

***** MATERIAL SAFETY DATA SHEET *****

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER **ADHESIVE-LT**
PRODUCT NAME **PERFORMANCEPLUS LOW TEMP ADHESIVE**
Manufacturer Muller Martini Corp
 Book Binding Division
 P.O. Box 10820, 40 Rabro Drive
 Hauppauge, NY 11788
 USA

EMERGENCY PHONES:
MEDICAL: 866-359-5657 (Health & Safety Call Center-24 hours)
TRANSPORT: CHEMTREC: 800-424-9300 (24 hours)
CHEMTREC International: 703-527-3887 (call collect)
Corporate Emergency Phone: 631-582-4343 (DWH)
MSDS Requests/Customer Service: See phone numbers in Section 16
SYNONYMS None

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL FAMILY	Hot Melt Adhesive	
COMPONENT	CAS NUMBER	CONCENTRATION
		(% by weight)
Paraffin waxes and hydrocarbon waxes	8002-74-2	15 - 40
Amines, bis(hydrogenated tallow alkyl), oxidized	143925-92-2	0.1 - 1

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUSES THERMAL BURNS
NON-HAZARDOUS AT ROOM TEMPERATURES. HAZARDOUS ONLY WHEN HEATED.
 Off-white Solid Negligible odor

EYE As supplied: irritant as a foreign body. As used: severe thermal hazard.
SKIN CONTACT Exposure to hot material may cause thermal burns.
INHALATION Overexposure to paraffin wax fumes may be irritating to respiratory passages and cause other effects such as eye irritation and nausea. Care should be taken not to exceed the established TLV.
INGESTION Low oral toxicity.

4. FIRST-AID MEASURES

EYE If hot: flush with cool water. Treat as wax or resin burn. Do not attempt to remove solidified adhesive. Get medical attention immediately. As supplied: remove as foreign body.
SKIN CONTACT For hot product, immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting and get prompt medical attention.
INHALATION Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.
INGESTION Treat symptomatically and supportively. Get medical attention.

5. FIREFIGHTING MEASURES

AUTOIGNITION	Not available
FLASH POINT	> 500 °F (Cleveland Open Cup)
EXTINGUISHING MEDIA	CO2; Dry Chemical
SPECIAL FIREFIGHTING PROCEDURES	No special procedures are required.
FIRE & EXPLOSION HAZARDS	Non-combustible.
HAZARDOUS COMBUSTION PRODUCTS	Carbon monoxide, carbon dioxide, unknown hydrocarbons.
LOWER EXPLOSION LIMIT (%)	Not applicable
UPPER EXPLOSION LIMIT (%)	Not applicable

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES	Allow to cool and solidify. Scrape up and collect in suitable containers for disposal.
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For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

7. HANDLING AND STORAGE

STORAGE TEMPERATURE	0 - 100 °F
HANDLING/STORAGE	Store in a cool, dry area. Precaution: this product should only be heated to recommended temperatures. Hazards of pyrolysis products emitted are unknown and may be hazardous to health. Provide adequate ventilation to ensure that the defined occupational exposure limit is not exceeded.

SENSITIVITY TO STATIC ELECTRICITY	No
SENSITIVITY TO MECHANICAL IMPACT	No

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMITS	ACGIH	OSHA	Mfg Working Standard
Paraffin wax	ACGIH-TWA: 2 mg/m3	OSHA-PEL: 2 mg/m3	
VENTILATION REQUIREMENTS	General exhaust to avoid accumulation of vapors near ceilings. Local exhaust to keep vapors below TLV.		
EYE PROTECTION REQUIREMENTS	Safety glasses, goggles or face shield to protect against splashing.		
GLOVE REQUIREMENTS	Thermally resistant gloves should be worn.		
CLOTHING REQUIREMENTS	To avoid burns, use long-sleeved, long-legged clothing.		
CHANGE/REMOVAL OF CLOTHING	Remove contaminated clothing and launder before reuse.		
WASH REQUIREMENTS	Wash before eating, drinking, or using toilet facilities.		
RESPIRATOR REQUIREMENTS	No respiratory protection is recommended while working with this material. However, if operating conditions create high vapor or mist concentration, use of an approved respirator is recommended.		

9. PHYSICAL AND CHEMICAL PROPERTIES

PURE SUBSTANCE OR MIXTURE	Mixture
PHYSICAL FORM	Solid
COLOR	Off-white
ODOR	Negligible
ODOR THRESHOLD	Not available
PH AS IS	Not applicable
pH IN (1%) SOLUTION	Not applicable
OXIDIZING PROPERTIES	Not applicable
BOILING POINT	> 500 °F
MELTING/FREEZING POINT	Not applicable
SOLUBILITY IN WATER	Insoluble
PARTITION COEFFICIENT	(n-octanol/water) Not applicable
SPECIFIC GRAVITY (WATER=1)	0.98
BULK DENSITY	8.1 lb/gal
EVAPORATION RATE	(Water = 1)
VAPOR PRESSURE (mmHg)	Nil @ 20°C
VAPOR DENSITY (air = 1)	Nil
VOLATILES	Nil
VOLATILE ORGANIC COMPOUNDS	Nil
AUTOIGNITION	Not available
FLASH POINT	> 500 °F (Cleveland Open Cup)

10. STABILITY AND REACTIVITY

STABILITY	Stable
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon monoxide, carbon dioxide, unknown hydrocarbons.

11. TOXICOLOGICAL INFORMATION

ROUTE OF ENTRY	Skin Contact; Eye Contact; Inhalation
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CHRONIC (LONG TERM) EFFECTS OF EXPOSURE

EFFECTS OF CHRONIC EXPOSURE	Although this product has not been tested for chronic effects it is judged as having a low order of toxicity based on component information. Use of good industrial hygiene practices is recommended.
TARGET ORGANS	Eyes; Skin; Respiratory system
CARCINOGEN	No.

COMPONENT	ORAL TOXICITY	NOTES ON ORAL TOXICITY
Paraffin waxes and hydrocarbon waxes		No hazard in normal industrial use.

COMPONENT	DERMAL TOXICITY	NOTES ON DERMAL TOXICITY
Paraffin waxes and hydrocarbon waxes		Non-irritant.
Amines, bis(hydrogenated tallow alkyl), oxidized		May cause skin sensitization.

COMPONENT	INHALATION TOXICITY	NOTES ON INHALATION TOXICITY
Paraffin waxes and hydrocarbon waxes		Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

COMPONENT	NOTES ON EYE IRRITATION
Paraffin waxes and hydrocarbon waxes	No evidence of irritant effects from normal handling and use.

12. ECOLOGICAL INFORMATION

POTENTIAL TO BIOACCUMULATE	Unknown.
AQUATIC TOXICITY	None Established

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS	Disposal should be in accordance with local, state or national legislation.
EMPTY CONTAINER WARNINGS	Empty containers may contain product residue; follow MSDS and label warnings even after they have been emptied.

14. TRANSPORTATION INFORMATION

This section provided for general information only.

FOR NON-BULK SHIPMENTS.

FOR MORE COMPLETE TRANSPORTATION REGULATORY INFORMATION PLEASE REFER TO THE SHIPPING DOCUMENTS ACCOMPANYING THE SHIPMENT OF THIS PRODUCT.

DOT CLASSIFICATION Not applicable.

The information provided herein may not include the impact of additional regulatory requirements (eg, for materials meeting the definition of a hazardous waste under RCRA, hazardous substances under CERCLA, and/of marine pollutants under CWA or other similar federal, state or local laws) or any associated exceptions or exemptions under regulations applicable to the transport of this material.

15. REGULATORY INFORMATION

USA TSCA This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C. 2601 et. seq.

SARA/TITLE III	CAS NUMBER	CONCENTRATION (% by weight)
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Contains no substances at or above the reporting threshold under Section 313.

CALIFORNIA PROPOSITION 65

WARNING: This product contains the following chemicals that are known to the State of California to cause cancer, birth defects or other reproductive harm.

Unless a concentration is specified in Section 2 of the MSDS, the below chemical/s are present in trace amounts.

COMPONENT	CAS NUMBER
Ethylene oxide	75-21-8
1,4-Dioxane	123-91-1
Acetaldehyde	75-07-0
Propylene oxide	75-56-9

16. OTHER INFORMATION

HMIS® Hazard Ratings

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs by OSHA's 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual.

HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).

<u>Health</u>	<u>Flammability</u>	<u>Reactivity</u>
0/2	1	0

MSDS DATE 28-July-2005

FOR INFORMATION CONTACT:

Muller Martini Corp
Book Binding Division
Product Information:
Customer Relations: 1-888-2-MULLER

ADDITIONAL INFORMATION: The information given and the recommendations made herein apply to our product(s) alone and are not combined with other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. No guaranty of accuracy is made. It is the purchaser's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.