

## MATERIAL SAFETY DATA SHEET

## DM688 GREEN

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone : Product Stewardship (770) 590-3500 x.3563

Emergency telephone : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure

or accident).

Product name : DM688 GREEN
Product code : FO20022091
Chemical Name : Mixture
CAS-No. : Mixture

Product Use : Industrial Applications

## 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Bisphenol A - Epichlorohydrin polymer	25068-38-6	1 - 5
Titanium dioxide	13463-67-7	0.1 - 1
Calcium carbonate	1317-65-3	1 - 5
Miscellaneous Barium Compounds	0-08-8	1 - 5

#### 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.

Skin : Experience shows no unusual dermatitis hazard from routine handling.

**Chronic exposure** : Refer to Section 11 for Toxicological Information.



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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 of

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 eye

irritation persists, seek medical attention.

Skin : Wash off with soap and plenty of water. If skin irritation persists

seek medical attention.

5. FIRE-FIGHTING MEASURES

Flash point : No data available

Flammable Limits

Upper explosion limit : No data available Lower explosion limit : No data available Autoignition temperature : Not applicable

Suitable extinguishing media : Carbon dioxide blanket, Water spray, Dry powder, Foam.

Special Fire Fighting

Procedures

: Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne

contaminants.

Unusual Fire/Explosion

Hazards

May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under

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.

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid

binder, universal binder, sawdust). Package all material in

appropriate container for disposal. Refer to Section 13 of this MSDS

for proper disposal methods.



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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. EXPOSURE 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

Additional Protective

Measures

Safety shoes

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.

Exposure limit(s)



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Components	Value	Exposure time	Exposure type	List:
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average		MX OEL
		(TWA):		
	20 mg/m3	Short Term Exposure Limit		MX OEL
		(STEL):		
Titanium dioxide	10 mg/m3	Time Weighted Average		ACGIH
		(TWA):		
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average	Total dust.	OSHA Z1A
		(TWA):		
	10 mg/m3	Time Weighted Average	as Ti	MX OEL
		(TWA):		
	20 mg/m3	Short Term Exposure Limit	as Ti	MX OEL
		(STEL):		
Miscellaneous Barium	0.5 mg/m3	Time Weighted Average	as Ba	ACGIH
Compounds		(TWA):		
	0.5 mg/m3	PEL:	as Ba	OSHA Z1

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid Evaporation rate : Not established : Viscous, liquid : Not determined Specific Gravity Appearance : GREEN Bulk density : Not applicable Color Odour : Very faint Vapour pressure : Not determined Melting point/range : Not applicable Vapour density : Not determined **Boiling Point:** : Not applicable pН : Not applicable

Water solubility : Immiscible

#### 10. STABILITY AND REACTIVITY

Stability : Stable.

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).



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#### 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:

CAS-No.	Chemical Name	Effect	Target Organ
25068-38-6	Bisphenol A -	Irritant	Skin.
	Epichlorohydrin polymer		
		sensitizer	Skin.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory
			system.
0-08-8	Miscellaneous Barium	Irritant	Respiratory system, Eyes.
	Compounds		
		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

#### Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
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.
- 2B 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.

#### 12. ECOLOGICAL INFORMATION

Persistence and degradability : Not readily biodegradable.

Environmental Toxicity : Environmental toxicity has not been established for this mixture as a

whole.



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Bioaccumulation Potential : 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 (air) : 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)

Chemical Name	CAS-No.	RQ for component	RQ for
			Mixture/Product
Chromium (III)	1308-38-9	010 lbs	1,258 LB
oxide			

California Proposition : Not applicable

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SARA Title III Section 302 Extremely Hazardous Substance



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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 %	
BARIUM COMPOUNDS	0-08-8	1.00 - 5.00	

#### Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight %	NPRI ID#
Chromium (III) oxide	1308-38-9	0.10 - 1.00	
Phthalocyanine green	1328-53-6	0.10 - 1.00	
Miscellaneous Zinc Compounds	0-05-5	0.10 - 1.00	241

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

	CAS-No.
ſ	0-08-8

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,



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storage, transportation, disposal and release and is not to be considered a warranty or quality information relates only to the specific material designated and may not be valid for such m combination with any other materials or in any process, unless specified in the text.	y specification. aterial used in	The

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