

MATERIAL SAFETY DATA SHEET

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Johnsonite, 16910 Munn Road, Chagrin Falls, Ohio 44023

24-Hour Emergency Telephone: (800) 661-2162

SECTION 1. PRODUCT IDENTIFICATION

PRODUCT NAME: JOHNSONITE 930 - PART A

CHEMICAL FAMILY: Solvent-Free Epoxy Resin

SECTION 2. COMPOSITION / INGREDIENTS AND EXPOSURE LIMITS

<u>Chemical Name</u>	<u>CAS Number</u>	<u>% by Weight</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>
Polyurethane Polymer	Proprietary	2-10	---	---
Epoxy Resin	25085-99-8	20-40	---	---
Epoxy Diluent	68609-97-2	3-9	---	---
Butyl Benzyl Phthalate	85-68-7	1-5	5 mg/M ³	5 mg/M ³
Calcium Carbonate	1317-65-3	40-60	10 mg/M ³	10 mg/M ³
Silica	67762-90-7	3-5	10 mg/M ³	10 mg/M ³

SECTION 3. HAZARDS IDENTIFICATION

PRIMARY ROUTES OF ENTRY: Eyes, skin, respiratory.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Respiratory problems.

POTENTIAL HEALTH EFFECTS:

EYE CONTACT: May cause severe irritation. May damage eyes.

SKIN CONTACT: Prolonged exposure may cause irritation. May cause drying or flaking of skin.

INGESTION: May cause severe injury to intestinal tract, liver, kidneys, stomach, throat, lungs, mouth, and mucous membranes. Harmful or fatal if swallowed. Do not ingest.

INHALATION: Overexposure may cause severe respiratory tract irritation. Prolonged overexposure may cause central nervous system depression with narcotic effects (headaches, dizziness, unconsciousness).

CHRONIC: Liver and kidney damage. May cause corneal opacity. May cause central nervous system depression causing headaches, nausea, and dizziness.

CARCINOGENICITY: This product contains no known ingredient listed as a carcinogen by IARC, NTP, or OSHA.

SECTION 4. FIRST AID MEASURES

EYE CONTACT: Flush with water for 15 minutes. Immediately contact a physician.

SKIN CONTACT: Wash with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

INGESTION: If swallowed, seek medical attention immediately.

INHALATION: Remove to fresh air. Restore breathing if necessary by giving artificial respiration and/or oxygen. Get medical attention if victim does not show rapid and complete recovery. Do Not Leave Victim Unattended. This material can cause lung damage.

SECTION 5. FIRE-FIGHTING MEASURES

FLASH POINT (°)F: >200°F. Setflash Method.

LOWER FLAMMABLE LIMIT: None.

FIRE-FIGHTING INSTRUCTIONS: Use protective clothing and self-contained breathing apparatus.

GENERAL HAZARD: Toxic gases will form upon combustion. Closed containers may explode when exposed to extreme heat. Vapors are heavier than air and may travel a considerable distance. When heated above 250°F, toluene diisocyanate is released. TDI is a carcinogen.

EXTINGUISHING MEDIA: Water fog, CO₂, dry chemical, and chemical foam.

DECOMPOSITION PRODUCTS: Material can produce CO, CO₂, H₂O, smoke, fumes, phosgene, nitrogen oxides, hydrogen cyanide, toluene diisocyanate, and other products from the burning of hydrocarbons.

SECTION 6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Keep all heat sources and hot metal surfaces away from spill. Isolate the danger area and keep unauthorized personnel out. Stop spill if it can be done with minimal risk. Wear appropriate protective equipment including respirator protection as conditions warrant. Prevent additional discharge of material. Notify the appropriate authorities immediately. Contain spilled liquid with sand, earth, or other non-combustible inert absorbent material. Prevent run off from entering storm sewers, ditches or waterways. Use non-sparking tools to transfer absorbed waste material into properly identified drums. Treat waste material with same precautions as the adhesive. Do not use solvent or flammable liquid to help clean-up accidental releases. Release to the environment may be reportable under environmental regulations.

SECTION 7. HANDLING AND STORAGE

HANDLING: Open container slowly to relieve any pressure. Do not breath vapors. The use of respiratory protection is recommended when airborne concentrations of vapor exceed exposure guidelines. Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Wear appropriate protective gloves and clothing to prevent prolonged or repeated skin contact. Avoid all contact with eyes. Use good hygienic practices. Wash with soap and water before eating, drinking, smoking, or using toilet facilities. Keep out of the reach of children.

STORAGE: Keep containers tightly closed. Use and store this material in cool, dry, well-ventilated area away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Post area "No smoking or open flames". Store only in approved containers. Protect containers against physical damage.

EMPTY CONTAINERS: Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or drum re-conditioner. All containers should be disposed of in accordance with governmental regulations.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: Approved chemical splash goggles and/or safety glasses should be worn to safeguard against potential eye contact, irritation, or injury. Where splashing is likely to occur, hard hats and face shields may be used to provide additional protection. Eye wash facilities should be available in work area.

SKIN PROTECTION: The use of rubber gloves impermeable to the specific material handled is advised to prevent prolonged or repeated skin contact. Where splashing is likely to occur, aprons impermeable to the specific material may be worn. Refer to the glove and protective clothing manufacturer's selection guide for appropriate material.

RESPIRATORY PROTECTION: A NIOSH/MSHA approved air-purifying respirator with an organic vapor cartridge may be used under conditions where airborne concentrations are expected to exceed exposure guidelines. Protection provided by air purifying respirators is limited. Refer to respirator manufacturer's selection guide for appropriate respirator for conditions encountered. If in doubt, seek the advice of an industrial hygienist or safety professional for appropriate air purifying respiratory equipment. Use positive pressure air supplied respirator if there is potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air-purifying respirators may not provide adequate protection.

ENGINEERING CONTROLS: Provide sufficient mechanical ventilation to maintain exposure below OSHA limits. The use of local exhaust ventilation is recommended. Provide mechanical ventilation of confined spaces. If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure guidelines, additional ventilation or exhaust systems may be required. Use explosion proof ventilation equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (°F): >425

SPECIFIC GRAVITY (WATER = 1): 1.3

% VOLATILE BY WEIGHT: <1

APPEARANCE AND ODOR: Beige thick paste with little or no odor.

GRAMS VOLATILE ORGANIC COMPOUNDS/LITER OF COATING: <12

SECTION 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Keep away from flames and spark producing equipment. Not dangerously unstable. When heated above 250° F, TDI is released. TDI is a Carcinogen.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Strong oxidizing agents, strong reducing agents, acids, bases, or unstable chemicals, chloroform, nitric compounds, peroxides, sulfur dichloride, strong alkalis, amines, anhydrides, mercaptans, materials that react with epoxies.

