

MATERIAL SAFETY DATA SHEET

VonRoll USA, INC.

REVISION DATE: 12/13/2006 REVISION NUMBER: 3
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 PREPARED BY: M. J. ST. DENIS

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURED BY:
VON ROLL USA, INC.
 200 VON ROLL DRIVE
 SCHENECTADY, NY 12306
 BUSINESS: (518) 344-7100
 EMERGENCY: (518) 395-3310

PRODUCT ID: 7031
 CHEMICAL FAMILY: COMPOUNDS AND ADHESIVES
 CHEMICAL NAME: PHENOLIC BUTVAR RESIN
 FORMULA: MIXTURE
 SYNONYMS: NONE

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS PRODUCT COMPOSITION/CAS NUMBER	APPROX. WEIGHT PERCENT	ACGIH 8 HR. TWA	ACGIH UNIT	OSHA PEL-TWA	OSHA UNIT
Ethyl Alcohol 64-17-5	30 - 60	1000	PPM	1000	PPM
Acetone 67-64-1	10 - 30	500	PPM	1000	PPM
Xylene (Mixed Isomers) 1330-20-7	10 - 30	100	PPM	100	PPM
Ethyl Benzene 100-41-4	1 - 5	100	PPM	100	PPM
Methyl Alcohol 67-56-1	1 - 5	200	PPM	200	PPM
Formaldehyde 50-00-0	<5 PPM	MAXIMUM: 0.3	PPM	0.75	PPM
Benzene 71-43-2	<5 PPM	0.5	PPM	1	PPM
Acetaldehyde 75-07-0	<5 PPM	MAXIMUM: 25	PPM	200	PPM

3. HAZARDS IDENTIFICATION

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Refer to other MSDS sections for detailed information.

TARGET ORGANS:

Skin. Eyes. Respiratory System. Gastrointestinal System. Central Nervous System. Kidneys. Liver. Hematopoietic System (Blood). Embryo / Petus. Reproductive System. Immune System - bone marrow.

EFFECTS FROM ACUTE EXPOSURE:INGESTION:

Harmful if swallowed. Causes vomiting, nausea, and diarrhea. May cause severe damage of gastrointestinal tract. Aspiration can be a hazard if this material is swallowed. May cause pulmonary edema.

SKIN CONTACT:

Causes moderate skin irritation. Will cause skin defatting. Can dry skin.

INHALATION:

Causes irritation of the mouth, nose, and throat. Irritates mucous membranes. Excessive inhalation causes headache, dizziness, nausea and incoordination. Dust hazard would only exist if the volatiles have evaporated.

EYE CONTACT:

May cause moderate eye irritation.

AGGRAVATED MEDICAL CONDITIONS:

Respiratory. Pulmonary disorders. Liver, kidney. Dermal ailments. Central nervous system disorders. Gastrointestinal disorders.

EFFECTS OF CHRONIC EXPOSURE:

Dermatitis. Respiratory ailments. Central nervous system damage. Gastrointestinal effects. Eye damage. Blood disorders. Optic nerve damage. Blindness. May cause liver and kidney damage. This product contains ethyl alcohol, which consumption of is known to cause birth defects. Reproductive disorders. Nasal cancer.

CARCINOGENICITY COMMENT:

This product or one of its ingredients present at 0.1% or more is listed as a carcinogen or potential carcinogen by NTP, IARC or OSHA.

CARCINOGENICITY:

Ethyl Benzene: The International Agency for Research on Cancer (IARC) has determined that there is inadequate evidence in humans and sufficient evidence in experimental animals for the carcinogenicity of ethyl benzene. IARC has given ethyl benzene an overall evaluation of 2B possibly carcinogenic to humans.

ROUTES OF ENTRY:

Contact. Absorption. Inhalation. Ingestion.

OTHER:

None known.

4. FIRST AID MEASURES

INGESTION:

Seek medical attention immediately.

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SKIN CONTACT: Remove contaminated clothing and laundry before reuse. Wash with soap and water. Get medical attention if irritation persists.

INHALATION: If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.

EYE CONTACT: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

NOTES TO PHYSICIAN: Aspiration may cause severe lung damage. Evacuate stomach in a way which avoids aspiration.

5. FIRE FIGHTING MEASURES

FLASH POINT (F): -4 (C): -20

FLASH POINT METHOD: Tagliabue Open Cup (TOC)

IGNITION TEMP (F): Unknown (C): Unknown

OSHA FLAMMABILITY CLASSIFICATION: Flammable Liquid, Class IB

FLAMMABLE LIMITS IN AIR - LOWER (%): 1.0

FLAMMABLE LIMITS IN AIR - UPPER (%): 12.8

SENSITIVITY TO MECHANICAL IMPACT (Y/N): No

SENSITIVITY TO STATIC DISCHARGE: Sensitivity to static discharge is expected; material has a flash point below 200 F (93 C).

EXTINGUISHING MEDIA: Alcohol foam. Carbon dioxide. Dry chemical.

FIRE FIGHTING PROCEDURES: Vapors may form explosive mixture with air. Extremely flammable. Positive pressure, self-contained breathing apparatus. Evacuate area and fight fire from a safe distance. Containers can build up pressure if exposed to heat (fire).

6. ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section. Remove sources of ignition. Warn other workers of spill. Increase area ventilation.

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7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Use ground strap and appropriate precautions for dispensing flammable liquids. Recommended storage in original container at temperature below 30 C (85 F). Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Use only in a well ventilated area. Danger: Extremely flammable. Keep container closed when not in use to prevent contact with acidic, basic or oxidizing materials. Keep away from food and smoking materials. Wash hands before eating and smoking. Use only spark-proof and explosion-proof tools and equipment.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Exhaust ventilation. Showers. Eyewash stations. Use in a well ventilated area.

RESPIRATORY PROTECTION: Use in a well ventilated area. Use approved NIOSH respiratory protection if TLV exceeded, or over exposure is likely.

GLOVES: Viton rubber gloves. Polyvinyl alcohol gloves.

EYE PROTECTION: Splash Goggles.

OTHER PERSONAL PROTECTION DATA: Face shield. Rubber apron or other chemical-resistant apron.

VENTILATION: Use only in well ventilated area. Localized mechanical ventilation.

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9. PHYSICAL AND CHEMICAL PROPERTIES

COMPONENT INFORMATION:

HAZARDOUS PRODUCT COMPOSITION/CAS NUMBER	APPROX. WEIGHT PERCENT	BOILING POINT (F):	BOILING POINT (C):	VAPOR PRESSURE @ 20 C (mmHg):	VAPOR DENSITY (AIR=1):
Ethyl Alcohol 64-17-5	30 - 60	173	78	40	1.59
Acetone 67-64-1	10 - 30	133	56	182	2.00
Xylene (Mixed Isomers) 1330-20-7	10 - 30	281	139	5.1	3.60
Ethyl Benzene	1 - 5	277	136	7.1	3.66

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HAZARDOUS PRODUCT COMPOSITION/CAS NUMBER	APPROX. WEIGHT PERCENT	BOILING POINT (F):	BOILING POINT (C):	VAPOR PRESSURE @ 20 C (mmHg):	VAPOR DENSITY (AIR=1):
100-41-4					
Methyl Alcohol 67-56-1	1 - 5	148	65	97.25	1.11
Formaldehyde 50-00-0	<5 PPM	-5.8	-21	10 @ -88 C	1.03
Benzene 71-43-2	<5 PPM	176	80	75.2	2.77
Acetaldehyde 75-07-0	<5 PPM	69	21	740	1.52

PRODUCT INFORMATION:

BOILING POINT (F): NOT DETERMINED (C): NOT DETERMINED

FREEZING POINT (F): NOT DETERMINED (C): NOT DETERMINED

MELTING POINT (F): NOT DETERMINED (C): NOT DETERMINED

PHYSICAL STATE: LIQUID

DESCRIPTION: AMBER

ODOR: AROMATIC

ODOR THRESHOLD (PPM): UNKNOWN

% VOLATILE BY WEIGHT: 76

EVAPORATION RATE (BUTYL ACETATE = 1): >1

VAPOR PRESSURE (mmHg @ 20 C): NOT DETERMINED

VAPOR DENSITY (AIR=1): NOT DETERMINED

SPECIFIC GRAVITY @ 25 C (WATER = 1): 0.89

ACID/ALKALINITY (MEG/G): NOT DETERMINED

pH: NOT DETERMINED

SOLUBILITY IN WATER DESCRIPTION: APPRECIABLE

SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT): NOT DETERMINED

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

HAZARDOUS POLYMERIZATION: Will not occur.

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HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide. Carbon dioxide. Toxic fumes. Oxides of nitrogen.

MATERIALS TO AVOID:

Avoid contact with acidic, basic or oxidizing agents.

CONDITIONS TO AVOID:

Keep away from heat, sparks and flame.

11. TOXICOLOGICAL INFORMATION**COMPONENT INFORMATION:**

Ethyl Alcohol 64-17-5
 ACUTE ORAL LD50 (MG/KG): >25,000 (RAT)
 ACUTE DERMAL LD50 (MG/KG): NOT DETERMINED
 ACUTE INHALATION: LC50: 20,000 PPM / 10H (RAT)
 OTHER: Eye and skin irritant.

Acetone 67-64-1
 ACUTE ORAL LD50 (MG/KG): TDLO: 2,857 (HUMAN)
 ACUTE DERMAL LD50 (MG/KG): 20,000 (RABBIT)
 ACUTE INHALATION: LC50: 50,100 MG / M3 / 8H (RAT)
 OTHER: Eye and skin irritant.

Xylene (Mixed Isomers) 1330-20-7
 ACUTE ORAL LD50 (MG/KG): 4,300 (RAT)
 ACUTE DERMAL LD50 (MG/KG): >1,700 (RABBIT)
 ACUTE INHALATION: LC50: 5,000 PPM / 4H (RAT)
 OTHER: Eye and skin irritant.

Ethyl Benzene 100-41-4
 ACUTE ORAL LD50 (MG/KG): 3,500 (RAT)
 ACUTE DERMAL LD50 (MG/KG): 17,800 (RABBIT)
 ACUTE INHALATION: LCLO: 4,000 PPM / 4H (RAT)
 OTHER: Eye and skin irritant.

Methyl Alcohol 67-56-1
 ACUTE ORAL LD50 (MG/KG): 5,628 (RAT)
 ACUTE DERMAL LD50 (MG/KG): 15,800 (RABBIT)
 ACUTE INHALATION: LC50: 64,000 PPM / 4H (RAT)
 OTHER: Eye and skin irritant.

Formaldehyde 50-00-0
 ACUTE ORAL LD50 (MG/KG): 100 (RAT)
 ACUTE DERMAL LD50 (MG/KG): 270 (RABBIT)
 ACUTE INHALATION: LC50: 203 MG / M3 (RAT)
 OTHER: Eye and skin irritant.

Benzene 71-43-2
 ACUTE ORAL LD50 (MG/KG): 930 (RAT)
 ACUTE DERMAL LD50 (MG/KG): >9,400 (RABBIT)
 ACUTE INHALATION: LC50: 10,000 PPM / 7H (RAT)
 OTHER: Eye and skin irritant.

Acetaldehyde 75-07-0
 ACUTE ORAL LD50 (MG/KG): 661 (RAT)
 ACUTE DERMAL LD50 (MG/KG): 3,540 (RABBIT)
 ACUTE INHALATION: LC50: 13,300 PPM / 4H (RAT)

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Eye and skin irritant.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: No data at this time.
 CHEMICAL FATE INFORMATION: No data at this time.
 PERSISTENCE: Not determined.
 APPRAISAL: Not determined.
 MOBILITY: Not determined.

13. DISPOSAL CONSIDERATIONS

DISPOSAL OF WASTE METHOD: Disposal should be made in accordance with federal, state and local regulations.
 EPA HAZARDOUS WASTE DISPOSAL CODE: D001, RQ = 100 lb / 45.4 kg.

14. TRANSPORT INFORMATION

DOT SHIPPING NAME: ADHESIVES
 DOT HAZARD CLASS: 3
 DOT PACKING GROUP: PG II
 DOT LABEL(S): FLAMMABLE LIQUID
 UN/NA NUMBER: UN1133
 PLACARDS: FLAMMABLE LIQUID
 ICAO/IATA: 3, II
 MARINE POLLUTANT: NONE
 NMFC CLASSIFICATION: CLASS 55

15. REGULATORY INFORMATION

HAZARD RATING SYSTEMS

NFPA RATING: HEALTH 2, FLAMMABILITY 3, INSTABILITY 0
 HMIS CLASSIFICATION: HEALTH *2, FLAMMABILITY 3, PHYSICAL HAZARD 0
 VOC EXCLUDING H2O & EXEMPTED VOC (LB/GL): 5.8 lb VOC/gal by ASTM 2369-81

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COUNTRY REGISTRATION

TSCA INVENTORY STATUS: The ingredients of this product are either listed on the TSCA inventory or are not subject to the notification requirements (exempt).

CANADIAN INVENTORY: The ingredients of this product are listed on the Domestic Substance List, Non-Domestic Substance List or are exempt.

EINECS: This product, and all its components, complies with EINECS.

REGULATORY INFORMATION: CA/MA/NJ/PA RIGHT-TO-KNOW

HAZARDOUS PRODUCT COMPOSITION/CAS NUMBER	APPROX. WEIGHT PERCENT	CALIFORNIA PROPOSITION 65	MASSACHUSETTS RIGHT-TO-KNOW	NEW JERSEY RIGHT-TO-KNOW	PENNSYLVANIA RIGHT-TO-KNOW
Ethyl Alcohol 64-17-5	30 - 60	NOT LISTED	YES	YES	YES
Acetone 67-64-1	10 - 30	NOT LISTED	YES	YES	YES
Xylene (Mixed Isomers) 1330-20-7	10 - 30	NOT LISTED	YES	YES	YES
Ethyl Benzene 100-41-4	1 - 5	YES	YES	YES	YES
Methyl Alcohol 67-56-1	1 - 5	NOT LISTED	YES	YES	YES
Formaldehyde 50-00-0	<5 PPM	YES	YES	YES	YES
Benzene 71-43-2	<5 PPM	YES	YES	YES	YES
Acetaldehyde 75-07-0	<5 PPM	YES	YES	YES	YES

SARA 302 EXTREMELY HAZARDOUS SUBSTANCES LIST: No components of this product are listed as extremely hazardous substances in 40 CFR Part 355 and are present at levels which could require reporting and emergency planning.

SARA (311, 312) HAZARD CLASS: ACUTE HEALTH HAZARD
 CHRONIC HEALTH HAZARD
 FIRE HAZARD

SARA 313 CHEMICALS: This product contains toxic chemical(s) listed below which is(are) subject to the reporting requirements of Section 313 of Title III of SARA and 40 CFR Part 372.

METHYL ALCOHOL // 67-56-1
 ETHYL BENZENE // 100-41-4
 XYLENE (MIXED ISOMERS) // 1330-20-7

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WHMIS (CANADA):

WHMIS HAZARD CLASS: B2 FLAMMABLE LIQUIDS
 D2A VERY TOXIC MATERIALS
 D2B TOXIC MATERIALS

WHMIS TRADE SECRET: NONE

16. OTHER INFORMATION

COMPANY DISCLAIMER:

These data are offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is made. The recommended handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use.

ABBREVIATIONS:

EST = ESTIMATED NEGL. = NEGLIGIBLE
NA = NOT APPLICABLE UNKN = UNKNOWN

ADDITIONAL INFORMATION:

NONE