



DURAL 340 SL LT GRAY 1:1

Version 3.0
REVISION DATE: 07/07/2012

Print Date 07/09/2012

This is a kit that contains the following components:

DURAL 340 LIGHT GRAY 1:1 PART A
DURAL 340 1:1 PART B



DURAL 340 LIGHT GRAY 1:1 PART A

Version 3.0
REVISION DATE: 07/07/2012

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SECTION 1 - PRODUCT IDENTIFICATION / PREPARATION INFORMATION

Product Information

Trade name : DURAL 340 LIGHT GRAY 1:1 PART A
Product code : TD5370104501

Supplier : Euclid Canada
2835 Grande-Allée
St-Hubert, QC J4T 2R4

Telephone : 1-800-667-0920
Emergency Phone: : (613) 996-6666

Preparation Information

Prepared by: : Sewnauth Raghunandan
Date: : 07/07/2012
Telephone : (416) 421-3300

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. Repeated inhalation of nonyl phenol may cause lung damage. Repeated skin contact with nonyl phenol may cause skin irritation and dermatitis. Prolonged and repeated exposure to excessive airborne concentrations of talc can result in scarring of the lungs (pneumoconiosis) or the covering of the lungs (pleural thickening). Fillers are encapsulated and not expected to be released from product under normal conditions of use.

Target Organs: Skin, Eye, Ingestion

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SECTION 3 : HAZARDOUS INGREDIENTS

Chemical Name	CAS-No.	Weight % Range
Bisphenol A Polyglycidyl Ether Resin	25068-38-6	> 60.0
Epichlorohydrin castor oil based epoxy resin	74398-71-3	10.0 - 30.0
4-Nonylphenol	84852-15-3	7.0 - 13.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	3.0 - 7.0
Talc	14807-96-6	3.0 - 7.0
Titanium dioxide	13463-67-7	1.0 - 5.0

The ingredients listed above are hazardous as defined in the controlled products regulation. (CPR).

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 / EXPLOSION HAZARDS

Flash point	:	> 200 °F, > 93 °C
Method	:	Setaflash Closed Cup
Lower explosion limit	:	Not available.
Upper explosion limit	:	Not available.
Autoignition temperature	:	Not available.
Means of Extinction	:	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.

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SECTION 6 - SPILLS / LEAKS / 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.
- 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
4-Nonylphenol	84852-15-3			
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	Ontario TWAEV: ACGIH TWA:	0.10 mg/m ³ 0.025 mg/m ³	Respirable fraction. Respirable fraction.
Talc	14807-96-6	Ontario TWAEV: ACGIH TWA: Ontario TWAEV:	2 mg/m ³ 2 mg/m ³ 2 ppm	Respirable. Respirable fraction.
Titanium dioxide	13463-67-7	Ontario TWAEV: ACGIH TWA:	10 mg/m ³ 10 mg/m ³	Total dust.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Physical State : Liquid
- Form : Liquid
- Color : Light Gray



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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
Evaporation Rate:	: Not available.
Specific Gravity	: 1.15
% Volatile Weight	: 8 %

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 - WASTE DISPOSAL CONSIDERATIONS

Disposal Method : Dispose as hazardous waste according to all local, state, federal and provincial regulations.

SECTION 14 - TRANSPORTATION / SHIPPING DATA

TDG:

Not Regulated

CFR / DOT:

Not Regulated



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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.

Canadian Regulations:

WHMIS Classification : D2A, D2B

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Other Regulations:

Regulatory VOC (less water and exempt solvent) : 100 g/l

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: Sewnauth Raghunandan

Legend

- | | |
|---|--|
| ACGIH - American Conference of Governmental Hygienists | OSHA - Occupational Safety and Health Administration |
| DOT - Department of Transportation | PEL - Permissible Exposure Limit |
| DSL - Domestic Substance List | RCRA - Resource Conservation and Recovery 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 |



DURAL 340 LIGHT GRAY 1:1 PART A

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NTP - National Toxicology Program

WHMIS - Workplace Hazardous Materials Information System



DURAL 340 1:1 PART B

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SECTION 1 - PRODUCT IDENTIFICATION / PREPARATION INFORMATION

Product Information

Trade name : DURAL 340 1:1 PART B
Product code : TD5370104501

Supplier : Euclid Canada
2835 Grande-Allée
St-Hubert, QC J4T 2R4

Telephone : 1-800-667-0920
Emergency Phone: : (613) 996-6666

Product use : Curative

Preparation Information

Prepared by: : Sewnauth Raghunandan
Date: : 07/07/2012
Telephone : (416) 421-3300

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview

White to Gray. 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.

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. 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

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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. Repeated inhalation of nonyl phenol may cause lung damage. Repeated skin contact with nonyl phenol may cause skin irritation and dermatitis. Prolonged and repeated exposure to excessive airborne concentrations of talc can result in scarring of the lungs (pneumoconiosis) or the covering of the lungs (pleural thickening). Fillers are encapsulated and not expected to be released from product under normal conditions of use.

SECTION 3 : HAZARDOUS INGREDIENTS

Chemical Name	CAS-No.	Weight % Range
4-Nonylphenol	84852-15-3	30.0 - 60.0
Talc	14807-96-6	15.0 - 40.0
Poly(oxypropylene) diamine	9046-10-0	15.0 - 40.0
N Amino ethyl piperazine	140-31-8	3.0 - 7.0
Tris(dimethylaminomethyl)phenol	90-72-2	1.0 - 5.0
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	0.1 - 1.0

The ingredients listed above are hazardous as defined in the controlled products regulation. (CPR).

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.
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 / EXPLOSION HAZARDS

Flash point	:	> 200 °F, > 93 °C
Method	:	Setaflash Closed Cup
Lower explosion limit	:	Not available.
Upper explosion limit	:	Not available.
Autoignition temperature	:	Not available.
Means of Extinction	:	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).



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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 - SPILLS / LEAKS / 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

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>
4-Nonylphenol	84852-15-3			
Talc	14807-96-6	Ontario TWAEV: ACGIH TWA: Ontario TWAEV:	2 mg/m3 2 mg/m3 2 ppm	Respirable. Respirable fraction.
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	Ontario TWAEV: ACGIH TWA:	0.10 mg/m3 0.025 mg/m3	Respirable fraction. Respirable fraction.



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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Liquid
Form : Liquid
Color : White to Gray
Odor : Amine
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
Evaporation Rate: : Not available.
Specific Gravity : 1.18
% Volatile Weight : 35 %

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

No Data Available

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Disposal Method : Dispose as hazardous waste according to all local, state, federal and provincial regulations.



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SECTION 14 - TRANSPORTATION / SHIPPING DATA

TDG:

UN1760, CORROSIVE LIQUID, N.O.S. (Alkaline Amine), 8, PG III

CFR / DOT:

UN1760, Corrosive liquids, n.o.s. (Alkaline Amine), 8, PG III

IMDG:

UN1760, CORROSIVE LIQUID, N.O.S. (Alkaline Amine, Nonylphenol), 8, 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.
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

Canadian Regulations:

D2A, D2B, E

This is a "controlled product" under the Canadian Workplace Hazardous Materials Information System (WHMIS).
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Other Regulations:

Regulatory VOC (less water and exempt solvent) : 420 g/l

SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	2
Flammability	1
Reactivity	1
PPE	

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



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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: Sewnauth Raghunandan

Legend

ACGIH - American Conference of Governmental Hygienists	OSHA - Occupational Safety and Health Administration
DOT - Department of Transportation	PEL - Permissible Exposure Limit
DSL - Domestic Substance List	RCRA - Resource Conservation and Recovery 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