



DURATREM EP KIT

Version 1.

Print Date 03/16/2007

REVISION DATE: 02/26/2007

This is a kit that contains the following components:

- DURATREM EP CURATIVE (PART A)
- DURATREM EP PART B BASE

DURATREM EP CURATIVE (PART A)

Version 1.

Print Date 03/16/2007

REVISION DATE: 02/26/2007

SECTION 1 - PRODUCT IDENTIFICATION

Trade name : DURATREM EP CURATIVE (PART A)
 Product code : 104200 804

COMPANY : Tremco Incorporated
 3735 Green Road
 Cleveland, OH 44122

Telephone : (216) 292-5000 8:30 - 5:00 EST
 Emergency Phone: : (216) 765-6727 8:30 - 5:00 EST
 After Hours: Chemtrec 1-800-424-9300

Product use : Curative

SECTION 2 - HAZARDS IDENTIFICATION**Emergency Overview**

Black. Liquid. May cause slight irritation to the respiratory system. Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel. Remove to fresh air. Get immediate 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 gastrointestinal irritation, nausea, and vomiting. May cause chemical burns to stomach, mouth, nose, and throat.
 Skin : May cause itching, reddening, inflammation. May cause severe burns, blistering and skin damage. May cause sensitization resulting in irritation, itching and redness. May cause a rash.

Aggravated Medical Conditions

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

Chronic Health Effects

May cause sensitization by contact. Prolonged skin contact may cause irritation, burns or dermatitis. Repeated overexposure to vapors and/or material may injure the liver, kidneys and respiratory system unless suitable engineering controls and/or personal protective equipment are used. May aggravate persons sensitized to amines. 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.

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
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Proprietary Ingredient (Non-hazardous)	NJ TSN# 51721300-5744P	40.0 - 70.0
Calcium Carbonate (Limestone)	1317-65-3	10.0 - 30.0
Nonylphenol	25154-52-3	10.0 - 30.0
Benzyl alcohol	100-51-6	10.0 - 30.0
Tetraethylene pentamine	112-57-2	7.0 - 13.0
N Amino ethyl piperazine	140-31-8	3.0 - 7.0
Tris(dimethylaminomethyl)phenol	90-72-2	3.0 - 7.0

SECTION 4 - FIRST AID MEASURES

Get immediate medical attention for any significant overexposure.

Inhalation	:	Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel. Remove to fresh air. Get immediate medical attention.
Eye contact	:	Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
Skin contact	:	Clean area of contact thoroughly using 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	:	131 °C, 268 °F
Method	:	Not available.
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 and carbon dioxide can form. Smoke, fumes. Nitrogen oxides can form.
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. Vapors may travel to sources of ignition and flashback. Vapor concentrations in enclosed areas may ignite explosively. Empty containers may contain ignitable vapors.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Remove sources of ignition immediately. Stop flow of material if safe to do so. Contain spill and keep out of water courses. Ventilate area.

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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. Do not smoke, weld, generate sparks, or use flame near container. Do not use in confined or poorly ventilated areas. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. Store under dry warehouse conditions away from heat and all ignition sources.

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

- Respiratory protection : 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 : Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.
- 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 : Inspect and replace equipment at regular intervals. Use professional judgment in the selection, care, and use.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. 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>
Calcium Carbonate (Limestone)	1317-65-3	OSHA PEL:	5 mg/m3	Respirable fraction.
		OSHA PEL:	15 mg/m3	Total dust.
		ACGIH TWA:	3 mg/m3	Respirable particles.
		ACGIH TWA:	10 mg/m3	Inhalable particles.
		OSHA TWA:	15 mg/m3	Total dust.
		OSHA TWA:	5 mg/m3	Respirable fraction.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Form : Liquid
- Color : Black
- Odor : Amine
- pH : Not available.
- 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	: > 196 °C, > 385 °F
Water solubility	: Partially soluble
Specific Gravity	: 1.34
% Volatile Weight	: 22 %

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid	: Oxidizing agents.Epoxies.Isocyanates.Acids.
Stability	: Material is stable under normal storage, handling, and use.
Hazardous polymerization	: Will not occur under normal conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

Nonylphenol, CAS-No.: 25154-52-3	
Acute oral toxicity (LD-50 oral)	1,620 mg/kg (Rat) 1,600 mg/kg (Rat)
Acute dermal toxicity (LD-50 dermal)	2,140 mg/kg (Rabbit)
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)
Tetraethylene pentamine, CAS-No.: 112-57-2	
Acute oral toxicity (LD-50 oral)	2,100 mg/kg (Rat) 3,990 mg/kg (Rat)
Acute dermal toxicity (LD-50 dermal)	660 mg/kg (Rabbit)

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method	: Subject to hazardous waste treatment, storage, and disposal requirements under RCRA. Recycle or incinerate waste at EPA approved facility or dispose of in compliance with federal, state and local regulations.
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SECTION 14 - TRANSPORTATION / SHIPPING DATA**TDG / DOT Shipping Description:**

CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (Contains Aliphatic Amine), 8, UN3267, PG III

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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 :

Calcium Carbonate (Limestone) 1317-65-3

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

OSHA Flammability : IIIB

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:
< 5 g/l

Regulatory VOC (less water and : 295 g/l
exempt solvent)

VOC Method 310 : 22 %

U.S. State Regulations:

MASS RTK Components	:	Calcium Carbonate (Limestone)	1317-65-3
		Nonylphenol	25154-52-3
		Benzyl alcohol	100-51-6
		Tetraethylene pentamine	112-57-2
		N Amino ethyl piperazine	140-31-8
Penn RTK Components	:	Proprietary Ingredient (Non-hazardous)	NJ TSRN# 51721300-5744P
		Calcium Carbonate (Limestone)	1317-65-3
		Nonylphenol	25154-52-3
		Benzyl alcohol	100-51-6
		Tetraethylene pentamine	112-57-2
		N Amino ethyl piperazine	140-31-8
NJ RTK Components	:	Tris(dimethylaminomethyl)phenol	90-72-2
		Proprietary Ingredient (Non-hazardous)	NJ TSRN# 51721300-5744P
		Calcium Carbonate (Limestone)	1317-65-3
		Nonylphenol	25154-52-3
		Benzyl alcohol	100-51-6
	Tetraethylene pentamine	112-57-2	



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N Amino ethyl piperazine

140-31-8

WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm:

1333-86-4

Carbon Black

SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	3
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

DURATREM EP PART B BASEVersion 1.
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SECTION 1 - PRODUCT IDENTIFICATION

Trade name : DURATREM EP PART B BASE
 Product code : 104200 804

COMPANY : Tremco Incorporated
 3735 Green Road
 Cleveland, OH 44122

Telephone : (216) 292-5000 8:30 - 5:00 EST
 Emergency Phone: : (216) 765-6727 8:30 - 5:00 EST
 After Hours: Chemtrec 1-800-424-9300

SECTION 2 - HAZARDS IDENTIFICATION**Emergency Overview**

White. Liquid solution. Vapor may irritate respiratory tract. May cause nausea, headaches, and dizziness. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation : Vapor may irritate respiratory tract. May cause nausea, headaches, and dizziness.
 Eyes : Direct contact may cause mild irritation. May cause temporary injury.
 Ingestion : May cause gastrointestinal irritation, nausea, and vomiting.
 Skin : May cause sensitization resulting in irritation, itching and redness.

Aggravated Medical Conditions

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

Chronic Health Effects

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, Lung

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Bisphenol A Polyglycidyl Ether Resin	25068-38-6	> 60.0
Benzyl alcohol	100-51-6	10.0 - 30.0
Titanium dioxide	13463-67-7	5.0 - 10.0
Siloxanes and Silicones	67762-90-7	3.0 - 7.0
Amorphous silica	7631-86-9	1.0 - 5.0

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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 : 251 °C, 484 °F
- Method : Not available.
- 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 : Smoke, fumes. Carbon monoxide and carbon dioxide can form.
- Protective equipment for firefighters : Water may be used to cool containers to minimize pressure build-up. Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).
- Fire and explosion conditions : Closed container, may burst when exposed to extreme heat. Empty containers may contain ignitable vapors. Vapor concentrations in enclosed areas may ignite explosively. Vapors may travel to sources of ignition and flashback.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Remove sources of ignition immediately. Stop flow of material if safe to do so. Contain spill and keep out of water courses. Ventilate area.

SECTION 7 - HANDLING AND STORAGE

Store under dry warehouse conditions away from heat and all ignition sources. Store in a cool, well ventilated area. 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. Do not smoke, weld, generate sparks, or use flame near container. Change soiled work clothes frequently. Clean hands thoroughly after handling.

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

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved organic vapor or supplied air respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.
- Eye protection : Chemical splash goggles.
- Protective measures : Use professional judgment in the selection, care, and use.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use general ventilation and/ or local exhaust to reduce the airborne contaminant concentration below the exposure limit listed in the MSDS

Exposure Limits

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Titanium dioxide	13463-67-7	ACGIH TWA:	10 mg/m3	Total dust. Total dust. Respirable fraction.
		OSHA PEL:	15 mg/m3	
		OSHA TWA:	15 mg/m3	
		OSHA TWA:	5 mg/m3	
Amorphous silica	7631-86-9	ACGIH TWA:	3 mg/m3	Respirable particles. Inhalable particles. Total dust. Respirable fraction.
		ACGIH TWA:	10 mg/m3	
		OSHA PEL:	15 mg/m3	
		OSHA PEL:	5 mg/m3	
		OSHA TWA:	0.8 mg/m3	

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Form : Liquid solution
- Color : White
- Odor : Alcohol
- 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 : Negligible
- Specific Gravity : 1.24

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% Volatile Weight : 12 %

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid : Epoxy curing agents.Amines and oxidizing agents.
Stability : Material is stable under normal storage, handling, and use.
Hazardous polymerization : Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

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)
Acute inhalation toxicity (LC-50) 200 - 300 mg/l for 8 h (Rat) 1,000 mg/l for 8 h (Rat)

Amorphous silica, CAS-No.: 7631-86-9
Acute oral toxicity (LD-50 oral) 22,500 mg/kg (Rat) 22,500 mg/kg (Rat) 15,000 mg/kg (Mouse)

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method : Recycle or dispose of in compliance with local, provincial and federal regulations.

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 :

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Titanium dioxide 13463-67-7
 Amorphous silica 7631-86-9

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

OSHA Flammability : IIIB

When appropriately mixed with the other part, product has a VOC less water and exempt solvent of:
 < 5 g/l

Regulatory VOC (less water and : 149 g/l
 exempt solvent)

VOC Method 310 : 12 %

U.S. State Regulations:

MASS RTK Components : Benzyl alcohol 100-51-6
 Titanium dioxide 13463-67-7
 Amorphous silica 7631-86-9

Penn RTK Components : Bisphenol A Polyglycidyl Ether Resin 25068-38-6
 Benzyl alcohol 100-51-6
 Titanium dioxide 13463-67-7
 Siloxanes and Silicones 67762-90-7
 Amorphous silica 7631-86-9

NJ RTK Components : Bisphenol A Polyglycidyl Ether Resin 25068-38-6
 Benzyl alcohol 100-51-6
 Titanium dioxide 13463-67-7
 Siloxanes and Silicones 67762-90-7
 Amorphous silica 7631-86-9

WARNING! Contains 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	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.



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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