



DURAL FAST SET EPOXY GEL 1:1

Version 4.0
REVISION DATE: 07/08/2012

Print Date 12/23/2013

This is a kit that contains the following components:

DURAL FAST SET EPOXY GEL (1:1) PART A
DURAL FAST SET EPOXY GEL 1:1 PART B

**DURAL FAST SET EPOXY GEL (1:1) PART A**Version 4.0
REVISION DATE: 07/08/2012

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SECTION 1 - PRODUCT IDENTIFICATION

Trade name : DURAL FAST SET EPOXY GEL (1:1) PART A
 Product code : TD5323122NC

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

Telephone : 1-800-321-7628
 Emergency Phone: : U.S. only: 1-800-424-9300
 International Users Call Collect: 1-703-527-3887

SECTION 2 - HAZARDS IDENTIFICATION**Emergency Overview**

Light Gray. 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. Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica. 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 %
Bisphenol A Polyglycidyl Ether Resin	25068-38-6	> 60.0
Acrylate Ester	15625-89-5	7.0 - 13.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	5.0 - 10.0
Siloxanes and Silicones	67762-90-7	3.0 - 7.0



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Hydroquinone (HQ) 123-31-9 - <0.1

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 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 : 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 : 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

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- 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.
- Protective measures : Use professional judgment in the selection, care, and use. Other equipment not normally required.
- Engineering measures : General ventilation is sufficient.

Exposure Limits

Chemical Name	CAS Number	Regulation	Limit	Form
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	OSHA TWA:	0.1 mg/m ³	Respirable.
		OSHA TWA:	0.3 mg/m ³	Total dust.
		OSHA PEL:	15 mg/m ³	Total dust.
		OSHA PEL:	5 mg/m ³	Respirable fraction.
		ACGIH TWA:	0.025 mg/m ³	Respirable fraction.
Hydroquinone (HQ)	123-31-9	ACGIH TWA:	1 mg/m ³	
		OSHA PEL:	2 mg/m ³	

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Form : Liquid
- Color : Light Gray
- Odor : Epoxy
- pH : Not available.
- Vapour pressure : Not available.
- Vapor density : Heavier than air
- Melting point/range : Not available.
- Freezing point : Not available.
- Boiling point/range : Not available.
- Water solubility : Miscible
- Specific Gravity : 1.13
- % Volatile Weight : 0.1 %

SECTION 10 - REACTIVITY / STABILITY

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



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SECTION 11 - TOXICOLOGICAL INFORMATION

Hydroquinone (HQ), CAS-No.: 123-31-9
Acute oral toxicity (LD-50 oral) 320 mg/kg (Rat)

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.

SECTION 14 - TRANSPORTATION / SHIPPING DATA

CFR / DOT:

Not Regulated

TDG:

Not Regulated

IMDG:

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
Chronic Health Hazard

OSHA Hazardous Components :

Crystalline Silica (Quartz)/ Silica Sand 14808-60-7



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Hydroquinone (HQ) 123-31-9

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

OSHA Flammability : Not Regulated

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

Chemical is listed as an IARC, NTP, OSHA, or ACGIH Carcinogen:
 Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

U.S. State Regulations:

MASS RTK Components : Crystalline Silica (Quartz)/ Silica Sand 14808-60-7
 Hydroquinone (HQ) 123-31-9

Penn RTK Components : Bisphenol A Polyglycidyl Ether Resin 25068-38-6
 Acrylate Ester 15625-89-5
 Crystalline Silica (Quartz)/ Silica Sand 14808-60-7
 Siloxanes and Silicones 67762-90-7

NJ RTK Components : Bisphenol A Polyglycidyl Ether Resin 25068-38-6
 Acrylate Ester 15625-89-5
 Crystalline Silica (Quartz)/ Silica Sand 14808-60-7
 Siloxanes and Silicones 67762-90-7

WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm:
 14808-60-7 Crystalline Silica (Quartz)/ Silica Sand
 1333-86-4 Carbon Black

SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	2
Flammability	1
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



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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

**DURAL FAST SET EPOXY GEL 1:1 PART B**Version 4.0
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SECTION 1 - PRODUCT IDENTIFICATION

Trade name : DURAL FAST SET EPOXY GEL 1:1 PART B
Product code : TD5323122NC

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

Telephone : 1-800-321-7628
Emergency Phone: : U.S. only: 1-800-424-9300
International Users Call Collect: 1-703-527-3887

Product use : Curative

SECTION 2 - HAZARDS IDENTIFICATION**Emergency Overview**

Light Gray. Liquid solution. 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 : Vapors or liquid may cause tearing, blurred vision, severe irritation, and possible chemical burns.
Ingestion : May cause irritation to the mouth, throat and stomach. May cause chemical burns to stomach, mouth, nose, and throat.
Skin : May cause moderate irritation. May cause sensitization resulting in irritation, itching and redness.

Aggravated Medical Conditions

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

Chronic Health Effects

May aggravate persons sensitized to amines. Prolonged skin contact may cause irritation, burns or dermatitis. Polyamines are reported to cause liver and kidney damage in experimental animals on prolonged and repeated overexposure. Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica. 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. Repeated inhalation of nonyl phenol may cause lung damage. Repeated skin contact with nonyl phenol may cause skin irritation and dermatitis. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

Target Organs: Skin, Eye, Lung

**DURAL FAST SET EPOXY GEL 1:1 PART B**Version 4.0
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SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
1,3-Cyclohexanedimethanamine	2579-20-6	15.0 - 40.0
4-Nonylphenol	84852-15-3	15.0 - 40.0
Bisphenol A	80-05-7	15.0 - 40.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	15.0 - 40.0
Epichlorohydrin polymer	25085-99-8	5.0 - 10.0
Fly Ash	68131-74-8	3.0 - 7.0
Siloxanes and Silicones	67762-90-7	3.0 - 7.0
Modified Amine	NJ TSRN# 51721300-5867P	3.0 - 7.0
Benzyl alcohol	100-51-6	1.0 - 5.0

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 : 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 : Setaflash Closed Cup
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- Autoignition temperature : Not available.
- Extinguishing media : If water fog is ineffective, use carbon dioxide, dry chemical or foam.
- Hazardous combustion products : Carbon monoxide, carbon dioxide, and nitrogen oxides.
- Protective equipment for firefighters : Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).
- Fire and explosion conditions : Product may ignite if heated in excess of its flash point.



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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

Store under normal warehouse conditions. Handle in compliance with common hygienic practices. Clean hands thoroughly after handling. 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.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

- Respiratory protection : Use full engineering controls before relying on personal protective equipment. Wear NIOSH/MSHA approved vapor respirator with appropriate cartridge when the vapor concentration is expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Protect hands with impervious gloves.
- 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.
- Protective measures : Use professional judgment in the selection, care, and use.
- Engineering measures : Use local exhaust when the general ventilation is inadequate.

Exposure Limits

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	OSHA TWA:	0.1 mg/m3	Respirable.
		OSHA TWA:	0.3 mg/m3	Total dust.
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA PEL:	5 mg/m3	Respirable fraction.
		ACGIH TWA:	0.025 mg/m3	Respirable fraction.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Form : Liquid solution
- Color : Light Gray
- pH : Not available.
- Vapour pressure : Not available.
- Vapor density : Not available.
- Melting point/range : Not available.



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Freezing point	:	Not available.
Boiling point/range	:	Not available.
Water solubility	:	Not available.
Specific Gravity	:	1.20
% Volatile Weight	:	19.0 %

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid	:	Acids.
Stability	:	Stable under normal conditions. Avoid welding arcs, flames or other high temperature sources.
Hazardous polymerization	:	Will not occur under normal conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

Bisphenol A, CAS-No.: 80-05-7	
Acute oral toxicity (LD-50 oral)	4,100 mg/kg (Rat) 3,300 mg/kg (Rat) 5,280 mg/kg (Mouse) 4,100 mg/kg (Mouse) 2,500 mg/kg (Mouse)
Benzyl alcohol, CAS-No.: 100-51-6	
Acute oral toxicity (LD-50 oral)	1,580 mg/kg (Mouse) 1,940 mg/kg (Rabbit) 3,100 mg/kg (Rat) 1,230 - 3,100 mg/kg (Rat)
Acute inhalation toxicity (LC-50)	200 - 300 mg/l for 8 h (Rat) 1,000 mg/l for 8 h (Rat)

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

CFR / DOT:

Not Regulated

TDG:



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Not Regulated

IMDG:

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nonylphenol), 9, PG III, MARINE POLLUTANT

Further Information:

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

SECTION 15 - REGULATORY INFORMATION

North American Inventories:

All components are listed or exempt from the TSCA inventory. One or more components are listed on the NDSL.

U.S. Federal Regulations:

SARA 313 Components : Bisphenol A 80-05-7

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard

OSHA Hazardous Components :

Bisphenol A 80-05-7
Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

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

OSHA Flammability : Not Regulated

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of: 0 g/l

Chemical is listed as an IARC, NTP, OSHA, or ACGIH Carcinogen:

Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

U.S. State Regulations:

MASS RTK Components : Bisphenol A 80-05-7
Crystalline Silica (Quartz)/ Silica Sand 14808-60-7
Benzyl alcohol 100-51-6

Penn RTK Components : 1,3-Cyclohexanedimethanamine 2579-20-6
4-Nonylphenol 84852-15-3
Bisphenol A 80-05-7
Crystalline Silica (Quartz)/ Silica Sand 14808-60-7
Epichlorohydrin polymer 25085-99-8
Fly Ash 68131-74-8



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	Siloxanes and Silicones	67762-90-7
	Modified Amine	NJ TSRN# 51721300-5867P
	Benzyl alcohol	100-51-6
NJ RTK Components	:	
	1,3-Cyclohexanedimethanamine	2579-20-6
	4-Nonylphenol	84852-15-3
	Bisphenol A	80-05-7
	Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
	Epichlorohydrin polymer	25085-99-8

WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm:
 14808-60-7 Crystalline Silica (Quartz)/ Silica Sand

SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	2
Flammability	1
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