



MATERIAL SAFETY DATA SHEET

MSDS-0180 (part A)
GG-K-30, 36 Series
REV. DATE: 5/13/93

SECTION 1 - IDENTIFICATION

PRODUCT (TRADE) NAME: GG-K-30, 36 Series (Water Base Binder)

CHEMICAL FAMILY:

SUPPLIER: OMEGA ENGINEERING INC.
PO BOX 4047
STAMFORD, CT 06907

DATE PREPARED:
SUPERSEDES:

TELEPHONE: (203) 359-1660

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Component(s) (Chemical & Common names)	OSHA PEL	ACGIH TLV	Other Exposure Limits	% (optional)	CAS NO.
Triethylamine	25 ppm	10 ppm	T.W.A.		121-44-8

* Subject to Reporting Requirements under SARA Title III, Section 13: None

SECTION 3 - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: 180 °F - 244 °F **Specific Gravity (H₂O = 1):** 1.05 - 1.18

Vapor Pressure (mm Hg): 5.9 - 37 mm **Vapor Density (Air = 1):** Heavier

Solubility in Water: Soluble **Reactivity in Water:** None

Appearance and Odor: Opaque Liquid, Amine Odor **Melting Point:** N/A

SECTION 4 - FIRE AND EXPLOSION DATA

Flash Point: Unknown F.C. **Method Used:** TCC

Flammable Limits in Air % By Volume: **LEL Lower:** 1.4 **UEL Upper:** 12. (Component Solvents)

Auto-Ignition Temperature: Unknown **Extinguishing Media:** Foam, CO₂, Dry chemical, Water fog

Special Fire Fighting Procedures: Use NIOSH approved, self-contained breathing apparatus and protective clothing. Water may be used to cool containers to prevent pressure buildup and possible auto-ignition when exposed to extreme heat. If water is used, fog nozzles are preferable. During emergency conditions, over-exposure to decomposition of products may cause health hazard.

Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, and open flame. Closed container may explode when exposed to extreme heat. Application to hot surfaces requires special precautions.



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SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Stability: Stable

Conditions to Avoid: N/A

Compatibility (Materials to Avoid): None known

Hazardous Decomposition Products: Burning Releases CO, CO₂, H₂O

Hazardous Polymerization: Will Not Occur

Conditions to Avoid: N/A

SECTION 6 - HEALTH HAZARDS

Acute: None known

Chronic: None known

Signs and Symptoms of Exposure: No known adverse chronic health effects, but unnecessary exposure to any chemical should be avoided. This product may enhance allergic conditions by exposure.

Medical Conditions Generally Aggravated by Exposure: None known

Chemical Listed as Carcinogen or Potential Carcinogen:

National Toxicology Program: No I.A.R.C Monographs: No OSHA: No

Emergency and First Aid Procedures: See below

Routes of Entry:

Inhalation: No problem - threshold limit unknown.

Eyes: Slight irritation. Flush with water for 15 minutes.

Skin: None - to slight effect.

Ingestion: Mild discomfort. Drink plenty of water. DO NOT induce vomiting. Consult physician.

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage: Keep from freezing. Use reasonable care and caution. Store below 90 °F.

Other Precautions: None known

Steps to be Taken in Case Material is Released or Spilled: Use absorbent material to collect and contain for salvage or disposal.

Waste Disposal Methods (Consult Federal, State, and Local Regulations): —



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SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection (Specify Type): Not required

Ventilation: Adequate

Local Exhaust: May be needed **Mechanical (General):** — **Special:** Recommended **Other:** N/A

Protective Gloves: N/A

Eye Protection: Safety glasses.

Other Protective Clothing or Equipment: N/A

Work/Hygienic Practices: Remove chemical from skin prior to eating or smoking.



MATERIAL SAFETY DATA SHEET

MSDS-0180 (part B)
GG-K-30, 36 Series
REV. DATE: 5/13/93

SECTION 1 - IDENTIFICATION

PRODUCT (TRADE) NAME: GG-K-30, 36 Series (Clear Epoxy Varnish)

CHEMICAL FAMILY:

SUPPLIER: OMEGA ENGINEERING INC.
PO BOX 4047
STAMFORD, CT 06907

DATE PREPARED: 12/30/89
SUPERSEDES:

TELEPHONE: (203) 359-1660

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Component(s) (Chemical & Common names)	OSHA PEL	ACGIH TLV	Other Exposure Limits	% (optional)	CAS NO.
Methyl Ethyl Ketone *I	200	200		<32.0%	78-93-3
Toluol *II	100	100		<19.0%	108-88-3
Propylene Glycol *III		None Established			108-65-6
Monomethyl Ether Acetate					
Methyl Isobutyl Ketone *IV	100	50		<11.0%	108-10-1
N-Butyl Alcohol *V	100	50 (Skin)		<5.0%	71-36-3
Ethylene Glycol Mono Butylether Acetate *VI		None Established			112-07-2

* Subject to Reporting Requirements of SARA, Title III, Section 313.

SECTION 3 - PHYSICAL AND CHEMICAL CHARACTERISTICS

Boiling Point: 175 °F - 378 °F (Components)

Specific Gravity (H₂O = 1): .908 - .9095

Vapor Pressure (mm Hg): 1 mm - 70 mm (Components) **Vapor Density (Air = 1):** Heavier

Solubility in Water: Very slight

Reactivity in Water: None

Appearance and Odor: Clear straw-colored liquid; Ketone odor.

Melting Point: N/A

SECTION 4 - FIRE AND EXPLOSION DATA

Flash Point: 21 °C.

Method Used: TCC

Flammable Limits in Air % By Volume:

LEL Lower: 0.05 **UEL Upper:** 7.0 (Components)

Auto-Ignition Temperature: —

Extinguishing Media: Foam, CO₂, Dry chemical, Water fog



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SECTION 4 - FIRE AND EXPLOSION DATA (CONT'D)

Special Fire Fighting Procedures: Use NIOSH approved, self-contained breathing apparatus and protective clothing. Water may be used to cool containers to prevent pressure buildup and possible auto-ignition when exposed to extreme heat. If water is used, fog nozzles are preferable. During emergency conditions, over-exposure to decomposition of products may cause health hazard.

Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, and open flame. Closed container may explode when exposed to extreme heat. Application to hot surfaces requires special precautions.

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA)

Stability: Stable

Conditions to Avoid: Sparks, open flame, static electricity

Compatibility (Materials to Avoid): Oxidizing materials

Hazardous Decomposition Products: Burning releases CO, CO₂

Hazardous Polymerization: Will Not Occur

Conditions to Avoid: Sparks, open flame, static electricity

SECTION 6 - HEALTH HAZARDS

Acute: Eye, skin, nose, and throat irritation.

Chronic: Respiratory allergic sensitivity, nervous system depression and damage to liver, kidney, brain; blindness.

Signs and Symptoms of Exposure: Headache, dizziness, staggering gait, confusion, eye and blood disorders.

Medical Conditions Generally Aggravated by Exposure: Pre-existing skin, lung, heart, liver, kidney, eye and blood disorders may be aggravated by exposure to this material.

Chemical Listed as Carcinogen or Potential Carcinogen: No

National Toxicology Program: No **I.A.R.C Monographs:** No

OSHA: No

Emergency and First Aid Procedures: See below

Routes of Entry:

Inhalation: Remove from exposure. Remove to fresh air. Restore breathing. Treat symptomatically. Consult physician and keep warm and quiet.

Eyes: Flush with large amounts of water for about 15 minutes. Consult physician.

Skin: Wash affected areas with soap and water. Remove contaminated clothing. Consult physician if irritation persists.

Ingestion: Drink 1-2 glasses of water to dilute. DO NOT induce vomiting. Immediately consult physician or Poison Control Board.



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SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage: Avoid storage in high temperature areas. Keep away from sparks, open flame, and static electricity. Keep containers tightly closed and upright. DO NOT weld or flame-cut an empty drum. Drums of material should be grounded and bonded when pouring.

Other Precautions: Do not take internally. Avoid prolonged contact with skin. Ground and bond containers when pouring.

Steps to be Taken in Case Material is Released or Spilled: Use non-sparking tools; mop up and ventilate adequately. Avoid sparks, open flames and static electricity. Flush area with water.

Waste Disposal Methods (Consult Federal, State, and Local Regulations): DO NOT INCINERATE CLOSED CONTAINERS.

SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection (Specify Type): Maintain safe TLV. At concentrations exceeding TLV, use NIOSH approved respirators.

Ventilation:

Local Exhaust: Preferred **Mechanical (General):** — **Special:** — **Other:** —

Protective Gloves: Required for prolonged or repeated contact.

Eye Protection: Use safety eyewear with splash guards or side shields.

Other Protective Clothing or Equipment: Use of protective clothing recommended. Avoid skin contact.

Work/Hygienic Practices: Wash thoroughly after handling.

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