

MATERIAL SAFETY DATA SHEET

The W. J. Ruscoe Co.

Page 1
Date Prepared: 10/27/06
Date Printed: 10/27/06
MSDS Reference No.: R-27

1. Chemical Product and Company Identification

Material Identity

Product Name: Permanent Sealer – Aluminum High Viscosity (APS-HV)

Product Number: 49425A

Generic ID: Synthetic Rubber Sealant

Company

W. J. Ruscoe Company

485 Kenmore Blvd.

Akron, Ohio 44301

Telephone: 330-253-8148

Emergency Telephone: 800-424-9300
(Chemtrec – 24 hours/day)

Fax: 330-253-2933

2. Composition/Information on Ingredients

Ingredients	CAS Number	% (by weight)
Methyl Ethyl Ketone (2-Butanone)	78-93-3	45-50
Synthetic Rubber	9003-18-3	20-24
Phenolic Resin	N/A	9-11
Aluminum Powder	7429-90-5	7-10
Talc	14807-96-6	3-5
Vinyl Chloride-Vinyl Acetate-Maleic Acid Terpolymer	9005-09-8	3-5
Mineral Spirits	8052-41-3	2.5-4.5
Hexamethylenetetramine	100-97-0	0.1-0.2
Titanium Dioxide	13463-67-7	0.1-0.2
Mica	12001-26-2	<0.1
Phenol	108-95-2	<0.1
Quartz	14808-60-7	<0.1
Formaldehyde	50-00-0	<0.03

3. Hazards Identification

Potential Health Effects

Eye

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Continued on next page

MATERIAL SAFETY DATA SHEET

The W. J. Ruscoe Co.

Page 2

Date Prepared: 10/27/06

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MSDS Reference No.: R-27

Skin

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry the skin. Additional symptoms of skin contact may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects.) Passage of this material into the body is possible, and may add to toxic effects from breathing or swallowing.

Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Prolonged or repeated breathing of dust may result in progressive and permanent lung disease (fibrosis) which may cause death from respiratory and/or heart failure. Symptoms include coughing and difficult breathing which becomes worse with physical activity.

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), and death.

Target Organ Effects

Based on animal studies, exposure to methyl ethyl ketone (MEK) increases the onset of peripheral neuropathy caused by exposure to methyl butyl ketone (MBK), and/or n-hexane, and/or ethyl butyl ketone. MEK alone has not been shown to cause peripheral neuropathy. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: liver abnormalities, kidney damage, brain damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: liver abnormalities, eye damage, kidney damage.)

Developmental Information

No data

Cancer Information

Inhalation exposure of formaldehyde has been shown to cause nasal tumors in rats, and ingestion of formaldehyde in drinking water has been shown to cause leukemia and

Continued on next page

MATERIAL SAFETY DATA SHEET

The W. J. Ruscoe Co.

Page 3

Date Prepared: 10/27/06

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MSDS Reference No.: R-27

gastrointestinal tract tumors in rats. Epidemiology studies have not clearly associated exposure to formaldehyde with cancer in man. Formaldehyde is listed as a carcinogen by IARC, NTP, and OSHA.

Other Health Effects

No data

Primary Routes of Entry

Inhalation, Skin absorption, and Skin contact.

4. First Aid Measures

Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with plenty of water for at least 15 minutes while holding eyelids apart; seek medical attention.

Skin

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If Breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Note to Physicians

This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See section 3 – Swallowing) when deciding whether to induce vomiting. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), liver, kidney, central nervous system, eye.

5. Fire Fighting Measures

Flash Point

24 F (-4 C) TCC

Continued on next page

MATERIAL SAFETY DATA SHEET

The W. J. Ruscoe Co.

Page 4

Date Prepared: 10/27/06

Date Printed: 10/27/06

MSDS Reference No.: R-27

Explosive Limit

(for component) Lower 2.0 Upper 11.5

Autoignition Temperature

No data

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, phenols, various hydrocarbons.

Fire and Explosion Hazards

Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media

Regular foam, water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear a self-contained breathing apparatus with a full facepiece operate in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating

Not determined

6. Accidental Release Measures

Small Spill

Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to hood. Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks.

Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from the area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal.

Continued on next page

MATERIAL SAFETY DATA SHEET

The W. J. Ruscoe Co.

Page 5

Date Prepared: 10/27/06

Date Printed: 10/27/06

MSDS Reference No.: R-27

7. Handling and Storage

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/or bonded when material is transferred.

8. Exposure Controls/Personal Protection

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory Precautions

If workplace exposure limits of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLVs.

Exposure Guidelines

Component

Methyl Ethyl Ketone (78-93-3)
OSHA VPEL 200 ppm – TWA
OSHA VPEL 300 ppm – STEL
ACGIH TLV 200 ppm – TWA

Continued on next page

ACGIH TLV 300 ppm – STEL

Nitrile Rubber
No exposure limits established

Talc (14807-96-6)
OSHA VPEL 2mg/m³ – TWA respirable dust
ACGIH TLV 2mg/m³ – TWA respirable dust, as talc

Phenolic Resin
No exposure limits established

Aluminum (7429-90-5)
OSHA VPEL 5 mg/m³ – TWA respirable fraction, as Al
OSHA VPEL 15 mg/m³ – TWA total dust, as Al
ACGIH TLV 2 mg/m³ – TWA alkyls (NOC), as Al
ACGIH TLV 5 mg/m³ – TWA pyro powders, as Al
ACGIH TLV 2 mg/m³ – TWA soluble salts, as Al
ACGIH TLV 5 mg/m³ – TWA welding fumes, as Al
ACGIH TLV 10 mg/m³ – TWA metal dust, as Al

Hydrocarbon Solvent (64742-88-7)
OSHA VPEL 100ppm – TWA
ACGIH TLV 100ppm – TWA

Mica (120001-26-2)
OSHA VPEL 3 mg/m³ – TWA respirable dust (less than 1% crystalline silica) (Listed under 'Silicates')
ACGIH TLV 3 mg/m³ – TWA (this TLV is for the respirable fraction of dust for talc)

Phenol (108-95-2)
OSHA VPEL 5 ppm – TWA (Skin)
ACGIH TLV 5 ppm – TWA (Skin)

Formaldehyde (50-00-0)
OSHA VPEL 0.75 ppm – TWA
OSHA VPEL 2 ppm – STEL
ACGIH TLV 0.3 ppm – Ceiling

Quartz (14808-60-7)
OSHA VPEL 0.1 mg/m³ – TWA respirable dust
ACGIH TLV 0.05 mg/m³ – TWA (this TLV is for the respirable fraction of dust)

MATERIAL SAFETY DATA SHEET

The W. J. Ruscoe Co.

Page 7

Date Prepared: 10/27/06

Date Printed: 10/27/06

MSDS Reference No.: R-27

9. Physical and Chemical Properties

Boiling Point

(for component) 175 F (79 C) @ 760 mmHg

Vapor Pressure

(for Product) 71 mmHg @ 68 F

Specific Vapor Density

2.5 @ air=1

Specific Gravity

0.96 @ 77 F

Liquid Density

8.0 lbs/gal @ 74 F

Percent Volatiles

54 %

Evaporation Rate

Slower than ethyl ether

Appearance

Aluminum colored liquid

State

Liquid

Physical Form

No data

Color

Aluminum colored heavy syrup

Odor

No data

pH

Not applicable

10. Stability and Reactivity

Continued on next page

MATERIAL SAFETY DATA SHEET

The W. J. Ruscoe Co.

Page 8
Date Prepared: 10/27/06
Date Printed: 10/27/06
MSDS Reference No.: R-27

Hazardous polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide, phenols, various hydrocarbons.

Chemical Stability

Stable

Incompatibility

Avoid contact with: strong alkalis, strong mineral acids, strong oxidizing agents.
Aluminum reacts with water, acids, and alkalis and may produce combustible hydrogen gas.

11. Toxicological Information

No data

12. Ecological Information

No data

13. Disposal Information

Waste Management Information

Destroy by liquid incineration in accordance with applicable regulations.

14. Transport Information

DOT Information – 49 CFR 172.101

DOT Description

Adhesives, 3, UN1133, III

Container/Mode:

55 gal drum/Truck package

NOS Component:

None

RQ (Reportable Quantity) – 49 CFR 172.101

Product Quantity (lbs) Component

MATERIAL SAFETY DATA SHEET

The W. J. Ruscoe Co.

Page 9

Date Prepared: 10/27/06

Date Printed: 10/27/06

MSDS Reference No.: R-27

10000

Ethyl Methyl Ketone

15. Regulatory Information

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (United States) The intentional ingredients of this product are listed.

CERCLA RQ – 40 CFR 302.4(a)

Component	RQ (lbs)
Methyl Ethyl Ketone	5000
Phenol	1000
Formaldehyde	100

CERCLA RQ – 40 CFR 302.4(b)

Materials without a “listed” RQ may be reportable as an “unlisted hazardous substance.” See 40 CFR 302.5(b).

SARA 302 Components – 40 CFR 355 Appendix A

Section 302 Components	TPQ (lbs)	RQ (lbs)
Phenol	500/10000	1000
Formaldehyde	500	100

Section 311/312 Hazard Class – 40 CFR 370.2

Immediate (X) Delayed (X) Fire (X) Reactive () Sudden Release
of Pressure ()

SARA 313 Components – 40 CFR 372.65

Section 313 Components	CAS Number	%
Methyl Ethyl Ketone	78-93-3	50
Aluminum	7429-90-5	10
Phenol	108-95-2	0.1
Formaldehyde	50-00-0	0.03

International Regulations

Inventory Status

Not Determined

Continued on next page

MATERIAL SAFETY DATA SHEET

The W. J. Ruscoe Co.

Page 10

Date Prepared: 10/27/06

Date Printed: 10/27/06

MSDS Reference No.: R-27

State and Local Regulations

California Proposition 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substances known to the State of California to cause cancer.

Formaldehyde	50-00-0
1,3-Butadiene	106-99-0
Acrylonitrile	107-13-1
Quartz	14808-60-7

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substances known to the state of California to cause reproductive harm.
None

New Jersey RTK Label Information

Methyl Ethyl Ketone	78-93-3
Aluminum	7429-90-5
Silica, Mica	12001-26-2
Talc	14807-96-6

Pennsylvania RTK Label Information

2-Butanone	78-93-3
Aluminum	7429-90-5
Mica Group Minerals	12001-26-2
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	14807-96-6

16. Other Information

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of the need that the information is current, applicable, and suitable to their circumstances.

End of MSDS