

MATERIAL SAFETY DATA SHEET

C.D. PRODUCTS, INC. emergency telephone #
918 N. Union St.. (920)-739-8685
Appleton, WI 54911 ISSUE DATE- 10/6/99

SECTION I: PRODUCT IDENTIFICATION

PRODUCT NAME- ARISTOTHANE

PRODUCT #- 2300 PART A

PRODUCT CLASS- Water Based Dispersion

HMIS CODE HEALTH-1 , FIRE-2, REACTIVITY-0

HAZARD RATING: 0=LEAST, 1=SLIGHT, 2= MODERATE, 3=HIGH, 4= EXTREME

SECTION II: HAZARDOUS INGREDIENTS CAS % PEL TLV

| | | | | |
|----------------------------|--|-------------|-----|-----|
| Proprietary Resin Solution | | Significant | N/E | N/E |
|----------------------------|--|-------------|-----|-----|

| | | | | |
|---------------------|--|-------|-----|-----|
| Proprietary Solvent | | Minor | N/E | N/E |
|---------------------|--|-------|-----|-----|

| | | | | |
|--------------------------|------------|-------|-----|-----|
| N-Mythyl Pyrrolidone (1) | (872-50-4) | Minor | N/E | N/E |
|--------------------------|------------|-------|-----|-----|

| | | | | |
|--------------------------------------|-------------|-------|-----|-----|
| Propylene Glycol Monopropyl Ether(1) | (1569-01-3) | Minor | N/E | N/E |
|--------------------------------------|-------------|-------|-----|-----|

% Listing: 0-10% Minor, 10-35% Moderate 35-60% Significant >60% Major N/E = Not Established

(1) As an ingredient in one or more of the proprietary ingredients.

SECTION III: PHYSICAL DATA

BOILING RANGE: > 200F

EVAPORATION RATE VS BUTYL ACETATE - slower

VAPOR DENSITY VS AIR: heavier

SOLUBILITY IN WATER: soluble

APPEARANCE AND ODOR: White liquid, mild sour odor

PERCENT VOLATILE BY VOLUME: >50

WEIGHT PER GALLON: 8.7 lb/gal

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (F): >125F

EXTINGUISHING MEDIA: water spray, dry chemical, foam or carbon dioxide

HAZARDOUS DECOMPOSITION PRODUCTS: carbon dioxide, carbon monoxide

SPECIAL FIRE FIGHTING PROCEDURES: Use self-contained breathing apparatus and full protective clothing

UNUSUAL FIRE AND EXPLOSION HAZARDS: Emits toxic fumes under fire conditions.

SECTION V: HEALTH HAZARD DATA - EFFECTS OF OVER EXPOSURE

INGESTION: No specific information. May can cause irritation. Contains N-Methyl Perrolidone which may cause irritation and central nervous system, liver and kidney effects. Contains Propylene Glycol monopropyl ether which may cause central nervous system effects and kidney damage

INHALATION: No specific information. May can cause irritation. Contains N-Methyl Perrolidone and Propylene Glycol monopropyl ether which may cause irritation, coughing, dizziness and central nervous system effects

SKIN ABSORPTION: No specific information. Contains N-Methyl Perrolidone which may cause irritation and central nervous system effects

SKIN CONTACT: No specific information. May can cause irritation. Contains N-Methyl Perrolidone which may cause irritation, redness, edema.

EYE CONTACT: No specific information. May can cause irritation. Contains N-Methyl Perrolidone and Propylene Glycol monopropyl ether which may cause irritation.

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EFFECTS OF CHRONIC OVER EXPOSURE: contains N-methyl Pyrrolidone . studies at high doses have shown N-methyl pyrrolidine to cause fetotoxic and other reproductive effects.

EMERGENCY FIRST AID PROCEDURES

EYE CONTACT: flush with water for 15 minutes, lifting upper and lower lids occasionally, and seek medical attention

SKIN CONTACT: wash immediately with soap and water, remove contaminated clothing and launder before reuse. Seek medical attention for severe exposures.

INGESTION: Seek medical attention.

INHALATION: Consult physician if irritation of respiratory passage occurs.

SECTION VI: REACTIVITY DATA

STABILITY: stable

HAZARDOUS POLYMERIZATION: will not occur

CONDITIONS TO AVOID: High temperatures, fire conditions

SECTION VII: SPILL OR LEAK PROCEDURE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Wear appropriate personal protective equipment, contain spill, pick up spilled material with a pump or sorbent and shovel. Place in container for suitable transport and disposal.

WASTE DISPOSAL: Product and soiled sorbent may be incinerated. Dispose of in accordance with federal, state and local regulations.

SECTION VIII: SPECIAL PROTECTION INFORMATION

RESPIRATORY: If airborne concentrations pose a health hazard, become irritatating use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements under 29 CFR 1910.134. For emergencies such as fire, usa positive pressure self contained breathing apparatus. **VENTILATION:** local exhaust recommended when appropriate to control employee exposure.

PROTECTIVE CLOTHING: Clothing suitable to prevent skin contact. Safety glasses. Rubber Gloves.

OTHER PROTECTIVE EQUIPMENT: Use local exhaust ventilation or respiratory protection to maintain minimum exposure. Eye wash and shower to be available.

SECTION IX: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: avoid skin contact, remove and launder contaminated clothing. Empty containers may contain residual harmful so all hazard precautions should be observed.

NOTE: To the best of our knowledge, the information contained herein is accurate. However C.D. Products. Inc assumes no liability whatsoever for the accuracy or completeness of the information contained herein. The final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

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SECTION I: PRODUCT IDENTIFICATION

PRODUCT NAME- ARISTOTHANE

PRODUCT #- 2300 PART B

PRODUCT CLASS- Aliphatic Polyisocyanate solution

HMS CODE HEALTH-1 , FIRE-2, REACTIVITY-0

HAZARD RATING: 0=LEAST, 1=SLIGHT, 2= MODERATE, 3=HIGH, 4= EXTREME

| SECTION II: HAZARDOUS INGREDIENTS | CAS | % | PEL | TLV |
|-----------------------------------|---------------|-------|-----|-----|
| Homopolymer of HDI | (28182-81-2) | Major | N/E | N/E |
| Proprietary Solvent | | Minor | N/E | N/E |
| 1-methoxy-2-acetoxyp propane | (000108-65-6) | Minor | N/E | N/E |

% Listing: 0-10% Minor, 10-35% Moderate 35-60% Significant >60% Major N/E = Not Established

SECTION III: PHYSICAL DATA

BOILING RANGE: > 300F

EVAPORATION RATE VS BUTYL ACETATE - slower

VAPOR DENSITY VS AIR: heavier

SOLUBILITY IN WATER: soluble

APPEARANCE AND ODOR: White liquid, mild odor

PERCENT VOLATILE BY VOLUME: <25

WEIGHT PER GALLON: 9.3 lb/gal

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (F): >200F

EXTINGUISHING MEDIA: water spray, dry chemical, foam or carbon dioxide

HAZARDOUS DECOMPOSITION PRODUCTS: carbon dioxide, carbon monoxide

SPECIAL FIRE FIGHTING PROCEDURES: Use self-contained breathing apparatus and full protective clothing

UNUSUAL FIRE AND EXPLOSION HAZARDS: Emits toxic fumes under fire conditions. Closed container may explode when exposed to extreme heat or burst when contaminated with water (CO2 evolved).

SECTION V: HEALTH HAZARD DATA - EFFECTS OF OVER EXPOSURE

INGESTION: May can cause irritation and possible corrosive action in the digestive tract.

INHALATION: May can cause irritation with symptoms of sore throat, coughing, runny nose, and shortness of breath.

Repeated exposure to isocyanates may cause certain individuals to develop isocyanate sensitization.

SKIN CONTACT: May cause irritation, rash, redness, edema. Prolonged or repeated contact may cause skin sensitization.

EYE CONTACT: May can cause irritation, pain, reddening, and swelling.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Asthma and other respiratory disorders, skin allergies, eczema.

EMERGENCY FIRST AID PROCEDURES

EYE CONTACT: flush with water for 15 minutes, lifting upper and lower lids occasionally, and seek medical attention immediately.

SKIN CONTACT: wash immediately with soap and water, remove contaminated clothing and launder before reuse. Seek medical attention for severe exposures.

INGESTION: Do not induce vomiting. If conscious, give 1 to 2 cups of water or milk. .Seek medical attention.

INHALATION: Move to an area free from risk of further exposure. Administer oxygen or artificial respiration as needed. Treatment is essentially symptomatic. Consult physician.

SECTION VI: REACTIVITY DATA

STABILITY: stable

HAZARDOUS POLYMERIZATION: May occur. Contact with moisture or other materials which react with isocyanates, or temperatures over 400 F (204 C) may cause polymerization.

INCOMPATIBILITIES: Water, amines, strong bases, alcohols, metal compounds and surface active materials.

DECOMPOSITION PRODUCTS: By high heat and fire: Carbon dioxide, carbon monoxide, oxides of nitrogen, HCN, HDI.

SECTION VII: SPILL OR LEAK PROCEDURE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Evacuate nonessential personnel. Remove all sources of ignition and ventilate area. Wear appropriate personal protective equipment, contain spill, cover the spill with sawdust, vermiculite, or other absorbent material. Pour decontamination solution over the spill area and allow to react for at least 10 minutes. Collect material in open containers and add further amounts of decontamination solution. Remove containers to a safe place, cover loosely, and allow to stand for 24 to 48 hours. Wash down spill area with decontamination solution. **DECONTAMINATION SOLUTIONS:** nonionic surfactant Union carbide's Tergitol TMN-10 (20%) and water (80%): concentrated ammonia (3 – 8 %), detergent (2%), and water (90-95 %).

WASTE DISPOSAL: Dispose of in accordance with federal, state and local regulations. Incineration is the preferred method.

SECTION VIII: SPECIAL PROTECTION INFORMATION

RESPIRATORY: If airborne concentrations pose a health hazard, become irritating use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements under 29 CFR 1910.134. For emergencies such as fire, use a positive pressure self contained breathing apparatus. **VENTILATION:** local exhaust recommended when appropriate to control employee exposure.

PROTECTIVE CLOTHING: Clothing suitable to prevent skin contact. Safety glasses. Rubber Gloves.

OTHER PROTECTIVE EQUIPMENT: Use local exhaust ventilation or respiratory protection to maintain minimum exposure. Eye wash and shower to be available.

SECTION IX: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: avoid skin contact, remove and launder contaminated clothing. Empty containers may contain residual harmful so all hazard precautions should be observed.

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