



Material Safety Data Sheet

Revised 13 March 2008

Section 1 - Product and Company Identification

Product Name: 9948, Armor Var Plus (5, 10, 20, 35, 45, 60, or 90 Sheen)
Product Codes: 9948-5, 9948-10, 9948-20, 9948-35, 9948-45, 9948-60, or 9948-90
Manufacturer: David E. Easterday & Company, Inc.
Address: P.O. Box 332
Mount Eaton, Ohio 44659

Emergency Phone: 1-800-322-8172
(Monday - Friday, 7:30 a.m. to 5:00 p.m. EST)

Chemtrec Phone: 1-800-424-9300
Other Calls: (330) 359-0700
Facsimile: (330) 359-0800

Section 2 - Composition/Information on Ingredients

| <u>Ingredient</u> | <u>CAS No.</u> | <u>HAP (Y/N)</u> | <u>VOC (Y/N)</u> | <u>% by Wt.</u> |
|--|----------------|------------------|------------------|-----------------|
| n-butyl acetate | 123-86-4 | No | Yes | 38 |
| acetone | 67-64-1 | No | No | 6 |
| ethyl alcohol | 64-17-5 | No | Yes | 6 |
| 2-butoxyethanol | 111-76-2 | No | Yes | 5 |
| isopropyl alcohol | 67-63-0 | No | Yes | 2 |
| xylene | 1330-20-7 | Yes | Yes | 2 |
| methyl propyl ketone | 107-87-9 | No | Yes | 2 |
| bis(2-ethylhexyl)-1,4-benzenedicarboxylate | 6422-86-2 | No | Yes | 2 |
| formaldehyde | 50-00-0 | Yes | Yes | < 0.10 |

Section 3 - Hazards Identification

Emergency Overview: This product is a clear liquid with a strong solvent odor. Inhalation overexposure to the vapors this product can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness. A component of this product is suspected to be carcinogenic and teratogenic in humans. This product is flammable and can be readily ignited under normal ambient conditions. Vapors of this product may travel to a source of ignition and flashback to a leak or open container. If involved in a fire, this product will release smoke and toxic gases (i.e., carbon monoxide, carbon dioxide). This product is not reactive. Emergency responders must wear proper personal protective equipment suitable for the situation to which they are responding.

Routes of Entry: Inhalation, Skin Absorption, Ingestion. Skin Contact. Eye Contact.

Inhalation - Can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness. Irritation may be delayed for several hours.

Skin Absorbtion - Can be absorbed through the skin but exposure must be extensive before adverse health

effects occur. Can be toxic if absorbed through the skin; may cause target organ damage. Minimal hazard in normal industrial use. May cause gastrointestinal discomfort.

Ingestion - Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal. Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.

Skin Contact - Moderately irritation to the skin. Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

Eye Contact - Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue. Contact with the eyes may cause moderate to severe eye injury. Temporary vision impairment (cloudy or blurred vision) is possible.

Medical Conditions Aggravated: May aggravate pre-existing skin disorders, respiratory disorders, kidney disease, liver disease, eye disorders, and or gastrointestinal disorders.

Carcinogenicity: NTP Carcinogen - **Yes (formaldehyde gas - reasonably anticipated to be a human carcinogen)**
IARC Monographs - **Yes (formaldehyde - nasopharyngeal, leukemia, sinonasal)**
Yes (2-butoxyethanol - Group 3, not classifiable as to carcinogenicity)
OSHA Regulated - **Yes (formaldehyde - 29CFR1910.1048)**
NIOSH - **Yes (formaldehyde - A2, suspected human carcinogen)**

Teratogenicity: Possible reproductive hazard. A component in this product has been shown to cause birth defects and reproductive disorders in laboratory animals at doses that could be encountered in the workplace.

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% is mutagenic.

Section 4 - First Aid Measures

Inhalation: Move victim to fresh air. If not breathing, call 911 (or emergency services number if 911 service is not available) and administer artificial respiration. If breathing is difficult, have a trained individual administer oxygen. Get medical attention immediately.

Eyes: Immediately flush eyes with plenty of water for at least 20 minutes - opening and closing eyelids often. Get medical attention immediately.

Skin Contact: Wash with mild soap and water. If clothing is contaminated, remove contaminated clothing being careful to avoid additional skin contact. Wash contaminated clothing before reuse. Get medical attention if irritation develops or persists.

Ingestion: Do not induce vomiting. Call 911 (or emergency services number if 911 service is not available). Get medical attention immediately.

Section 5 - Fire Fighting Measures

Flashpoint: 72 ° Fahrenheit

Method Used: *N-Butyl Acetate*

Lower Flammable/Explosive Limit: 1.70%

Upper Flammable/Explosive Limit: 7.68%

Extinguishing Media: Alcohol Resistant Foam, CO₂, and Dry Chemical extinguishing agents.

Special Fire Fighting Procedures: Firefighters should wear self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to potential of hazardous vapors and decomposition products.

Unusual Fire and Explosion Hazards: Solvent vapors are heavier than air and may travel a considerable distance to a source of ignition and then flash back. Avoid accumulation of water. Solvent may float and reignite on surface of water. Closed containers may explode due to pressure build-up when exposed to extreme heat. Use water spray/fog for cooling. Do not cut, drill, grind, or weld near containers - even when empty. Residual product or vapors may ignite or explode.

Sensitive to Static Discharge: Appropriate grounding and bonding procedures should be followed when storing, transferring and applying this product to eliminate a build-up of static charge.

Section 6 - Accidental Release Measures

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with a suitable absorbent material. Gather and store in an approved and sealed container pending a waste disposal evaluation.

Section 7 - Handling and Storage

Handling: Rags or other materials containing this product may oxidize and ignite. All contaminated materials should be isolated immediately to avoid spontaneous combustion. Iron oxide pigments may accelerate this process. Use spark-proof tools and explosion-proof equipment. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Wash hands thoroughly after handling. Contents may develop pressure upon prolonged storage. Avoid contact with material. Avoid contact and avoid breathing vapors and fumes. Use only in a well ventilated area.

Storage: Keep away from sources of ignition. Keep away from heat, sparks, and flame. Avoid exposure to sunlight or ultraviolet (UV) light sources. Keep container closed when not in use. Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed.

Section 8 - Engineering Controls and Personal Protective Equipment

Engineering Controls: Check applicable ventilation codes. Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

Personal Protective Equipment:

Respiratory Tract - Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical evaluation, training, fit testing, exposure assessments, maintenance, inspection, cleaning and convenient, sanitary storage should be implemented.

Eyes - Wear chemically resistant safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available.

Skin - Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving the jobsite.

Section 9 - Physical and Chemical Properties

| | |
|---------------------------------|--------------------------------------|
| Physical State | liquid |
| Odor | strong solvent |
| Solids, Wt % (calc.) | 36.76 to 38.89, depending upon sheen |
| Material VOC, lbs/gal (calc.) | 4.40 |
| Coating VOC, lbs/gal (calc.) | 4.9 |
| Weight per gallon (calc.) | 7.75 to 8.02, depending upon sheen |
| VHAPs, lbs/lb of solids (calc.) | < 0.08 |

Section 10 - Stability and Reactivity

Stability: Spontaneous combustion can occur. Stable under normal conditions.

Conditions to Avoid: Heat, sparks, open flames or other sources of ignition.

Incompatibility (Materials to Avoid): Strong oxidizing agents. Strong acids. Peroxides.

Hazardous Decomposition or Byproducts: Carbon monoxide, Carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

| <u>Ingredient</u> | <u>CAS No.</u> | <u>LC₅₀/LD₅₀/IDLH</u> |
|----------------------|----------------|---|
| n-butyl acetate | 123-86-4 | LC50 Rat - 160 ppm to 2,000 ppm/4 hrs; IDLH - 1,700 ppm |
| isopropyl alcohol | 67-63-0 | LC50 Rat - 12,000 ppm/8 hrs; LD50 Rat - 5,045 mg/kg; IDLH - 2,000 ppm |
| acetone | 67-64-1 | LC50 Rat - 20,702 ppm/8 hrs; LD50 Rat - 5,800 mg/kg; IDLH - 2,500 ppm |
| methyl propyl ketone | 107-87-9 | LD50 Rat - 1,600 mg/kg; LD50 Mouse - 1,600 mg/kg; IDLH - 1,500 ppm |
| 2-butoxyethanol | 111-76-2 | LC50 Rat - 450 ppm/4 hrs; LD50 Rat - 470 mg/kg to 1,480 mg/kg; IDLH - 700 ppm |
| formaldehyde | 50-00-0 | LC50 Rat - 815 ppm/30 min; LC50 Mouse - 333 ppm/2 hrs; LD50 Rat - 100 mg/kg; LD50 Rabbit - 270 mg/kg; IDLH - 20 ppm |

Target Organ Acute Toxicity

| | |
|----------------------|---|
| n-butyl acetate | eyes, skin, respiratory system, CNS |
| isopropyl alcohol | eyes, skin, respiratory system |
| acetone | eyes, respiratory system, CNS, liver, kidneys, gastrointestinal tract |
| methyl propyl ketone | eyes, skin, respiratory system, CNS |
| 2-butoxyethanol | eyes, skin, respiratory system, CNS, blood, liver, kidneys |
| formaldehyde | eyes, skin, respiratory system |

Section 12 - Ecological Information

Overview: No data available. No ecological information available.

Section 13 - Disposal Considerations

Waste Disposal Method: Whatever cannot be recovered, reused, or recycled in an appropriate manner should be disposed of at an approved waste facility. Processing, use or contamination of this product may change the the waste management options. Dispose of container and unused contents in accordance with applicable federal, state and local laws and regulations.

EPA: If disposed, this coating is considered a RCRA ignitable waste, D001.

Components Subject to EPA Land Ban Restrictions:

| | |
|-----------------|-----------|
| acetone | 67-64-1 |
| xylene | 1330-20-7 |
| n-butyl alcohol | 78-92-2 |
| formaldehyde | 50-00-0 |

Section 14 - Transportation Information

| | | |
|--|------------------------------|---------|
| U.S. Department of Transportation | Proper Shipping Name: | Paint |
| Title 49 CFR, Subchapter C | Hazard Class: | 3 |
| | I.D. Number: | UN 1263 |
| | Packing Group: | II |

| | | |
|--|----------------------|-----|
| Emergency Response Guidebook (2004) | Guide Number: | 128 |
|--|----------------------|-----|

Section 15 - Regulatory Information

Sara 313 Reportable:

| <u>Chemical</u> | <u>CAS No.</u> | <u>Chemical</u> | <u>CAS No.</u> |
|-------------------|----------------|----------------------|----------------|
| n-butyl acetate | 123-86-4 | methyl propyl ketone | 107-87-9 |
| isopropyl alcohol | 67-63-0 | xylene | 1330-20-7 |
| acetone | 67-64-1 | formaldehyde | 50-00-0 |

Section 16 - Other Information

To the best of our knowledge, the information and recommendations contained herein were believed to be accurate at the time of preparation, or obtained from sources believed to be reliable. However, it is the user's responsibility to determine safety, toxicity, and suitability for his own use of the product. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding the product described, data or information set forth. In no case shall the descriptions, information or data provided be considered as part of our terms and conditions of sale. The descriptions, information and data furnished herein are given gratis. No obligation or liability for the descriptions, information and data given are assumed. All such being given and accepted at your risk.

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