## MATERIAL SAFETY DATA SHEET

### DGD0026 Sandstone Sm.

Version Number 1.3 Revision Date 01/13/2014

Product Use

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone Emergency telephone number	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	DGD0026 Sandstone Sm.
Product code	:	FO20011733
Chemical Name	:	Mixture
CAS-No.	:	Mixture

#### : Industrial Applications

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Bisphenol A - Epichlorohydrin polymer	25068-38-6	1 - 5
Naphthalene	91-20-3	0.1 - 1
Antimony trioxide	1309-64-4	1 - 5
Rutile, antimony chromium buff	68186-90-3	1 - 5
Silica, cristobalite	14464-46-1	1 - 5
Titanium dioxide	13463-67-7	10 - 30

#### **3. HAZARDS IDENTIFICATION**

#### EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions.

#### POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Skin contact, Ingestion
Acute exposure	
Inhalation	: Inhalation of airborne droplets may cause irritation of the respiratory tract.
Ingestion	: May be harmful if swallowed.
Eyes	: May cause eye and skin irritation.

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Skin	: Experience shows no unusual dermatitis hazard from routine handling
Chronic exposure	: Refer to Section 11 for Toxicological Information.
Medical Conditions Aggravated by Exposure:	: None known.
	4. FIRST AID MEASURES
Inhalation	: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. When symptoms persist or in all cases o doubt seek medical advice.
Ingestion	: Do not induce vomiting without medical advice. When symptoms persist or in all cases of doubt seek medical advice.
Eyes	: Rinse immediately with plenty of water for at least 15 minutes. If ey irritation persists, seek medical attention.
Skin	: Wash off with soap and plenty of water. If skin irritation persists seek medical attention.
	5. FIREFIGHTING MEASURES
Flash point	: no data available
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion	<ul> <li>no data available</li> <li>no data available</li> <li>Not applicable</li> <li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.</li> <li>May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) unde</li> </ul>
Hazards	fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.
	6. ACCIDENTAL RELEASE MEASURES
Personal precautions	: Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.
Environmental precautions	: The product should not be allowed to enter drains, water courses or the soil. Should not be released into the environment.

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		binder, universal binder, sawdust). Package all material in appropriate container for disposal.
		7. HANDLING AND STORAGE
Handling	:	Heat only in areas with appropriate exhaust ventilation. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials.
Storage	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store in a cool dry place.
8. EX	POSU	RE CONTROLS/PERSONAL PROTECTION
Respiratory protection	:	No personal respiratory protective equipment normally required.
Eye/Face Protection	:	Safety glasses with side-shields
Hand protection	:	Protective gloves
Skin and body protection	:	Long sleeved clothing

Measures	
General Hygiene Considerations	: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Engineering measures	: Heat only in areas with appropriate exhaust ventilation. Provide

appropriate exhaust ventilation at machinery.

: Safety shoes

Exposure limit(s)

Additional Protective

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Components	Value	Exposure time	Exposure type	List:
Antimony trioxide	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Sb	NIOSH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	OSHA Z1A
Rutile, antimony chromium buff	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Sb	NIOSH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	OSHA Z1A
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
Silica, cristobalite	0.025 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	0.05 mg/m3	Time Weighted Average (TWA):	Respirable dust.	OSHA Z1A
	0.05 mg/m3	Time Weighted Average (TWA):	Respirable.	Z3
	0.15 mg/m3	Time Weighted Average (TWA):	Total dust.	Z3
	0.05 mg/m3	Time Weighted Average (TWA):		MX OEL
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):	Total dust.	OSHA Z1A
	10 mg/m3	Time Weighted Average (TWA):	as Ti	MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL
Naphthalene	10 ppm	Time Weighted Average (TWA):		ACGIH
	15 ppm	Short Term Exposure Limit (STEL):		ACGIH
	10 ppm 50	Recommended exposure		NIOSH
	mg/m3	limit (REL):		
	15 ppm 75 mg/m3	Short Term Exposure Limit (STEL):		NIOSH

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0 ppm 50 mg/m3	PEL:	OSHA Z1
0 ppm 50 mg/m3	Time Weighted Average (TWA):	OSHA Z1A
5 ppm 75 mg/m3	Short Term Exposure Limit (STEL):	OSHA Z1A
0 ppm 50 mg/m3	Time Weighted Average (TWA):	MX OEL
5 ppm 75 mg/m3	Short Term Exposure Limit (STEL):	MX OEL
5 ppm	Time Weighted Average (TWA):	ACGIH NIC

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility
- liquid
  viscous, liquid
  TAN
  very faint
  not applicable
  not applicable
  immiscible

Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH

- Not establishedNot determined
- : Not applicable
- : Not determined
- : Not determined
- : Not applicable

#### **10. STABILITY AND REACTIVITY**

Stability	:	The product is stable if stored and handled as prescribed.
Hazardous Polymerization	:	Will not occur.
Conditions to avoid	:	Keep away from oxidizing agents and open flame. To avoid thermal decomposition, do not overheat.
Incompatible Materials	:	Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing.
Hazardous decomposition products	:	Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), hydrogen chloride (HCl), other hazardous materials, and smoke are all possible. Prolonged heating may result in product degradation. As a general rule of thumb, degradation begins to occur after one hour at 177 °C (350 °F), after 10 minutes at 204 °C (400 °F), and within 5 minutes at 232 °C (450 °F).

#### **11. TOXICOLOGICAL INFORMATION**

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

#### Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

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CAS-No.	Chemical Name	Effect	Target Organ
25068-38-6	Bisphenol A - Epichlorohydrin polymer	Irritant	Skin.
		sensitizer	Skin.
91-20-3	Naphthalene	Irritant	Eyes.
		Systemic effects	Eyes, Respiratory system, central nervous system (CNS).
		Toxic	Refer to LC50 / LD50 Data on MSDS
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.
		sensitizer	Skin.
68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, Respiratory system.
14464-46-1	Silica, cristobalite	Systemic effects	Respiratory system.
		Irritant	Eyes, Skin, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.

#### LC50 / LD50

This product contains the following components which, in their pure form, have the following toxicity data:

CAS-No.	Chemical Name	Route	Value	Species
25068-38-6	Bisphenol A -	Oral LD50	11,400 mg/kg	rat
	Epichlorohydrin polymer	Dermal LD50	> 6,000 mg/kg	rabbit
91-20-3	Naphthalene	LC50	> 340 mg/m3	rat
		Oral LD50	490 mg/kg	rat
		Dermal LD50	> 20 gm/kg	rabbit
1309-64-4	Antimony trioxide	Oral LD50	> 34,600 mg/kg	rat

Carcinogenicity

This product contains the following components which, in their pure form, have the following carcinogenicity data:

CAS-No.	Chemical Name	OSHA	IARC	NTP
91-20-3	Naphthalene	no	2B	no
1309-64-4	Antimony trioxide	no	2B	no
14464-46-1	Silica, cristobalite	no	1	no
13463-67-7	Titanium dioxide	no	2B	no

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

 $2\mathbf{B}$  - The component is possibly carcinogenic to humans.

NTP Carcinogen Classifications:

1 - The component is known to be a human carcinogen.

2 - The component is reasonably anticipated to be a human carcinogen.

#### **Additional Health Hazard Information:**

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Antimony trioxide 1309-64-4 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

#### Additional Health Hazard Information:

Silica, cristobalite 14464-46-1 This material in its free releasable form may cause respiratory tract irritation. Long-term exposure may cause coughing, chest pain, diminished chest expansion and possibly silicosis, which is a scarring of the lungs.

	12. ECOLOGICAL INFORMATION		
Persistence and degradability	: Not readily biodegradable.		
Environmental Toxicity	: Environmental toxicity has not been established for this mixture as a whole.		
<b>Bioaccumulation Potential</b>	: no data available		
Additional advice	: no data available		
	13. DISPOSAL CONSIDERATIONS		
Product	: Where possible recycling is preferred to disposal or incineration. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.		
Contaminated packaging	: Recycling is preferred when possible. The generator of waste material has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.		
14. TRANSPORT INFORMATION			
U.S. DOT Classification	: Refer to specific regulation.		
ICAO/IATA	: Refer to specific regulation.		
IMO/IMDG (maritime)	: Refer to specific regulation.		
	15. REGULATORY INFORMATION		
US Regulations:			
OSHA Status	: Classified as hazardous based on components.		
TSCA Status	: All components of this product are listed on or exempt from the TSCA Inventory.		
US. EPA CERCLA Hazardous	Substances (40 CFR 302)		

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not applicable

California Proposition 65 : WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

SARA Title III Section 302 Extremely Hazardous Substance

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Chemical Name	CAS-No.	Weight percent	
ANTIMONY COMPOUNDS	1309-64-4	1.00 - 5.00	
CHROMIUM III COMPOUNDSCHROMIUM III	68186-90-3	1.00 - 5.00	
COMPOUNDSANTIMONY			
COMPOUNDSCHROMIUM COMPOUNDS			
NAPHTHALENE	91-20-3	0.10 - 1.00	

Canadian Regulations:

National Pollutant Release Inventory (NPRI)			
Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Antimony trioxide	1309-64-4	1.00 - 5.00	
Bis (2-ethylhexyl) adipate	103-23-1	1.00 - 5.00	
Rutile, antimony chromium buff	68186-90-3	1.00 - 5.00	
Miscellaneous Zinc Compounds	0-31-7	0.10 - 1.00	241
Naphthalene	91-20-3	0.10 - 1.00	
1,2,4-Trimethylbenzene	95-63-6	0.10 - 1.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
1309-64-4
103-23-1
68186-90-3

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14464-46-1 95-63-6 DSL	:	All of the components of this product are listed on the Canadian Inventories or are exempt. However, at least one component of this product is on the Canadian Non-Domestic Substances List (NDSL). Quantity use in Canada is restricted by regulations.		
National Inventories:				
Australia AICS	:	Not determined		
China IECS	:	Not determined		
Europe EINECS	:	Not determined		
Japan ENCS	:	Not determined		
Korea KECI	:	Not determined		
Philippines PICCS	:	Not determined		
16. OTHER INFORMATION				

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.