

This is a kit that contains the following components: DURAL 100 CLASS D PART A (7.65:1.81) DURAL 100 CLASS D - PART B (7.65:1.81)



Version: 2.2 Revision Date: 09/18/2023

## SAFETY DATA SHEET

#### 1. Identification

Product identifier: DURAL 100 CLASS D PART A (7.65:1.81) Product Code: TD63323

#### Recommended use and restriction on use

Recommended use: Sealant Restrictions on use: Not known.

#### Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY 19218 REDWOOD ROAD CLEVELAND OH 44110 US

#### Contact person: Telephone: Emergency telephone number:

EH&S Department 216-531-9222 1-800-424-9300 (US); 1-613-996-6666 (Canada)

#### 2. Hazard(s) identification

#### **Hazard Classification**

#### **Health Hazards**

Serious Eye Damage/Eye Irritation	Category 2B
Skin sensitizer	Category 1
Carcinogenicity	Category 1A

#### **Unknown toxicity - Health**

Acute toxicity, oral	24.33 %
Acute toxicity, dermal	26.62 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust	99.82 %
or mist	

#### Label Elements

#### Hazard Symbol:





Signal Word:	Danger
Hazard Statement:	Causes eye irritation. May cause an allergic skin reaction. May cause cancer.
Precautionary Statements	
Prevention:	Wash thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
Response:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. Specific treatment (see on this label). Wash contaminated clothing before reuse.
Storage:	Store locked up.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Hazard(s) not otherwise classified (HNOC):	None.

## 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Bisphenol A Polyglycidyl Ether Resin	25068-38-6	50 - <100%
Calcium carbonate	471-34-1	10 - <20%
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	10 - <20%
Titanium dioxide	13463-67-7	1 - <5%
Magnesite	546-93-0	0.1 - <1%
Trade Secret	Trade Secret	0.1 - <1%
Aluminum oxide	1344-28-1	0.1 - <1%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

## Description of necessary first-aid measures

#### Inhalation:

Move to fresh air.



Skin Contact:	If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.
Eye contact:	Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.
Ingestion:	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
Personal Protection for First- aid Responders:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Most important symptoms/effe	cts, acute and delayed
Symptoms:	May cause skin and eye irritation.
Hazards:	No data available.
Indication of immediate medica	I attention and special treatment needed
Treatment:	Symptoms may be delayed.
5. Fire-fighting measures	
General Fire Hazards:	No unusual fire or explosion hazards noted.
Suitable (and unsuitable) exting	guishing media
Suitable extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical:	During fire, gases hazardous to health may be formed.
Special protective equipment a	and precautions for fire-fighters
Special fire-fighting procedures:	No data available.
Special protective equipment for fire-fighters:	
	worn in case of fire.

#### 6. Accidental release measures



Personal precautions, protective equipment and emergency procedures:	See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.		
Accidental release measures:	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.		
Methods and material for containment and cleaning up:	Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.		
Environmental Precautions:	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.		
7. Handling and storage			
Handling			
Technical measures (e.g. Local and general ventilation):	Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.		
Safe handling advice:	Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes. Wash hands thoroughly after bandling. Avoid contact with eyes, skip, and clothing Provide adequate		

handling. Avoid contact with eyes, skin, and clothing.Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
 Contact avoidance measures: No data available.

**Hygiene measures:** Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

Storage	
Safe storage conditions:	Store locked up.
Safe packaging materials:	No data available.

## 8. Exposure controls/personal protection

### Control Parameters

### **Occupational Exposure Limits**

Chemical Identity	Туре	Exposure Limit Values	Source
Calcium carbonate - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (01 2017)
Calcium carbonate - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)
Calcium carbonate - Inhalable particles.	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (01 2021)
Calcium carbonate - Respirable particles.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as amended (01 2021)
Calcium carbonate - Respirable fraction.	TWA	15 millions of particles per	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)



		cubic foot of	
Calcium carbonate - Total	TWA	air 15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
dust.		-	amended (09 2016)
	TWA	50 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
		particles per cubic foot of	amended (09 2016)
		cubic toot of air	
Calcium carbonate -	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air
Respirable fraction.		-	Contaminants (29 CFR 1910.1000), as
			amended (01 2017)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016)
	OSHA_AC T	0.025 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016)
Crystalline Silica (Quartz)/	PEL	0.05 mg/m3	US. OSHA Table Z-1 Limits for Air
Silica Sand - Respirable dust.		0.00 mg/m0	Contaminants (29 CFR 1910.1000), as amended (03 2016)
Crystalline Silica (Quartz)/	TWA	2.4 millions	US. OSHA Table Z-3 (29 CFR 1910.1000), as
Silica Sand - Respirable.		of particles	amended (2000)
		per cubic foot of air	
	TWA	0.1 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
		0.1 mg/m0	amended (2000)
Crystalline Silica (Quartz)/	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values, as
Silica Sand - Respirable fraction.		-	amended (02 2020)
Titanium dioxide - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air
			Contaminants (29 CFR 1910.1000), as amended (02 2006)
Titanium dioxide - Respirable	TWA	15 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
fraction.		particles per	amended (03 2016)
		cubic foot of	
		air	
Titanium dioxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Titanium dioxide - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
Titanium dioxide - Total dust.	TWA	50 millions of	amended (03 2016) US. OSHA Table Z-3 (29 CFR 1910.1000), as
		particles per	amended (03 2016)
		cubic foot of	
		air	
Titanium dioxide - Respirable finescale particles	TWA	2.5 mg/m3	US. ACGIH Threshold Limit Values, as amended (01 2022)
Titanium dioxide - Respirable	TWA	0.2 mg/m3	US. ACGIH Threshold Limit Values, as
nanoscale particles		- <b>J</b>	amended (01 2022)
Magnesite - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air
			Contaminants (29 CFR 1910.1000), as
Magnesite - Respirable	PEL	5 mg/m3	amended (02 2006) US. OSHA Table Z-1 Limits for Air
fraction.	F L L	5 mg/m5	Contaminants (29 CFR 1910.1000), as amended (02 2006)
Magnesite - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as
Magnesite - Respirable	TWA	3 mg/m3	amended (09 2016) US. ACGIH Threshold Limit Values, as
particles.			amended (01 2021)
Magnesite - Total dust.	TWA	50 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
		particles per	amended (09 2016)
		cubic foot of	
Magnesite - Inhalable	TWA	air 10 mg/m3	US. ACGIH Threshold Limit Values, as
particles.		io mg/mo	amended (01 2021)
Magnesite - Respirable	TWA	15 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000), as
fraction.		particles per	amended (09 2016)
		cubic foot of	
		air	
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as



			amended (09 2016)
Trade Secret - Inhalable particles.	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
Trade Secret - Respirable particles.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2015)
Trade Secret - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Trade Secret - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
Trade Secret - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
Aluminum oxide - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values, as amended (2011)
	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Aluminum oxide - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Aluminum oxide - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Aluminum oxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (03 2016)
Aluminum oxide - Inhalable particles.	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (01 2021)
Aluminum oxide - Respirable particles.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values, as amended (01 2021)



Chemical name	Туре	Exposure Limit Values	Source
Calcium carbonate - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Calcium carbonate - Respirable fraction.	TWA	3 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Calcium carbonate - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (06 2020)
Calcium carbonate - Respirable fraction.	TWA	3 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (06 2020)
Calcium carbonate - Respirable particles.	TWA	3 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Calcium carbonate - Inhalable particles.	TWA	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Calcium carbonate - Inhalable fraction.	TWA	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.1 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	TWA	0.05 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (04 2022)
Titanium dioxide - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
Titanium dioxide - Respirable fraction.	TWA	3 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
Titanium dioxide	TWA	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Titanium dioxide - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)

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Appropriate Engineering
Controls
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Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

#### Individual protection measures, such as personal protective equipment

Eye/face protection:Wear safety glasses with side shields (or goggles).Skin ProtectionAdditional Information: Use suitable protective gloves if risk of skin contact.



Skin and Body Protection:	Wear suitable protective clothing. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
Respiratory Protection:	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
Hygiene measures:	Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin.

## 9. Physical and chemical properties

Appearance	
Physical state:	liquid
Form:	liquid
Color:	White
Odor:	Mild
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	> 93 °C > 200 °F
Evaporation rate:	Slower than Ether
Flammability (solid, gas):	No
Upper/lower limit on flammability or explosive	ve limits
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Vapor pressure:	No data available.
Vapor density:	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density:	1.295
Solubility(ies)	
Solubility in water:	Insoluble in water
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

## 10. Stability and reactivity

**Reactivity:** 

No data available.



Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

## 11. Toxicological information

Information on likely routes of e Inhalation:	exposure In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact:	May be harmful in contact with skin. Causes mild skin irritation. May cause an allergic skin reaction.
Eye contact:	Causes eye irritation.
Ingestion:	May be ingested by accident. Ingestion may cause irritation and malaise.
Symptoms related to the physic	al, chemical and toxicological characteristics
Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.
Information on toxicological eff	ects
Acute toxicity (list all possibl	e routes of exposure)
Oral Product:	Not classified for acute toxicity based on available data.
Dermal Product:	ATEmix: 3,606.49 mg/kg
Inhalation Product:	Not classified for acute toxicity based on available data.
Repeated dose toxicity Product:	No data available.
Skin Corrosion/Irritation	10/30



Product:		No data available.
Serious Eye Dan Product:	nage/Eye Irritatio	on No data available.
Respiratory or S Product:	kin Sensitizatior	n No data available.
Carcinogenicity Product:		No data available.
IARC Monograp	hs on the Evalua	tion of Carcinogenic Risks to Humans:
	stalline Silica artz)/ Silica d	Overall evaluation: Carcinogenic to humans.
Tita	nium dioxide	Overall evaluation: Possibly carcinogenic to humans.
Crys (Qu San	stalline Silica artz)/ Silica d	n (NTP) Report on Carcinogens: Known To Be Human Carcinogen.
	ifically Regulated genic components	d Substances (29 CFR 1910.1001-1053), as amended: s identified
Germ Cell Mutaç	genicity	
In vitro Product:		No data available.
In vivo Product:		No data available.
Reproductive to Product:	xicity	No data available.
Specific Target ( Product:	Organ Toxicity -	Single Exposure No data available.
Specific Target Organ Toxicity - Repeated ExposureProduct:No data available.		
Aspiration Haza Product:	rd	No data available.



#### Other effects:

Constituents of this product may include crystalline silica which, if in inhalable form, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. Constituents may also contain asbestiform or non-asbestiform tremolite or other silicates as impurities, and above de minimis exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

#### 12. Ecological information

#### **Ecotoxicity:**

#### Acute hazards to the aquatic environment:

Fish Product:	No data available.
Aquatic Invertebrates Product:	No data available.
Chronic hazards to the aquati	c environment:
Fish Product:	No data available.
Aquatic Invertebrates Product:	No data available.
Toxicity to Aquatic Plants Product:	No data available.
Persistence and Degradability	
Biodegradation Product:	No data available.
BOD/COD Ratio Product:	No data available.
Bioaccumulative potential Bioconcentration Factor (BC Product:	<b>CF)</b> No data available.
Partition Coefficient n-octanol / v Product:	water (log Kow) No data available.
Mobility in soil:	No data available.
Other adverse effects:	No data available.



## 13. Disposal considerations

Disposal methods:	Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Contaminated Packaging:	No data available.

#### 14. Transport information

#### TDG:

Not Regulated

#### CFR / DOT:

Not Regulated

#### IMDG:

Not Regulated

#### 15. Regulatory information

#### **US Federal Regulations**

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) None present or none present in regulated quantities.

#### US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs)

#### (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended None present or none present in regulated quantities.

#### CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### **Hazard categories**

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard

# US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting



#### Chemical Identity % by weight

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) None present or none present in regulated quantities.

#### Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3) None present or none present in regulated quantities.

#### **US State Regulations**

#### **US. California Proposition 65**

For more information go to www.P65Warnings.ca.gov.

#### International regulations

#### Montreal protocol

Not applicable

#### Stockholm convention

Not applicable

#### **Rotterdam convention**

Not applicable

#### Kyoto protocol

Not applicable

#### VOC:

Regulatory VOC (less water and exempt solvent)	:	0 g/l
VOC Method 310	:	0.00 %



Inventory Status: Australia AICS:	All components in this product are listed on or exempt from the Inventory.
EC Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	All components in this product are listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	All components in this product are listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.



## 16.Other information, including date of preparation or last revision

Revision Date:	09/18/2023
Version #:	2.2
Further Information:	No data available.
Disclaimer:	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.



Version: 2.2 Revision Date: 09/18/2023

## SAFETY DATA SHEET

#### 1. Identification

Product identifier: DURAL 100 CLASS D - PART B (7.65:1.81) Product Code: TD63323

#### Recommended use and restriction on use

Recommended use: Curative Restrictions on use: Not known.

#### Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY 19218 REDWOOD ROAD CLEVELAND OH 44110 US

#### Contact person: Telephone: Emergency telephone number:

EH&S Department 216-531-9222 1-800-424-9300 (US); 1-613-996-6666 (Canada)

#### 2. Hazard(s) identification

#### **Hazard Classification**

Category 4
Category 2
Category 1
Category 1
Category 1A
Category 2

#### **Unknown toxicity - Health**

Acute toxicity, oral	61.39 %
Acute toxicity, dermal	84.76 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust or mist	99.9 %

#### **Environmental Hazards**

Acute hazards to the aquatic environment

Category 3

#### **Unknown toxicity - Environment**

Acute hazards to the aquatic 64.99 % environment



Chronic hazards to the aquatic 100 % environment

#### Label Elements

Hazard Symbol:	
Signal Word:	Danger
Hazard Statement:	Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. Suspected of damaging fertility or the unborn child. Harmful to aquatic life.
Precautionary Statements	
Prevention:	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/ protective clothing/ eye protection/ face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Avoid release to the environment.
Response:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. Immediately call a POISON CENTER or doctor/ physician. Specific treatment (see on this label). Wash contaminated clothing before reuse.
Storage:	Store locked up.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Hazard(s) not otherwise classified (HNOC):	None.

3. Composition/information on ingredients



#### Mixtures

Chemical Identity	CAS number	Content in percent (%)*	
Diethylenetriamine	111-40-0	10 - <25%	
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	10 - <20%	
Bisphenol A	80-05-7	10 - <20%	
Triethylenetetramine	112-24-3	5 - <10%	
* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.			

### 4. First-aid measures

4. Filst-alu Illeasules		
Description of necessary first-aid measures		
Inhalation:	Move to fresh air.	
Skin Contact:	Get medical attention. Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.	
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.	
Ingestion:	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.	
Personal Protection for First- aid Responders:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.	
Most important symptoms/effe	cts, acute and delayed	
Symptoms:	Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Extreme irritation of eyes and mucous membranes, including burning and tearing.	
Hazards:	No data available.	
Indication of immediate medica	al attention and special treatment needed	
Treatment:	Symptoms may be delayed.	
5. Fire-fighting measures		
General Fire Hazards:	No unusual fire or explosion hazards noted.	
Suitable (and unsuitable) extinguishing media		
Suitable extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.	
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.	



Specific hazards arising from the chemical:	During fire, gases hazardous to health may be formed.		
Special protective equipment and	d precautions for fire-fighters		
Special fire-fighting procedures:	No data available.		
Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.		
6. Accidental release measures	6		
Personal precautions, protective equipment and emergency procedures:	See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.		
Accidental release measures:	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.		
Methods and material for containment and cleaning up:	Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.		
Environmental Precautions:	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.		
7. Handling and storage			
Handling			
Technical measures (e.g. Local and general ventilation):	Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.		
Safe handling advice:	Do not taste or swallow. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Do not get in eyes. Avoid contact with skin. Avoid contact with eyes, skin, and clothing.Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.		
Contact avoidance measures:	No data available.		
Hygiene measures:	Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Wash hands after handling. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace.		
Storage			
Safe storage conditions:	Store locked up.		



#### Safe packaging materials:

No data available.

#### 8. Exposure controls/personal protection

#### **Control Parameters**

#### **Occupational Exposure Limits**

Chemical Identity	Туре	Exposure Limit Values	Source
Diethylenetriamine	TWA	1 ppm	US. ACGIH Threshold Limit Values, as amended (2008)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.05 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016)
	OSHA_AC T	0.025 mg/m3	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended (03 2016)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	PEL	0.05 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)
Crystalline Silica (Quartz)/ Silica Sand - Respirable.	TWA	2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
	TWA	0.1 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (2000)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values, as amended (02 2020)

Chemical name	Туре	Exposure Lim	it Values	Source
Diethylenetriamine	TWA	1 ppm		Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
Diethylenetriamine	TWA	1 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Diethylenetriamine	TWA	1 ppm	4.2 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA		0.10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (06 2015)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA		0.1 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	TWA		0.05 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (04 2022)
Triethylenetetramine	TWA	0.5 ppm	3 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)

#### Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

#### Individual protection measures, such as personal protective equipment



Eye/face protection:	Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.
Skin Protection Hand Protection:	Additional Information: Use suitable protective gloves if risk of skin contact.
Skin and Body Protection:	Wear suitable protective clothing. Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
Respiratory Protection:	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
Hygiene measures:	Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Wash hands after handling. Wash hands before breaks and immediately after handling the product. Do not get in eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash contaminated clothing before reuse. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and chemical properties

Appearance	
Physical state:	liquid
Form:	liquid
Color:	Black
Odor:	Mild pungent
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	> 93 °C > 200 °F(Setaflash Closed Cup)
Evaporation rate:	Slower than Ether
Flammability (solid, gas):	No
Upper/lower limit on flammability or explosi	ive limits
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Vapor pressure:	No data available.
Vapor density:	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density:	1.045
Solubility(ies)	
Solubility in water:	Insoluble in water



Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

## 10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	Strong acids.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

## 11. Toxicological information

Information on likely routes of exposure			
Inhalation:	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.		
Skin Contact:	May be harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.		
Eye contact:	Causes serious eye damage.		
Ingestion:	Harmful if swallowed.		
Symptoms related to the physical, chemical and toxicological characteristics			
Inholotion	No dete eveilable		

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

#### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

Oral Product:	ATEmix: 1,480.52 mg/kg
Dermal Product:	ATEmix: 3,733.36 mg/kg



Inhalation Product:	Not classified for acute toxicity based on available data.
<b>Specified substance(s):</b> Crystalline Silica (Quartz)/ Silica Sand	LC 50: > 5.0 mg/l
Repeated dose toxicity Product:	No data available.
Skin Corrosion/Irritation Product:	No data available.
Serious Eye Damage/Eye Irritati Product:	on No data available.
Respiratory or Skin Sensitizatio Product:	n No data available.
Carcinogenicity Product:	No data available.
IARC Monographs on the Evalu	ation of Carcinogenic Risks to Humans:
IARC Monographs on the Evalu Crystalline Silica (Quartz)/ Silica Sand	ation of Carcinogenic Risks to Humans: Overall evaluation: Carcinogenic to humans.
Crystalline Silica (Quartz)/ Silica Sand US. National Toxicology Progra	Overall evaluation: Carcinogenic to humans. <b>m (NTP) Report on Carcinogens:</b> Known To Be Human Carcinogen.
Crystalline Silica (Quartz)/ Silica Sand <b>US. National Toxicology Progra</b> Crystalline Silica (Quartz)/ Silica Sand	Overall evaluation: Carcinogenic to humans. <b>m (NTP) Report on Carcinogens:</b> Known To Be Human Carcinogen. <b>ed Substances (29 CFR 1910.1001-1053), as amended</b> :
Crystalline Silica (Quartz)/ Silica Sand US. National Toxicology Progra Crystalline Silica (Quartz)/ Silica Sand US. OSHA Specifically Regulate	Overall evaluation: Carcinogenic to humans. <b>m (NTP) Report on Carcinogens:</b> Known To Be Human Carcinogen. <b>ed Substances (29 CFR 1910.1001-1053), as amended</b> :
Crystalline Silica (Quartz)/ Silica Sand US. National Toxicology Progra Crystalline Silica (Quartz)/ Silica Sand US. OSHA Specifically Regulate No carcinogenic component	Overall evaluation: Carcinogenic to humans. <b>m (NTP) Report on Carcinogens:</b> Known To Be Human Carcinogen. <b>ed Substances (29 CFR 1910.1001-1053), as amended</b> :
Crystalline Silica (Quartz)/ Silica Sand US. National Toxicology Progra Crystalline Silica (Quartz)/ Silica Sand US. OSHA Specifically Regulate No carcinogenic component Germ Cell Mutagenicity In vitro	Overall evaluation: Carcinogenic to humans. <b>m (NTP) Report on Carcinogens:</b> Known To Be Human Carcinogen. <b>ed Substances (29 CFR 1910.1001-1053), as amended:</b> ts identified



Product:	Suspected of damaging fertility or the unborn child.
Specific Target Organ Toxicity - Product:	Single Exposure No data available.
Specific Target Organ Toxicity - Product:	Repeated Exposure No data available.
Aspiration Hazard Product:	No data available.
Other effects:	Constituents of this product may include crystalline silica which, if in inhalable form, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. Constituents may also contain asbestiform or non-asbestiform tremolite or other silicates as impurities, and above de minimis exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

## 12. Ecological information

#### **Ecotoxicity:**

#### Acute hazards to the aquatic environment:

Fish Product:	No data available.
Specified substance(s): Diethylenetriamine	LC 50 (Poecilia reticulata, 96 h): 0.43 g/l Experimental result, Key study
Bisphenol A	LC 50 (Pimephales promelas, 96 h): 4.6 mg/l Experimental result, Key study
Aquatic Invertebrates Product:	No data available.
Specified substance(s): Diethylenetriamine	EC 50 (Daphnia magna, 48 h): 16 mg/l experimental result Experimental result, Key study
Bisphenol A	EC 50 (Daphnia magna, 48 h): 10.2 mg/l experimental result Experimental result, Key study
Triethylenetetramine	LC 50 (Water flea (Daphnia magna), 48 h): 33.9 mg/l Intoxication

#### Chronic hazards to the aquatic environment:



Fish Product:	No data available.
Specified substance(s): Diethylenetriamine	NOAEL (Gasterosteus aculeatus): > 10 mg/l experimental result Experimental result, Key study
Bisphenol A	NOAEL (Pimephales promelas): 640 µg/l experimental result Experimental result, Key study
Aquatic Invertebrates Product:	No data available.
Specified substance(s): Diethylenetriamine	NOAEL (Daphnia magna): 5.6 mg/l experimental result Experimental result, Key study
Bisphenol A	NOAEL (Daphnia magna): 1 mg/l experimental result Experimental result, Supporting study
Toxicity to Aquatic Plants Product:	No data available.
Persistence and Degradability	
Biodegradation Product:	No data available.
Specified substance(s): Diethylenetriamine	87 % Detected in water. Experimental result, Key study
Bisphenol A	89 % (28 d) Detected in water. Experimental result, Key study
BOD/COD Ratio Product:	No data available.
Bioaccumulative potential Bioconcentration Factor (BC Product:	<b>CF)</b> No data available.
Specified substance(s): Diethylenetriamine	Cyprinus carpio, Bioconcentration Factor (BCF): > 2.8 - 6.3 Aquatic sediment Experimental result, Key study
Bisphenol A	Cyprinus carpio, Bioconcentration Factor (BCF): 20 - 67 Aquatic sediment Experimental result, Key study
Partition Coefficient n-octanol / v Product:	vater (log Kow) No data available.
Specified substance(s): Bisphenol A	Log Kow: 3.32 Log Kow: 3.32



Mobility in soil:	No data available.
Other adverse effects:	Harmful to aquatic organisms.
13. Disposal considerations	
Disposal methods:	Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Contaminated Packaging:	No data available.

#### 14. Transport information

#### TDG:

UN2735, AMINES, LIQUID, CORROSIVE, N.O.S. (Triethylenetetramine), 8, PG III

#### CFR / DOT:

UN2735, Amines, liquid, corrosive, n.o.s. (Triethylenetetramine), 8, PG III

#### IMDG:

UN2735, AMINES, LIQUID, CORROSIVE, N.O.S. (Triethylenetetramine), 8, PG III

#### **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.

#### 15. Regulatory information

#### **US Federal Regulations**

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

## US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended None present or none present in regulated quantities.

#### CERCLA Hazardous Substance List (40 CFR 302.4):

**Chemical Identity** 

Reportable quantity

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard



# US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

#### US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

Chemical Identity% by weightBisphenol A1.0%

- Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) None present or none present in regulated quantities.
- Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3) None present or none present in regulated quantities.

#### **US State Regulations**

US. California Proposition 65

For more information go to www.P65Warnings.ca.gov.

#### International regulations

#### Montreal protocol

Not applicable

#### Stockholm convention

Not applicable

#### **Rotterdam convention**

Not applicable

#### Kyoto protocol

Not applicable

#### VOC:

Regulatory VOC (less water and exempt solvent)	:	0 g/l
VOC Method 310	:	0.00 %



Inventory Status: Australia AICS:	All components in this product are listed on or exempt from the Inventory.
EC Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	All components in this product are listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	All components in this product are listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	All components in this product are listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.



## 16.Other information, including date of preparation or last revision

Revision Date:	09/18/2023
Version #:	2.2
Further Information:	No data available.
Disclaimer:	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.