

MATERIAL SAFETY DATA SHEET

DATE OF PREPARATION Oct 23, 2013

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

AR-I900 Urethane Hybrid Part A (Part A)

MANUFACTURER'S NAME

PPI Tech 2700 W Cumberland St Bld 5 Lebanon, Pa 17042

Telephone Numbers and Websites

| Product Information | 717-814-7604 |
|---------------------------|---------------------------------------|
| | www.ppitechinc.com |
| | |
| | |
| | |
| | |
| *for Chemical Emergency (| ONLY (spill, leak, fire, exposure, or |
| | accident) |

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

| % by Weight | CAS Number | Ingredient | Units | Vapor Pressure |
|-------------|------------|------------------------------|---------------------------|----------------|
| 6 | 110-43-0 | Methyl n-Amyl Ketone | ; | |
| | | ACGIH TLV | 50 PPM | 3.855 mm |
| | | OSHA PEL | 100 PPM | |
| 12 | 123-86-4 | n-Butyl Acetate | | |
| | | ACGIH TLV | 150 PPM | 10 mm |
| | | ACGIH TLV | 200 PPM STEL | |
| | | OSHA PEL | 150 PPM | |
| | | OSHA PEL | 200 PPM STEL | |
| 1 | 540-88-5 | t-Butyl Acetate | | |
| | | ACGIH TLV | 200 PPM | 34 mm |
| | | OSHA PEL | 200 PPM | |
| 4 | 108-65-6 | 1-Methoxy-2-Propanol Acetate | | |
| | | ACGIH TLV | Not Available | 1.8 mm |
| | | OSHA PEL | Not Available | |
| 25 | 14808-60-7 | Quartz | | |
| | | ACGIH TLV | 0.025 mg/m3 as Resp. Dust | |
| | | OSHA PEL | 0.1 mg/m3 as Resp. Dust | |

SECTION 3 — HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

INHALATION of vapor or spray mist.

EYE or SKIN contact with the product, vapor or spray mist.

- EFFECTS OF OVEREXPOSURE
 - EYES: Irritation.
 - SKIN: Prolonged or repeated exposure may cause irritation.

INHALATION: Irritation of the upper respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

Prolonged overexposure to hazardous ingredients in Section 2 may cause adverse chronic effects to the following organs or systems: • the liver

• the urinary system

• the hematopoietic (blood-forming) system

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists.

| HMIS Codes | | |
|--------------|----|--|
| Health | 2* | |
| Flammability | 2 | |
| Reactivity | 0 | |

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

May cause allergic respiratory and/or skin reaction in susceptible persons or sensitization. This effect may be delayed several hours after exposure.

Persons sensitive to isocyanates will experience increased allergic reaction on repeated exposure.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

SECTION 4 — FIRST AID MEASURES

- EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention.
- **SKIN:** Wash affected area thoroughly with soap and water.
 - Remove contaminated clothing and launder before re-use.
- INHALATION: If any breathing problems occur during use, LEAVE THE AREA and get fresh air. If problems remain or occur later, IMMEDIATELY get medical attention.

INGESTION: Do not induce vomiting. Get medical attention immediately.

SECTION 5 — FIRE FIGHTING MEASURES

 FLASH POINT
 LEL
 UEL
 FLAMMABILITY CLASSIFICATION

 102 °F PMCC
 1.1
 13.1
 Combustible, Flash above 99 and below 200 °F

 EXTINGUISHING MEDIA Carbon Dioxide, Dry Chemical, Foam
 VNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat.

Application to hot surfaces requires special precautions.

During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used.

Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove all sources of ignition. Ventilate the area.

Remove with inert absorbent.

SECTION 7 — HANDLING AND STORAGE

STORAGE CATEGORY

DOL Storage Class II

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Contents are COMBUSTIBLE. Keep away from heat and open flame.

Consult NFPA Code. Use approved Bonding and Grounding procedures.

Keep container closed when not in use. Transfer only to approved containers with complete and appropriate labeling. Do not take internally. Keep out of the reach of children.

SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE

NO PERSON SHOULD USE THIS PRODUCT, OR BE IN THE AREA WHERE IT IS BEING USED, IF THEY HAVE CHRONIC (LONG-TERM) LUNG OR BREATHING PROBLEMS OR IF THEY EVER HAD A REACTION TO ISOCYANATES.

Use only with adequate ventilation.

Avoid contact with skin and eyes. Avoid breathing vapor and spray mist.

Wash hands after using.

This coating may contain materials classified as nuisance particulates (listed "as Dust" in Section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in Section 2, the applicable limits for nuisance dusts are ACGIH TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total dust), 5 mg/m3 (respirable fraction).

VENTILATION

Local exhaust preferable. General exhaust acceptable if the exposure to materials in Section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108.

RESPIRATORY PROTECTION

Where overspray is present, a positive pressure air supplied respirator (TC19C NIOSH/MSHA approved) should be worn. If unavailable, a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in Section 2 may be effective. Follow respirator manufacturers directions for use. Wear the respirator for the whole time of spraying and until all vapors and mists are gone. NO PERSONS SHOULD BE ALLOWED IN THE AREA WHERE THIS PRODUCT IS BEING USED UNLESS EQUIPPED WITH THE SAME RESPIRATOR PROTECTION RECOMMENDED FOR THE PAINTERS.

When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES

To prevent skin contact, wear gloves which are recommended by glove supplier for protection against materials in Section 2.

EYE PROTECTION Wear safety spectacles with unperforated sideshields.

OTHER PROTECTIVE EQUIPMENT

Use barrier cream on exposed skin.

OTHER PRECAUTIONS

This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

| PRODUCT WEIGHT | 0 | 1231 g/l |
|-------------------------------------|----------------------|-------------------------|
| SPECIFIC GRAVITY | 1.24 | |
| BOILING POINT | 208 - 308 °F | 97 - 153 °C |
| MELTING POINT | Not Available | |
| VOLATILE VOLUME | 36% | |
| EVAPORATION RATE | Slower than | |
| | ether | |
| VAPOR DENSITY | Heavier than air | |
| SOLUBILITY IN WATER | Not Available | |
| VOLATILE ORGANIC COMPOUNDS (VOC The | eoretical - As Packa | ged) |
| 2.57 lb/gal 308 g/l | Less Water and Fed | lerally Exempt Solvents |
| 2.53 lb/gal 304 g/l | Emitted VOC | |
| | | |

SECTION 10 — STABILITY AND REACTIVITY

STABILITY — Stable

CONDITIONS TO AVOID None known. INCOMPATIBILITY None known. HAZARDOUS DECOMPOSITION PRODUCTS By fire: Carbon Dioxide, Carbon Monoxide HAZARDOUS POLYMERIZATION

Will not occur

SECTION 11 — TOXICOLOGICAL INFORMATION

CHRONIC HEALTH HAZARDS

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Crystalline Silica (Quartz, Cristobalite) is listed by IARC and NTP. Long term exposure to high levels of silica dust, which can occur only when sanding or abrading the dry film, may cause lung damage (silicosis) and possibly cancer.

TOXICOLOGY DATA

| CAS No. | Ingredient Name | | | | |
|------------|------------------------------|----------|-----|---------------|--|
| 110-43-0 | Methyl n-Amyl Keto | ne | | | |
| | | LC50 RAT | 4HR | Not Available | |
| | | LD50 RAT | | 1670 mg/kg | |
| 123-86-4 | n-Butyl Acetate | | | | |
| | | LC50 RAT | 4HR | 2000 ppm | |
| | | LD50 RAT | | 13100 mg/kg | |
| 540-88-5 | t-Butyl Acetate | | | | |
| | • | LC50 RAT | 4HR | Not Available | |
| | | LD50 RAT | | Not Available | |
| 108-65-6 | 1-Methoxy-2-Propanol Acetate | | | | |
| | | LC50 RAT | 4HR | Not Available | |
| | | LD50 RAT | | 8500 mg/kg | |
| 14808-60-7 | Quartz | | | ÷ ÷ | |
| | | LC50 RAT | 4HR | Not Available | |
| | | LD50 RAT | | Not Available | |
| | | | | | |

SECTION 12 — ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

No data available.

SECTION 13 — DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Waste must be tested for ignitability to determine the applicable EPA hazardous waste numbers.

Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution.

SECTION 14 — TRANSPORT INFORMATION

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

US Ground (DOT)

May be Classed as a Combustible Liquid for U.S. Ground.

UN1263, PAINT, 3, PG III, (ERG#128)

Bulk Containers may be Shipped as: UN1263, PAINT, COMBUSTIBLE LIQUID, PG III, (ERG#128)

Canada (TDG)

May be Classed as a Combustible Liquid for Canadian Ground.

UN1263, PAINT, CLASS 3, PG III, (ERG#128)

IMO

5 Liters (1.3 Gallons) and Less may be Shipped as Limited Quantity.

UN1263, PAINT, CLASS 3, PG III, (39 C c.c.), EmS F-E, <u>S-E</u>

IATA/ICAO

UN1263, PAINT, 3, PG III

SECTION 15 — REGULATORY INFORMATION

SARA 313 (40 CFR 372.65C) SUPPLIER NOTIFICATION

 CAS No.
 CHEMICAL/COMPOUND
 % by WT
 % Element

 No ingredients in this product are subject to SARA 313 (40 CFR 372.65C) Supplier Notification.
 % Element
 % Element

CALIFORNIA PROPOSITION 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. TSCA CERTIFICATION

All chemicals in this product are listed, or are exempt from listing, on the TSCA Inventory.

SECTION 16 — OTHER INFORMATION

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.