













M102-0475 SHELLAC CLEAR AEROSOL

MATERIAL SAFETY DATA SHEET

RPM Wood Finishes Group 3194 Hickory Boulevard Hudson, North Carolina 28638 828-728-8266

Health: 1 Flammability: 4 Reactivity 0

PRODUCT NAME: M102-0475 SHELLAC CLEAR AEROSOL

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

 REVISION DATE:
 31/08/05

 SUPERCEDES:
 15/07/02

 MSDS NO.
 M102-0475

II. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	%	CAS#	PEL
ethanol	31-40	64-17-5	1000 ppm TWA; 1900 mg/m3 TWA
acetone	21-30	67-64-1	1000 ppm TWA; 2400 mg/m3 TWA
propane	11-20	74-98-6	1000 ppm TWA; 1800 mg/m3 TWA
isopropanol	1-10	67-63-0	400 ppm TWA; 980 mg/m3 TWA
isobutane	1-10	75-28-5	No PEL established
shellac	1-10	9000-59-3	No PEL established
butanol	1-10	78-92-2	150 ppm TWA; 450 mg/m3 TWA
Methanol	1-10	67-56-1	200 ppm TWA; 260 mg/m3 TWA
n-propyl acetate	1-10	109-60-4	200 ppm TWA; 840 mg/m3 TWA
methyl isobutyl ketone	<1	108-10-1	100 ppm TWA; 410 mg/m3 TWA

III. HAZARDS IDENTIFICATION

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

Medical Conditions Aggravated: Eye disease. Liver disease. Skin disease including eczema and sensitization.

Respiratory disease including asthma and bronchitis. Digestive tract disease.

Immediate (Acute) Health Effects

Inhalation: Irritation may be delayed for several hours. Can cause moderate respiratory irritation,

dizziness, weakness, fatigue, nausea and headache.

Skin Contact: Substance causes moderate skin irritation. Can cause minor skin irritation, defatting,

and dermatitis.

Eye Contact: Can cause irritation. 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. Eye contact may result in tearing and reddening, but not likely to permanently injure eye tissue. Temporary vision impairment (cloudy or blurred

vision) is possible.

Skin Absorption: Contains methanol. Upon prolonged or repeated exposure, may cause deterioration of

the optic nerve if large quantities are absorbed through the skin. Repeated absorption of large quantities may lead to blindness. No absorption hazard in normal industrial

use.

Ingestion: No hazard in normal industrial use. Irritating to mouth, throat, and stomach. Can

cause abdominal discomfort, nausea, vomiting and diarrhea.

Target Organ Acute Toxicity:

Ethyl alcohol respiratory system, skin, eyes, CNS, liver, blood, reproductive system

Acetone respiratory system, skin, eyes, CNS

Propane CNS

Isopropyl alcohol eyes, skin, respiratory system

Isobutane CNS

n-Butyl alcohol eyes, CNS, skin, respiratory system

Methyl alcohol skin, eyes, CNS, GI tract, respiratory system

n-Propyl acetate skin, eyes, CNS, respiratory system

Hexone eyes, skin, CNS, respiratory system, liver, kidneys

Long-Term (Chronic) Health Effects:

Carcinogenicity: ACGIH. IARC. NIOSH. NTP. OSHA. None of the substances have been shown to

cause cancer in long term animal studies. Not a carcinogen according to NTP, IARC,

or OSHA.

Reproductive and Developmental

Toxicity:

No information available.

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

is mutagenic or genotoxic.

Inhalation: Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation,

dizziness, weakness, fatigue, nausea and headache.

Skin Contact: Prolonged or repeated contact may cause irritation. Upon prolonged or repeated

contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to

cause permanent damage.

Eye Contact: Upon prolonged or repeated contact, can cause moderate to severe eye injury. Eye

contact may result in tearing and reddening, but not likely to permanently injure eye

tissue. Temporary vision impairment (cloudy or blurred vision) is possible.

Skin Absorption: Upon prolonged or repeated exposure, harmful if absorbed through the skin. May

cause severe irritation and systemic damage.

Target Organ Chronic Toxicity: Eyes. Blood. Liver. Skin. Nervous System. Respiratory Tract. Digestive Tract.

Supplemental Health Hazard

Information:

No additional health information available.

IV. FIRST AID

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. Get immediate medical attention. Remove to fresh air.

Eyes: Immediately flush eyes with plenty of water. Get medical attention, if irritation

persists. Use an eye wash to remove a chemical from your eye regardless of the level of hazard. Flush the affected eye for at least twenty minutes. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Seek medical advice after

flushing.

Skin Contact: Wash with soap and water. Wash with soap and water. Get medical attention if

irritation develops or persists.

Ingestion: No hazard in normal industrial use. Do not induce vomiting. Seek medical attention

if symptoms develop. Provide medical care provider with this MSDS.

Notes to MD: No additional first aid information available.

V. FIRE FIGHTING MEASURES

Flammability Summary:

Upper Flammable/Explosive

Limit, % in air:

Lower Flammable/Explosive

Limit, % in air:

12.8 @ 77° F

2.5 @ 77° F

Fire Hazards: Empty containers that retain product residue (liquid, solid/sludge, or vapor) can be

dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. Any of these actions can potentially cause an explosion that may lead to injury or death. Container may explode in heat of fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. If product is heated above its flash point it will release flammable vapors which can burn in the open or be explosive in confined spaces if exposed to ignition source. Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a Class B fire. Vapors are heavier than air and may travel to a

source of ignition and flash back.

Extinguishing Media: Use alcohol resistant spray, Carbon Dioxide, water spray or dry chemical to

extinguish a fire involving this chemical. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and keep exposed material from being damaged by fire.

Fire Fighting Instructions: Flammable component(s) of this material may be lighter than water and burn while

floating on the surface. Use methods for the surrounding fire.Do not enter fire area without proper protection including self-contained toxic breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to

the potential of hazardous vapors and decomposition products. Flammable

component(s) of this material may be lighter than water and burn while floating on

the surface. Use water spray/fog for cooling.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

VI. ACCIDENTAL RELEASE MEASURES

Health Consideration for Spill Response:

Evaporation of volatile substances can lead to the displacement of air creating an environment that can cause asphyxiation. No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section VIII of this MSDS

Spill Mitigation Procedures General Methods:

Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area. No special spill clean-up considerations. Collect and discard in regular trash.

VII. HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Avoid contact with material. Ground and bond

containers when transferring material. Keep in air-tight containers- material is hygroscopic. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Use spark-proof tools and explosion-proof equipment. Remove contaminated clothing and wash before reuse. Mildly irritating material. Avoid

unnecessary exposure.

Storage: Do not store near combustible materials. Keep away from sources of ignition. Keep

away from heat, sparks, and flame. Keep container closed when not in use. Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep

container(s) closed.

VIII. ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT

Engineering Controls: Facilities storing or using this material

Facilities storing or using this material should be equipped with an eyewash and safety shower. Ventilation should effectively remove and prevent buildup of any vapor/mist/fume generated from the handling of this product. Explosion proof exhaust ventilation should be used. No exposure limits exist for the constituents of this product. Use local exhaust ventilation or other engineering controls to minimize

exposures and maintain operator comfort.

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 certification, 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 work.

IX. PHYSICAL DATA

Physical State: COLORED LIQUID **Odor:** STRONG SOLVENT

Solids Vol %:

Solids Wt %:

4.9307

Material VOC lbs/gal:

Material VOC gms/l:

Coatings VOC lbs/gal:

5.5678

Coatings VOC gms/l:

Weight per gallon lbs:

3.0269

4.9307

4.1141

494.0698

668.6497

VOC data per US EPA guidelines. State and local variations may apply.

X. STABILITY AND REACTIVITY

Stability Information: Stable. Normally stable. Keep away from heat, sparks and flame.

Conditions to Avoid: Avoid: heat, sparks, flame and oxidizing agents. Contact with air. Sparks, open flame,

other ignition sources, and elevated temperatures.

Chemical Incompatibility: Strong oxidizing agents. Strong acids. Acids. Acetic anhydride. Peroxides. Oxidizing

materials. Nitrogen oxides. Strong alkalies.

Hazardous Polymerization: Hazardous Polymerization will not occur.

XI. TOXICOLOGICAL INFORMATION

Chemical Name	CAS Number	LD50/LC50
Ethyl alcohol	64-17-5	Inhalation LC50 Rat: 20000 ppm/10H; Inhalation LC50 Mouse: 39
		gm/m3/4H; Oral LD50 Rat: 7060 mg/kg; Oral LD50 Mouse: 3450 mg/kg
Acetone	67-64-1	Inhalation LC50 Rat: 50100 mg/m3/8H; Inhalation LC50 Mouse: 44
		gm/m3/4H; Oral LD50 Rat: 5800 mg/kg; Oral LD50 Mouse: 3 gm/kg
Isopropyl alcohol	67-63-0	Inhalation LC50 Rat: 16000 ppm/8H; Oral LD50 Rat: 5045 mg/kg; Oral
		LD50 Mouse: 3600 mg/kg; Dermal LD50 Rabbit: 12800 mg/kg
Propane, 2-methyl-	75-28-5	Inhalation LC50 Rat: 57 pph/15M
sec-Butyl alcohol	78-92-2	Inhalation LC50 Rat: 8000 ppm/4H; Oral LD50 Rat: 790 mg/kg; Oral LD50
		Mouse: 2680 mg/kg; Dermal LD50 Rabbit: 3400 mg/kg
Methanol	67-56-1	Inhalation LC50 Rat: 64000 ppm/4H; Oral LD50 Rat: 5628 mg/kg; Oral
		LD50 Mouse: 7300 mg/kg; Dermal LD50 Rabbit: 15800 mg/kg
Acetic acid, propyl ester	109-60-4	Oral LD50 Rat: 9370 mg/kg; Oral LD50 Mouse: 8300 mg/kg; Dermal LD50
		Rabbit : >20 mL/kg
2-Pentanone, 4-methyl-	108-10-1	Inhalation LC50 Mouse: 23300 mg/m3; Oral LD50 Rat: 2080 mg/kg; Oral
		LD50 Mouse: 2671 mg/kg; Dermal LD50 Rabbit: >20 mL/kg

XII. ECOLOGICAL INFORMATION

Overview (for ingredients): Keep out of waterways. Moderate ecological hazard. This product may be dangerous

to plants and/or wildlife.

XIII. DISPOSAL CONSIDERATIONS

Product:

Waste Description for Spent The waste may be a listed and/or characteristic hazardous waste. Spent or discarded

material is a hazardous waste.

Disposal Methods: Comply with all Local, State, Federal, and Provincial Environmental Regulations.

Dispose of by incineration following Federal, State, Local, or Provincial regulations.

Potential EPA Waste Codes: If discarded, this product is considered a RCRA ignitable waste, D001.

Components Subject to USEPA Land Disposal Restrictions:

Acetone	67-64-1	28.00 %
n-Butyl alcohol	78-92-2	4.00 %
Methanol	67-56-1	2.48 %
Methyl isobutyl ketone	108-10-1	0.5 %

XIV. TRANSPORTATION INFORMATION

DOT Flammable Gas (2.1) UN1950 G126; Quart or less ship: ORM-D See 49CFR 172.101 for Special Provisions, Packaging, and Quantity Limitations.

XV. REGULATORY INFORMATION

Chemical Name	Regulation	CASRN	%
Isopropyl alcohol	SARA 313 Reportable:	67-63-0	6.58
sec-Butyl alcohol	SARA 313 Reportable:	78-92-2	4.00
Methanol	SARA 313 Reportable:	67-56-1	2.48
Methylisobutyl ketone	SARA 313 Reportable:	108-10-1	0.5
Ethyl alcohol	California Proposition 65	64-17-5	31.54
·	Developmental Toxicity:		
ethanol	New Jersey Right To Know:	64-17-5	31.54
acetone	New Jersey Right To Know:	67-64-1	28.00
propane	New Jersey Right To Know:	74-98-6	13.76
isopropanol	New Jersey Right To Know:	67-63-0	6.58
isobutane	New Jersey Right To Know:	75-28-5	6.24

XVI. ADDITIONAL INFORMATION

Other Information:

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MSDS glossary.