this can give rise to excessive fuming indicating polymer breakdown and production of toxic or irritant vapours. The product contains some residual free vinyl acetate and on overheating acetic acid can be produced by decomposition. The requirements of regulations made under the Health and Safety at Work Act should be complied with.

**STORAGE:** Hotmelts can be stored for indefinite periods, but stock rotation is advised. Store in a dry, well ventilated place. Keep in original containers to avoid contamination with moisture and other foreign bodies. Keep containers closed.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Provide adequate extraction/ventilation of fumes and vapours released from molten hotmelt.

### **Exposure Limits:**

#### **Occupational exposure limit (OEL) in ppm given in EH40**

NAME	LTEL	STEL
Vinyl Acetate	10	20
Acetic Acid	10	15

### **Personal Protection:**

**RESPIRATORY PROTECTION:** No special protection necessary.

**HAND PROTECTION:** Wear gloves to avoid contact with molten adhesive. Wash hands with soap and water after use

**EYE PROTECTION:** Eye protection designed to protect against liquid splashes may be useful.

**SKIN PROTECTION:** Cotton or cotton/synthetic overalls may be useful to avoid skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Solid thermoplastic material
<b>Flash Point:</b>	> 250°C
<b>Specific Gravity:</b>	0.90 - 1.10
<b>Solubility in Water:</b>	Insoluble

## 10. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions (see section 7).

When exposed to high temperature may produce hazardous decomposition products such as sulphur dioxide, carbon monoxide, carbon dioxide and smoke as well as vinyl acetate and acetic acid.

#### **11. TOXICOLOGICAL INFORMATION**

There is no data available on the product itself.

#### **12. ECOLOGICAL INFORMATION**

The product should not be allowed to enter drains or water courses or be deposited where it can effect ground surface waters.

#### **13. DISPOSAL CONSIDERATION**

Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. Wastes should be disposed of in accordance with the regulations made under the Control of Pollution Act 1974 and the Environmental Protection Act 1990.

#### **14. TRANSPORT INFORMATION**

Not hazardous for transport.

#### **15. REGULATORY INFORMATION**

The product is not classified as dangerous under the Chemicals (Hazard Information and Packaging) Regulations 1994.

#### **16. OTHER INFORMATION**

The information contained in this safety data sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.