

MATERIAL SAFETY DATA SHEET

IDENTITY (As used on label and list) BEARING AND SHAFT - SERIES 17-OR GREEN, OIL RESISTANT, HIGH STRENGTH, PRESS FIT, ANEROBIC RETAINING COMPOUND	Part Numbers for this MSDS: 17-001-OR, 17-010-OR, 17-050-OR, 17-250-OR, 17-1000-OR
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SECTION I

Manufacturer's Name Palm Labs., Inc	Emergency Telephone Number 1-800 964-6660
Address 10 Office Way Hilton Head, SC, 29928	Telephone Number For Information. 843 686-2345
	Date Prepared 09/01/2011
	Signature of Preparer (optional)

SECTION II - Ingredients/Identity Information

COMPOSITION ON INGREDIENTS		CAS NO.	%	EC NO
Aliphatic Urethane Acrylate	Xi: R36/38	Proprietary	25 – 60	Proprietary
2-Hydroxypropylmethacrylate	Xi: R36 R43	923-26-2	5 – 25	213-090-3
Trimethylolpropane Triacrylate	Xi: R36/38 R43	15625-89-5	1 – 10	239-701-3
Acrylate Acid	R10 Xn: R20/21/22 C: R35 N: R50	79-10-7	1 – 5	201-177-9
Cumene Hydroperoxide	O: R7 T: R23 Xn: R21/22, 48/20/22 C: R34 N: R51,R53	80-15-9	0.5 – 3	201-254-7
1-Acetyl 2-Phenylhydrazine	Xn: R20/21/22 R40 Xi: R36/37/38 R43	114-83-0	0.01 – 0.95	204-055-3

Risk Phrases:

R7: May cause fire. R20/21/22: Harmful by inhalation, in contact with skin, and if swallowed. R23/24/25: Toxic by inhalation, in contact with skin, and if swallowed. R34: Causes burns. R36/37/38: Irritating to eyes, respiratory system and skin.

R40: Limited evidence of a carcinogenic effect. R43: May cause sensitization by skin contact. R48/20/22: Harmful: danger of serious damage to health by prolonged exposure through inhalation & if swallowed. R50: Very toxic to aquatic organisms. R51/53: Toxic to aquatic organisms.

SECTION III - Physical/Chemical Characteristics

Form: Liquid	Flash Point: >100° C	Solubility in Water: Low Solubility
Odor: Slightly sweet, characteristic	Flammability: Non-Flammable	Solubility in Solvents: Miscible in organic solvents eg Acetone
Color: Green	Explosive Properties: Na	Vapor Density: Not established
pH Value: ~3-5	Oxidizing Properties: None	Partitioning Coefficient low Pow Not established, but likely <3
Melting Point: Na	Vapor Pressure: ~0.1 mmHg (20°C)	Evaporation Rate: Not established
Boiling Point: Na	Relative Density: ~1.08	

SECTION IV - Fire And Explosion Hazard Data

Extinguishing Media Alcohol Resistant Foam, Dry Powder, Carbon Dioxide. DO NOT USE Direct water Jets
Hazardous Decomposition: Possible risk of explosion. Toxic fumes are produced in fire. CO, Co2, oxizes of nitrate possibly evolved.
Special Procedures Do not breathe decomposition products and fumes. Use approved self-contained breathing apparatus.
Health Hazard Codes Health: 1 Fire: 1 Reactivity: 1 PPE: H

SECTION V - Health Hazard Data

Routes of Entry	Inhalation? Yes	Skin? Yes	Eyes? Yes	Ingestion? Yes
First Aid Measures:	Inhalation:	Remove to fresh Air. If symptoms develop and persist, get medical attention.		
	Skin Contact:	Remove contaminated clothing and shoes. Rinse immediately with plenty of water, then wash with soap. Get medical attention if symptoms occur.		
	Eye Contact:	Flush with copious amounts of water, preferably, lukewarm water for at least 15 minutes, holding eyelids open all the time. Get medical attention.		
	Ingestion:	Do not induce vomiting. Give plenty of water to drink. Beware of aspiration if vomiting occurs – seek medical attention immediately.		
General:	Wear suitable gloves and face/eye protection. Prolonged or repeated over-exposure may lead to sensitizing effects and/or dermatitis in sensitive individuals.			

Section VI – Accidental Release Measures

Exposure Controls

Ventilate area. Do not allow spill to enter drains and watercourses.

Personal Protection

Wear suitable respiratory protection for large spills and confined spaces. Wear polythene gloves, chemically resistant overalls and boots, eye protection.

Cleanup:

Absorb in inert material such as sand or absorbent granules. Scoop up in plastic container to await transfer.

SECTION VII - Safe Handling and Use

Handling:

Avoid contact with eyes, skin and clothing. Avoid breathing vapor and mist. Wash thoroughly after handling. Ensure adequate ventilation.

Storage:

For safe storage, store at or below 100°F. Keep in cool, dry, well-ventilated area out of direct sunlight. Store in tightly closed containers. Do not allow to contact or store in aluminum, mild steel, rusty steel, copper or (alloys of), or tin vessels.

Occupational Exposure Limit:

Wear polythene, neoprene or nitrile gloves. Do not use PVC or latex.

Wear eye goggles. Ensure eye-wash stations are close to hand.

After skin contact, wash immediately with plenty of water.

If handling large quantities, wear suitable protective clothing.

Use in well ventilated areas. Use local exhaust ventilation if exposed for long periods.

If excessive inhalation in a poorly ventilated area is likely, use a respirator with filter type A.

SECTION VIII – Stability & Reactivity

Stability

Stable at normal temperatures.

Conditions to Avoid

Elevated temperatures, direct sunlight, sources of ignition, low oxygen environments. Hazardous exothermic polymerization can occur if exposed to elevated temperatures for periods of time. Air space/oxygen above the product is vital to keep formulatory inhibitors active.

Materials to Avoid:

Oxidizing agents. Free-radical initiators, reducing metal oxides. Do not allow to contact or store in aluminum, mild steel, rusty steel, copper or (alloys of), or tin vessels

Hazardous Decomposition Products:

Combustion/exothermic polymerization will generate oxides of carbon, acrid smoke and irritating fumes.

SECTION IX – Toxicological & Ecological Information

Acute Toxicity:	Oral:	Expected to be very low.
	Inhalation:	Expected to be low.
	Skin:	Expected to be low.
	Respiratory Tract:	Mild irritation of nose and throat.
Ecological:	Ecotoxicity:	Considered to be low.
	Bioaccumulative Potential:	Expected to be low.
	Persistence:	Considered to be biodegradable
	Mobility:	Considered to be relatively low due to low water solubility.

SECTION X – Disposal Considerations

Do not discharge into drains or waterways.

Product residues can be cleaned out of containers.

Alternatively, product can be polymerized using an Activator, although with care in polymerizing large quantities due to exothermic reaction.

Hardened product can be disposed of as chemical waste by incineration or licensed contractors.

Clean containers can be disposed of by landfill or incineration, or possibly recycled.

SECTION XI – Transport Information

Land Transport (USDOT): Proper shipping name: Hazard class or division Identification Number Packing Group	Unrestricted None None None
Sea Transportation (IMDG): Proper shipping name Hazard class or division Identification Number Packing Group	Unrestricted None None None
Air Transportation (IATA/ICAO): Proper shipping name Hazard class or division Identification Number Packing Group	Unrestricted None None None

PALM LABS INC.