



704-8099

TEC-BOND 23 HOTMELT ADHESIVE

**POWER
ADHESIVES**

DATA SHEET

GENERAL DESCRIPTION

TEC-BOND 23 is a product assembly grade with excellent bonding properties and a high level of adhesive strength, suitable for many assembly applications where both high and low temperature conditions prevail.

TEC-BOND 23 is good on most materials, such as wood, paper, fabric, many plastics and light gauge metals.

TECHNICAL CHARACTERISTICS

Adhesive type:
Colour:
Molten tack:

Synthetic polymer based hotmelt
Very pale amber
High

Diameter (Nominal)
Length (Nominal)
Carton Quantity
Sticks per kilo (approx.)
Suggested Application Temperature:
Brookfield viscosity (ASTM D3236) @ 180°C spindle 27
Ring & Ball Softening Point (ASTM E28)
Heat Resistance (BS5350 Part H3)
Open Time
Low temperature flexibility (tg)

12mm	20mm	43mm	Bulk
300mm	N/A	43mm	Slats
5 kilos		10 kilos	20 kilo bags
34		17	N/A
195°C		195°C	160°C
5000 cps		5000 cps	5000 cps
84°C		84°C	84°C
75°C		75°C	75°C
Long		Long	Long
-20°C		-20°C	-20°C

SIZES AVAILABLE

12mm sticks

SUITABLE APPLICATORS

HOTFIX 180, TEC 200
TEC 601, GAS-TEC 500
TEC 700
TEC 901
Most other 12mm applicators

TYPICAL OUTPUT

0.85 Kg/hr
1.25 Kg/hr
1.5 Kg/hr
1.75 Kg/hr
variable

43mm slugs

TEC 3200,
TEC 6100
Most bulk tank systems

2.5 Kg/hr
3.3 Kg/hr

Bulk Hotmelts

Dependent on system

All constituent parts of this adhesive have been approved by the American F.D.A under C.F.R.21.175.105 (adhesives).

HEALTH & SAFETY

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 hotmelt should be avoided and precautions taken against accidental splashes of adhesive. The use of overalls, cotton gloves, and safety glasses help minimise the risk of burns.

INHALATION:

Vapours given off during normal 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. Ensure hotmelts are run at the recommended operating temperatures and use in a well-ventilated area.

EYE CONTACT:

For solid hotmelt 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 accessible 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.

FIRE:

Not normally a hazard, but in a fire hotmelts are combustible, use dry powder or CO2 extinguisher. Do not use water.

STORAGE

Store in a clean dry place at temperatures between 5°C and 30°C with boxes closed. Do not expose to direct sunlight or localised heat sources such as radiators or hot pipes.

REMOVAL OF GLUE

Assembled components can be separated by heating assembly to a temperature slightly above the heat resistance figure.

EVA & POLYPROPYLENE:

Residues of EVA and polypropylene based hotmelts can be removed from components with white spirit.

POLYAMIDE:

Residues of Polyamide based hotmelt can be removed from components with acetone.

PLEASE NOTE

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 nor manufacturer shall be liable for any injury, loss, damage, direct or consequential arising out of the use or inability to use the product. 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 nearest distributor.



MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

Product Name and Code: TEC-BOND 23 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: 0208 507 8433 Fax: 0208 507 8407

Emergency phone number of company: 0208 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 CO₂. 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

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