



**TUFLOAT VOX CLEAR - 5 GAL UNIT**

Version 1  
REVISION DATE: 07/05/2005

Print Date 07/13/2007

This is a kit that contains the following components:

- EUCOPOXY TUFLOAT VOX CLEAR PART A
- EUCOPOXY TUFLOAT VOX CLEAR PART B



**EUCOPOXY TUFCOAT VOX CLEAR PART A**Version 1  
REVISION DATE: 07/05/2005

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**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : EUCOPOXY TUFCOAT VOX CLEAR PART A  
 Product code : 139M 05

COMPANY : Euclid Chemical Company  
 19218 Redwood Road  
 Cleveland, OH 44110

Telephone : 1-800-321-7628  
 Emergency Phone: : U.S. only: 1-800-255-3924  
 International Users Call Collect: 1-813-248-0585

Product use : Coating

**SECTION 2 - HAZARDS IDENTIFICATION****Emergency Overview**

Amber. Liquid. No serious effects anticipated under normal conditions of use. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

**Acute Potential Health Effects/ Routes of Entry**

Inhalation : No serious effects anticipated under normal conditions of use.  
 Eyes : Direct contact may cause mild irritation.  
 Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.  
 Skin : May cause mild irritation.

**Aggravated Medical Conditions**

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

**Chronic Health Effects**

Overexposure to 1-methoxy-2-propanol may cause olfactory tumors, general anesthesia, and nausea, and is an experimental teratogen. Many glycol ethers have been shown to have adverse human reproductive effects. As a by product of curing, acetic acid is produced. Acetic acid is a severe eye, skin and mucus membrane irritant and may cause burns with repeated or prolonged contact. Chronic exposure can cause bronchitis and pharyngeal edema. Acetic acid may cause tooth erosion from tooling. Diethylenetriamine is a skin and eye irritant. Prolonged and repeated exposure can cause skin sensitization, dermatitis, asthma. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

**SECTION 3 - PRODUCT COMPOSITION**

Chemical Name	CAS-No.	Weight %
Water	7732-18-5	40.0 - 70.0
Petaethylene hexamine	4067-16-7	10.0 - 30.0
Tetraethylene pentamine	112-57-2	10.0 - 30.0

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Diethylenetriamine	NJ TSN# 51721300-5334P	10.0 - 30.0
1-Methoxy-2-Propanol	107-98-2	10.0 - 30.0
Ethylene diamine	107-15-3	10.0 - 30.0
Acetic acid	64-19-7	3.0 - 7.0

**SECTION 4 - FIRST AID MEASURES**

Get immediate medical attention for any significant overexposure.

Inhalation	:	Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
Eye contact	:	Flush with water for 15 minutes. If irritation persists, get medical attention.
Skin contact	:	Wash area of contact thoroughly with hand cleaner followed by soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
Ingestion	:	Get medical attention. Do not induce vomiting.
Notes to physician	:	Not applicable.

**SECTION 5 - FIRE FIGHTING MEASURES**

Flash point	:	> 200 °F, > 93 °C
Method	:	Setaflash Closed Cup
Lower explosion limit	:	Not available.
Upper explosion limit	:	Not available.
Autoignition temperature	:	Not available.
Extinguishing media	:	This product is not expected to burn under normal conditions of use.
Hazardous combustion products	:	Carbon monoxide and carbon dioxide can form. Smoke, fumes.
Protective equipment for firefighters	:	Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).
Fire and explosion conditions	:	This product not expected to ignite under normal conditions of use.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Transfer to appropriate container for disposal. Stop flow. Contain spill. Keep out of water courses. Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal. Use appropriate protective equipment. Avoid contact with material.

**SECTION 7 - HANDLING AND STORAGE**

Handle in compliance with common hygienic practices. Clean hands thoroughly after handling. Keep from freezing. Do not use in confined or poorly ventilated areas. Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied

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containers. Store in sealed containers in a dry, ventilated warehouse location above freezing.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION****Personal protection equipment**

- Respiratory protection : Not required under normal conditions of use. Wear appropriate, NIOSH/MSHA approved respirator with combination particulate filter and vapor/gas removing cartridge when the ventilation is not adequate or if it is necessary to abrade or grind surfaces coated with this product.
- Hand protection : Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.
- Skin and body protection : Prevent contact with shoes and clothing. Use rubber apron and overshoes.
- Protective measures : Other equipment not normally required. Use professional judgment in the selection, care, and use.
- Engineering measures : Not required under normal conditions of use. Use local exhaust when the general ventilation is inadequate.

**Exposure Limits**

Chemical Name	CAS Number	Regulation	Limit	Form
Ethylene diamine	107-15-3	ACGIH TWA: OSHA PEL:	10 ppm 25 mg/m3	
1-Methoxy-2-Propanol	107-98-2	ACGIH TWA: ACGIH STEL:	100 ppm 150 ppm	
Diethylenetriamine	111-40-0	ACGIH TWA:	1 ppm	
Acetic acid	64-19-7	ACGIH TWA: ACGIH STEL: OSHA PEL:	10 ppm 15 ppm 25 mg/m3	

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

- Form : Liquid
- Color : Amber
- Odor : Amine
- pH : 9.0 - 9.4
- Vapour pressure : Not available.
- Vapor density : Heavier than air

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Melting point/range	: Not available.
Freezing point	: Not available.
Boiling point/range	: 212 °F, 100 °C
Water solubility	: Soluble
Specific Gravity	: 1.0
% Volatile Weight	: 54 %

**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid	: Strong acids.Strong bases.
Stability	: Stable
Hazardous polymerization	: Will not occur.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Tetraethylene pentamine, CAS-No.: 112-57-2	
Acute oral toxicity (LD-50 oral)	2,100 mg/kg ( Rat )
Acute dermal toxicity (LD-50 dermal)	660 mg/kg ( Rabbit )
Diethylenetriamine, CAS-No.: 111-40-0	
Acute oral toxicity (LD-50 oral)	1,080 mg/kg ( Rat )
Ethylene diamine, CAS-No.: 107-15-3	
Acute oral toxicity (LD-50 oral)	500 mg/kg ( Rat )
Acute dermal toxicity (LD-50 dermal)	730 mg/kg ( Rabbit )
Acetic acid, CAS-No.: 64-19-7	
Acute oral toxicity (LD-50 oral)	3,530 mg/kg ( Rat )
Acute inhalation toxicity (LC-50)	5,000 mg/l ( Mouse )

**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Disposal Method : Waste not regulated under RCRA. Incinerate at EPA approved facility or dispose of waste in compliance with state and local regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

TDG / DOT Shipping Description:

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NOT REGULATED

**SECTION 15 - REGULATORY INFORMATION****North American Inventories:**

All components are listed or exempt from the TSCA inventory.  
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

**U.S. Federal Regulations:**

SARA 313 Components : None present or none present in regulated quantities.

SARA 311/312 Hazards : Acute Health Hazard

## OSHA Hazardous Components :

Ethylene diamine	107-15-3
1-Methoxy-2-Propanol	107-98-2
Diethylenetriamine	NJ TSRN# 51721300-5334P
Acetic acid	64-19-7

OSHA Status: Considered : Irritant  
hazardous based on the  
following criteria:

OSHA Flammability : Not Regulated

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:  
119.8 g/l**U.S. State Regulations:**

MASS RTK Components	Tetraethylene pentamine	112-57-2
	Diethylenetriamine	NJ TSRN# 51721300-5334P
	1-Methoxy-2-Propanol	107-98-2
	Ethylene diamine	107-15-3
	Acetic acid	64-19-7

Penn RTK Components	Water	7732-18-5
	Petaethylene hexamine	4067-16-7
	Tetraethylene pentamine	112-57-2
	Diethylenetriamine	NJ TSRN# 51721300-5334P
	1-Methoxy-2-Propanol	107-98-2
	Ethylene diamine	107-15-3
Acetic acid	64-19-7	

NJ RTK Components	Water	7732-18-5
	Petaethylene hexamine	4067-16-7
	Tetraethylene pentamine	112-57-2
	Diethylenetriamine	NJ TSRN# 51721300-5334P
	1-Methoxy-2-Propanol	107-98-2
	Ethylene diamine	107-15-3
Acetic acid	64-19-7	



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Chemicals known to the State of California to cause cancer birth defects and/or other reproductive harm:  
 None known.

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	2
Flammability	2
Reactivity	1
PPE	

0 = Minimum  
 1 = Slight  
 2 = Moderate  
 3 = Serious  
 4 = Severe

**Further information:**

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

**Prepared by: Rich Mikol**

**Legend**

ACGIH - American Conference of Governmental Hygienists  
 CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT - Department of Transportation  
 DSL - Domestic Substance List  
 EPA - Environmental Protection Agency  
 HMIS - Hazardous Materials Information System  
 IARC - International Agency for Research on Cancer  
 MSHA - Mine Safety Health Administration  
 NDSL - Non-Domestic Substance List  
 NIOSH - National Institute for Occupational Safety and Health  
 NTP - National Toxicology Program  
 OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit  
 RCRA - Resource Conservation and Recovery Act  
 RTK - Right To Know  
 SARA - Superfund Amendments and Reauthorization Act  
 STEL - Short Term Exposure Limit  
 TLV - Threshold Limit Value  
 TSCA - Toxic Substances Control Act  
 TWA - Time Weighted Average  
 V - Volume  
 VOC - Volatile Organic Compound  
 WHMIS - Workplace Hazardous Materials Information System

**EUCOPOXY TUFCOAT VOX CLEAR PART B**Version 1  
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**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : EUCOPOXY TUFCOAT VOX CLEAR PART B  
 Product code : 139M 05

COMPANY : Euclid Chemical Company  
 19218 Redwood Road  
 Cleveland, OH 44110

Telephone : 1-800-321-7628  
 Emergency Phone: : U.S. only: 1-800-255-3924  
 International Users Call Collect: 1-813-248-0585

**SECTION 2 - HAZARDS IDENTIFICATION****Emergency Overview**

Clear. Liquid. May cause slight irritation to the respiratory system. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

**Acute Potential Health Effects/ Routes of Entry**

Inhalation : May cause slight irritation to the respiratory system.  
 Eyes : Slightly irritating.  
 Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.  
 Skin : May cause sensitization.

**Aggravated Medical Conditions**

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

**Chronic Health Effects**

May cause sensitization by contact. Prolonged or repeated exposure to epoxy resin can cause irritation to skin, eyes, skin sensitization, temporary eye injury. Certain epoxy resins are reported to be mutagenic in some laboratory tests. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

**Target Organs:** Skin, Eye, Ingestion

**SECTION 3 - PRODUCT COMPOSITION**

Chemical Name	CAS-No.	Weight %
Epichlorohydrin polymer	25068-38-6	> 60.0
Alkyl glycidyl ether	68609-97-2	10.0 - 30.0

**SECTION 4 - FIRST AID MEASURES**

Get immediate medical attention for any significant overexposure.



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- Inhalation : Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
- Eye contact : Flush with water for 15 minutes. If irritation persists, get medical attention.
- Skin contact : Wash with water. If irritation, rash or other disorders develop, get medical attention immediately.
- Ingestion : Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

**SECTION 5 - FIRE FIGHTING MEASURES**

- Flash point : 200 °F, 93 °C
- Method : Setflash Closed Cup
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- Autoignition temperature : Not available.
- Extinguishing media : This product is not expected to burn under normal conditions of use.
- Hazardous combustion products : Smoke, fumes.
- Protective equipment for firefighters : Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).
- Fire and explosion conditions : This product not expected to ignite under normal conditions of use.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Stop flow. Contain spill. Keep out of water courses. Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal.

**SECTION 7 - HANDLING AND STORAGE**

Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. Store in sealed containers in a dry, ventilated warehouse location above freezing.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Personal protection equipment**

- Respiratory protection : Not required under normal conditions of use.
- Hand protection : Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection.
- Skin and body protection : Not required.



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Protective measures : Use professional judgment in the selection, care, and use. Other equipment not normally required.

Engineering measures : General ventilation is sufficient.

**Exposure Limits**

No known components with exposure limits.

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Form : Liquid  
Color : Clear  
Odor : Aromatic  
pH : Not available.  
Vapour pressure : Not available.  
Vapor density : Heavier than air  
Melting point/range : Not available.  
Freezing point : Not available.  
Boiling point/range : 200 °F, 93 °C  
Water solubility : Miscible  
Specific Gravity : 1.1  
% Volatile Weight : 0 %

**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid : Acids and bases. Amines. Epoxy curing agents.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

No Data Available

**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Disposal Method : Not regulated under RCRA. Dispose of in compliance with state and local regulations. Do not incinerate.



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**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

**TDG / DOT Shipping Description:**

NOT REGULATED

**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory.  
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

**U.S. Federal Regulations:**

None present or none present in regulated quantities.

SARA 311/312 Hazards : Acute Health Hazard

OSHA Hazardous Components :

OSHA Status: Considered : Irritant  
hazardous based on the  
following criteria:

OSHA Flammability : Not Regulated

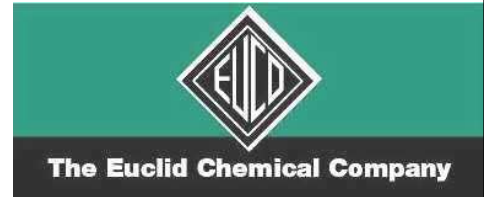
When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:  
119.8 g/l

**U.S. State Regulations:**

Penn RTK Components : Epichlorohydrin polymer 25068-38-6  
Alkyl glycidyl ether 68609-97-2

NJ RTK Components : Epichlorohydrin polymer 25068-38-6  
Alkyl glycidyl ether 68609-97-2

Chemicals known to the State of California to cause cancer birth defects and/or other reproductive harm:  
None known.



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**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	1
Flammability	2
Reactivity	0
PPE	

0 = Minimum  
 1 = Slight  
 2 = Moderate  
 3 = Serious  
 4 = Severe

**Further information:**

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

**Prepared by: Rich Mikol**

**Legend**

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|--|--|
| ACGIH - American Conference of Governmental Hygienists                         | PEL - Permissible Exposure Limit                         |
| CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act | RCRA - Resource Conservation and Recovery Act            |
| DOT - Department of Transportation   | RTK - Right To Know                                      |
| DSL - Domestic Substance List  | SARA - Superfund Amendments and Reauthorization Act      |
| EPA - Environmental Protection Agency  | STEL - Short Term Exposure Limit                         |
| HMIS - Hazardous Materials Information System                                  | TLV - Threshold Limit Value                              |
| IARC - International Agency for Research on Cancer                             | TSCA - Toxic Substances Control Act                      |
| MSHA - Mine Safety Health Administration                                       | TWA - Time Weighted Average                              |
| NDSL - Non-Domestic Substance List   | V - Volume   |
| NIOSH - National Institute for Occupational Safety and Health                  | VOC - Volatile Organic Compound                          |
| NTP - National Toxicology Program  | WHMIS - Workplace Hazardous Materials Information System |
| OSHA - Occupational Safety and Health Administration                           |  |