



B103-012 Gloss Topcoat Lacquer

MATERIAL SAFETY DATA SHEET

RPM Wood Finishes Group
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FOR ALL INTERNATIONAL TRANSPORTATION ACCIDENTS. 1-703-527-3887 (collect)

Health: 2 Flammability: 4 Reactivity 0

PRODUCT NAME: B103-012 Gloss Topcoat Lacquer

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

REVISION DATE:	19/09/03
SUPERCEDES:	30/01/02
MSDS NO.	B103-012
OSHA HAZ. CLASS:	Eye irritant. Neurotoxin - may cause nervous system damage. Mucous membrane (respiratory tract) irritant. Hepatotoxin - may cause liver damage.

II. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	%	CAS #	PEL
ethyl acetate	21-30	141-78-6	400 ppm TWA; 1400 mg/m3 TWA
n-butyl acetate	11-20	123-86-4	150 ppm TWA; 710 mg/m3 TWA
propane	11-20	74-98-6	1000 ppm TWA; 1800 mg/m3 TWA
rosin ester	1-10	8050-31-5	No PEL established
isobutane	1-10	75-28-5	No PEL established
acetone	1-10	67-64-1	1000 ppm TWA; 2400 mg/m3 TWA
methyl isobutyl ketone	1-10	108-10-1	100 ppm TWA; 410 mg/m3 TWA
Cellulose Nitrate, Cellulose Ester	1-10	9004-70-0	No PEL established
isopropyl acetate	1-10	108-21-4	250 ppm TWA; 950 mg/m3 TWA
toluene	1-10	108-88-3	200 ppm TWA; C 300 ppm
isopropanol	1-10	67-63-0	400 ppm TWA; 980 mg/m3 TWA
isobutyl isobutyrate	1-10	97-85-8	No PEL established
m-xylene	<1	108-38-3	No PEL established
o-xylene	<1	95-47-6	No PEL established
ethylbenzene	<1	100-41-4	100 ppm TWA; 435 mg/m3 TWA
p-xylene	<1	106-42-3	No PEL established

III. HAZARDS IDENTIFICATION

Routes of Entry:	Inhalation, ingestion, skin, eyes., Inhalation, Ingestion, Skin Absorbtion.
Medical Conditions Aggravated:	Skin disease including eczema and sensitization. Respiratory disease including asthma and bronchitis. Eye disease. Liver disease. Kidney disease. Digestive tract disease.

Immediate (Acute) Health Effects

- Inhalation:** Irritation may be delayed for several hours. Can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.
- Skin Contact:** Substance causes moderate skin irritation. Moderately irritating to the skin. 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:** A single exposure is not likely to result in the product being absorbed through the skin in harmful amounts. Can be absorbed through the skin but exposure must be extensive before adverse health effects occur. Toxic and may be harmful if absorbed through the skin; may produce target organ damage. Minimal hazard in normal industrial use. May cause gastrointestinal discomfort.
- Ingestion:** Harmful if swallowed. 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.

Target Organ Acute Toxicity:

Ethylacetate	eyes, skin, respiratory system
n-Butyl acetate	eyes, skin, respiratory system, CNS
Propane	CNS
Isobutane	CNS
Acetone	respiratory system, skin, eyes, CNS
Hexone	eyes, skin, CNS, respiratory system, liver, kidneys
Isopropyl acetate	eyes, skin, respiratory system, CNS
Toluene	CNS, liver, kidneys, skin, eyes, respiratory system
Isopropyl alcohol	eyes, skin, respiratory system
m-Xylene	CNS, eyes, blood, liver, kidneys, skin, GI tract, respiratory system
o-Xylene	CNS, eyes, blood, liver, kidneys, skin, GI tract, respiratory system
Ethyl benzene	eyes, respiratory system, skin, CNS
p-Xylene	CNS, eyes, blood, liver, kidneys, skin, GI tract, respiratory system

Long-Term (Chronic) Health Effects:

- Carcinogenicity:** ACGIH. IARC. NIOSH. NTP. OSHA. Contains a substance that is a probable cancer hazard based on human studies.
- Reproductive and Developmental Toxicity:** 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 or genotoxic.
- Inhalation:** Upon prolonged and/or repeated exposure, can cause severe respiratory irritation, dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.

Skin Contact:	Prolonged or repeated contact may cause irritation. May cause lingering effects but not likely to result in permanent damage if the exposure is eliminated. 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 severe irritation. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. 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. Upon prolonged or repeated exposure, harmful if absorbed through the skin. May cause severe irritation and systemic damage.
Target Organ Chronic Toxicity:	Skin. Skin. Eyes. Nervous System. Respiratory Tract. Respiratory Tract. Nervous System. Eyes. Liver. Liver. Kidneys. Digestive Tract. Blood.
Supplemental Health Hazard Information:	No additional health information available.

IV. FIRST AID

Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.
Eyes:	Immediately flush eyes with plenty of water. Get medical attention, if irritation persists. Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.
Skin Contact:	Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.
Ingestion:	Induce vomiting as a last measure. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal. Minimal risk of harm if swallowed. Do not induce vomiting. Seek medical attention immediately. Provide medical care provider with this MSDS.
Notes to MD:	No additional first aid information available.

V. FIRE FIGHTING MEASURES

Flammability Summary:

Flash Point:	-144 (CALC.) °F
Upper Flammable/Explosive Limit, % in air:	36.0 @ 77° F
Lower Flammable/Explosive Limit, % in air:	1.4 @ 77° F

Fire Hazards:	Flammable Liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. 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. 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:	H2O, CO2, dry chemical, foam. Carbon dioxide Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use alcohol resistant spray, Carbon Dioxide, water spray or dry chemical to extinguish a fire involving this chemical. 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. 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 Hydrogen cyanide Nitrogen containing gases Toxic gases

VI. ACCIDENTAL RELEASE MEASURES

Health Consideration for Spill Response:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section VIII of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.
Spill Mitigation Procedures General Methods:	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 VIII at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

VII. HANDLING AND STORAGE

Handling:	Use spark-proof tools and explosion-proof equipment. Wash thoroughly after handling. Avoid contact with material. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Remove contaminated clothing and wash before reuse. Harmful or irritating material. Avoid contact and avoid breathing the material. Use only in a well ventilated area.
Storage:	Keep away from sources of ignition. Keep away from heat, sparks, and flame. Store in a cool place in original container and protect from sunlight. 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: 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. Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

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:	CLEAR LIQUID
Odor:	STRONG SOLVENT
Solids Vol %:	9.4559
Solids Wt %:	14.3518
Material VOC lbs/gal:	5.1753
Material VOC gms/l:	621.508
Coatings VOC lbs/gal:	5.5334
Coatings VOC gms/l:	664.5105
Weight per gallon:	6.5557

X. STABILITY AND REACTIVITY

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

Conditions to Avoid: Avoid: heat, sparks, flame and oxidizing agents. Contact with air. Contact with oxidizing materials. None known.

Chemical Incompatibility: Strong oxidizing agents. Strong alkalies. Strong acids. Amines.

Hazardous Polymerization: Hazardous Polymerization will not occur.

XI. TOXICOLOGICAL INFORMATION

Chemical Name	CAS Number	LD50/LC50
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Acetic acid, ethyl ester	141-78-6	Inhalation LC50 Rat : 200 gm/m3; Inhalation LC50 Mouse : 45 gm/m3/2H; Oral LD50 Rat : 5620 mg/kg; Oral LD50 Mouse : 4100 mg/kg; Dermal LD50 Rabbit : >20 mL/kg
Acetic acid, butyl ester	123-86-4	Inhalation LC50 Rat : 2000 ppm/4H; Inhalation LC50 Mouse : 6 gm/m3/2H; Oral LD50 Rat : 10768 mg/kg; Oral LD50 Mouse : 6 gm/kg; Dermal LD50 Rabbit : >17600 mg/kg
Propane, 2-methyl- Acetone	75-28-5 67-64-1	Inhalation LC50 Rat : 57 pph/15M 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
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
Nitrocellulose	9004-70-0	Oral LD50 Rat : >5 gm/kg; Oral LD50 Mouse : >5 gm/kg
Acetic acid, isopropyl ester	108-21-4	Inhalation LC50 Rat : 50600 mg/m3/8H; Oral LD50 Rat : 6750 mg/kg; Dermal LD50 Rabbit : >20 mL/kg
Toluene	108-88-3	Inhalation LC50 Rat : 49 gm/m3/4H; Inhalation LC50 Mouse : 400 ppm/24H; Oral LD50 Rat : 636 mg/kg; Dermal LD50 Rabbit : 14100 uL/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
Isobutyric acid, isobutyl ester	97-85-8	Inhalation LC50 Rat : 5000 ppm/6H; Oral LD50 Rat : 12800 mg/kg; Dermal LD50 Rabbit : >8600 mg/kg
m-Xylene	108-38-3	Oral LD50 Rat : 5 gm/kg; Dermal LD50 Rabbit : 14100 uL/kg
Benzene, ethyl-	100-41-4	Oral LD50 Rat : 3500 mg/kg; Dermal LD50 Rabbit : 17800 uL/kg
p-Xylene	106-42-3	Inhalation LC50 Rat : 4550 ppm/4H; Oral LD50 Rat : 5 gm/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

Waste Description for Spent Product: The waste may be a listed hazardous waste. 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:

Ethylacetate	141-78-6	20.99 %
Acetone	67-64-1	6.52 %
Methyl isobutyl ketone	108-10-1	6.45 %
Toluene	108-88-3	4.33 %
Ethyl benzene	100-41-4	0.02 %

XIV. TRANSPORTATION INFORMATION

DOT COMPRESSED GAS, FLAMMABLE, N.O.S., 2.1, UN 1954 (CONTAINS)

XV. REGULATORY INFORMATION

Chemical Name	Regulation	CASRN	%
Methylisobutyl ketone	SARA 313 Reportable:	108-10-1	6.45
Toluene	SARA 313 Reportable:	108-88-3	4.33
Isopropyl alcohol	SARA 313 Reportable:	67-63-0	2.49
m-Xylene	SARA 313 Reportable:	108-38-3	0.06
o-Xylene	SARA 313 Reportable:	95-47-6	0.02
Ethyl benzene	SARA 313 Reportable:	100-41-4	0.02
p-Xylene	SARA 313 Reportable:	106-42-3	0.01
Toluene	California Proposition 65 Developmental Toxicity:	108-88-3	4.33

ethyl acetate	New Jersey Right To Know:	141-78-6	20.99
n-butyl acetate	New Jersey Right To Know:	123-86-4	16.19
propane	New Jersey Right To Know:	74-98-6	14.72
rosin ester	New Jersey Right To Know:	8050-31-5	7.11
isobutane	New Jersey Right To Know:	75-28-5	6.67

XVI. ADDITIONAL INFORMATION

Other Information:

IMPORTANT: WHILE THE DESCRIPTIONS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU PERFORM AN ASSESSMENT TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED, DATA OR INFORMATION SET FORTH. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, OR DATA PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, THE DESCRIPTIONS, DATA AND INFORMATION FURNISHED HEREUNDER ARE GIVEN GRATIS. NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DATA AND INFORMATION GIVEN ARE ASSUMED. ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

MSDS glossary.