

ROCKLAND INDUSTRIES, INC.
 PO Box 17293
 Baltimore, MD 21297-1293
 (410)-522-2505

MATERIAL SAFETY DATA SHEET

I PRODUCT

Rockland Industries processes cotton, cotton-blend, and polyester fabrics. These fabrics may be either resin-treated or coated with a formaldehyde containing substance.

Rockland fabrics as supplied are non-hazardous under the OSHA Hazard Communication Standard (29CFR1910 1200)

Under conditions of use they may become OSHA hazardous due to the possibly release formaldehyde into the air. The United States does not directly regulate the formaldehyde content of textiles, however other countries do. The levels of formaldehyde contained in Rockland's fabrics are less than the maximum allowed formaldehyde content for textiles that do not come into direct contact with the skin during normal use and for home decoration fabrics in countries that have adopted such regulations. Formaldehyde is a colorless gas with a pungent odor. Most physical data descriptive of formaldehyde is not applicable in the context of treated or coated textile products.

II HAZARDOUS INGREDIENTS

<u>Chemical and Common Name</u>	<u>CAS No.</u>	<u>PEL*</u>	<u>TLV**</u>
Formaldehyde (HCHO)	50-00-00	75 ppm	0.3 ppm ceiling limit 0.5 ppm Action Level 2.0 ppm Short Term Exposure Limit (15 minutes)

*PEL - OSHA Permissible Exposure Limit, 8 hour Time Weighted Average,
29 CFR 1910.1048.

**TLV - Threshold Limit Value, American Conference of Governmental Industrial Hygienists (ACGIH) 1997

III PHYSICAL DATA

General: A textile product treated with a resin or a coating containing very low levels of formaldehyde. Most physical data descriptive of chemical products is not applicable. Formaldehyde can be released from the finishes applied to this product. Formaldehyde has a pungent odor and can be recognized at elevated levels by noticeable sensory irritation.

Flash Point: Not applicable

Boiling Point: Not applicable

Fire and Explosion Hazard Data: No special concern for formaldehyde. Fabrics can burn. Use NIOSH/MSHA approved self-contained breathing apparatus with positive pressure in full face-piece when this material is involved in a fire.

Reactivity Data: Not applicable.

IV HEALTH HAZARD DATA

The potential health risks associated with formaldehyde vary, depending largely on the means of exposure (e.g., inhalation or dermal contact), the concentration of the formaldehyde, and the duration of exposure.

Primary route of exposure - inhalation

While exposure to formaldehyde gas in concentrations exceeding the permissible limit (see PEL above) is unlikely from working with treated or coated fabric, some concentration might be possible in poorly ventilated areas.

Exposure to gaseous formaldehyde by inhalation may result in sensory irritation of the upper respiratory tract and eyes, and nausea

Certain individuals who come in contact with formaldehyde may suffer respiratory sensitization reactions including asthma and bronchitis. Once sensitized, these individuals may suffer a recurrence of symptoms when exposed to formaldehyde related to use of this product.

The International Agency for Research on Cancer (IARC) determined formaldehyde is carcinogenic to humans (Group 1) (Vol. 88, 2006). OSHA has determined formaldehyde to be a potential human carcinogen. Formaldehyde is listed in the Report on Carcinogens, Twelfth Edition (2011) published by the U.S. Department of Health and Human Services, National Toxicology Program as a substance that is known to be a human carcinogen, specifically nasopharyngeal cancer, sinonasal cancer, and myeloid leukemia.

Primary route of exposure - skin contact:

Skin contact with formaldehyde may result in irritation and allergic dermatitis.

The Consumer Products Safety Commission (CPSC) studied the bioavailability and dermal penetration of formaldehyde from textiles. No penetration of the intact skin by formaldehyde was observed. Therefore, the CPSC took no action based on carcinogenic risk from the presence of formaldehyde in textiles.

The U.S. Government Accountability Office (GAO) completed a study of the use of formaldehyde in clothing textiles in August 2010 and identified the following risks to consumers: A form of eczema, allergic contact dermatitis affects the immune system and produces reactions characterized by rashes, blisters, and flaky, dry skin that can itch or burn. Another potential health effect from dermal exposure to formaldehyde--irritant contact dermatitis--is also a form of eczema and has similar symptoms; however, this condition does not affect the immune system.

V CONTROL MEASURES

Engineering Controls: Ventilation - Ensure that areas containing resin finished or coated textile products are well ventilated to prevent accumulation of formaldehyde. Open packages containing resin finished textile products prior to cutting so that ventilation occurs prior to handling of the products.

Work Practices: Minimize contact of human skin with fabric. Wash exposed areas of skin thoroughly with water at end of exposure period.

Personal Protective Equipment: A NIOSH/OSHA approved respirator for formaldehyde should be utilized if formaldehyde levels exceed the OSHA permissible exposure limit.

VI EMERGENCY AND FIRST-AID

Should respiratory exposure result in a highly irritated respiratory tract and coughing, the affected individual should be removed from formaldehyde exposure areas and be provided immediate medical attention.

VII DISPOSAL AND SPILL CONTROL

Waste materials may be disposed of in a sanitary landfill or by incineration.

Spill control information is not applicable to this product.

VIII CUSTOMER INQUIRIES

Customer inquiries should be directed to the following Hazard Communication Program Administrator:

Mark Berman 410-522-2505 ext. 1205

IX STATE RIGHT-TO-KNOW

California Proposition 65: Textiles finished or coated with acrylic containing compounds contain formaldehyde (gas)(50-00-0) which the State of California has found to cause cancer. Textiles finished or coated with acrylic containing compounds may

contain trace levels of acrylamide (79-06-1), acrylonitrile (107-13-1) and ethyl acrylate (140-88-5) which the State of California has found to cause cancer, birth defects or other reproductive harm.

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The information in this Material Safety Data Sheet is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Rockland Industries, Inc. assumes no responsibility for personal injury or property damage to buyers, users or third parties caused by the material. These buyers and users assume all risks associated with the use of the material.