

### MATERIAL SAFETY DATA SHEET

## 1178 MIDNBLUE D8HEATREDUCER

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#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION

33587 Walker Road, Avon Lake, OH 44012

Telephone : Product Stewardship (770) 271-5902

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

or accident).

Product name : 1178 MIDNBLUE D8HEATREDUCER

Product code : CC10123856 Chemical Name : Mixture CAS-No. : Mixture

Product Use : Industrial Applications

#### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Phenol, 2-(2H-benzotriazol-2-yl)-4,6-	25973-55-1	1 - 5
bis(1,1-dimethylpropyl)-		
1,6-Hexanediamine, N,N'-bis(2,2,6,6-	70624-18-9	5 - 10
tetramethyl-4-piperidinyl)-,polymer with		
2,4,6-trichloro-1,3,5-triazine, reaction		
products		
Aluminum chromium cobalt oxide (C.I.	68187-11-1	5 - 10
Pigment Blue 36)		
Hematite, chromium green black	68909-79-5	5 - 10
Cobalt aluminate blue spinel (C.I. Pigment	1345-16-0	10 - 30
Blue 28)		

#### 3. HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW**

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating and the enduser (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure.

#### POTENTIAL HEALTH EFFECTS

Routes of Exposure: : Inhalation, Ingestion, Skin contact

Acute exposure

Inhalation : Resin particles, like other inert materials, can be mechanically



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irritating.

Ingestion : May be harmful if swallowed.

Eyes : Resin particles, like other inert materials, are mechanically irritating to

eyes.

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 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, also under the eyelids, 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 : not applicable

Flammable Limits

Upper explosion limit : not applicable
Lower explosion limit : not applicable
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

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 : Should not be released into the environment. The product should not

be allowed to enter drains, water courses or the soil.



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Methods for cleaning up : Clean up promptly by sweeping or vacuum. Package all material in

plastic, cardboard or metal containers for disposal. Refer to Section

13 of this MSDS for proper disposal methods.

7. HANDLING AND STORAGE

Handling : Take measures to prevent the build up of electrostatic charge. Heat

only in areas with appropriate exhaust ventilation.

Storage : Keep containers dry and tightly closed to avoid moisture absorption

and contamination. Keep in a dry, cool 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 : Handle in accordance with good industrial hygiene and safety Considerations : 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)

Components	Value	Exposure time	Exposure type	List:
Cobalt aluminate blue	0.02	Time Weighted Average	as Co	ACGIH
spinel (C.I. Pigment	mg/m3	(TWA):		
Blue 28)				
Aluminum chromium	0.02	Time Weighted Average	as Co	ACGIH
cobalt oxide (C.I.	mg/m3	(TWA):		
Pigment Blue 36)				
	0.5 mg/m3	Time Weighted Average		MX OEL
		(TWA):		
Hematite, chromium	0.5 mg/m3	Recommended exposure	as Cr	NIOSH
green black		limit (REL):		
	0.5 mg/m3	PEL:	as Cr	OSHA Z1

### 9. PHYSICAL AND CHEMICAL PROPERTIES



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Not applicable Form : solid Evaporation rate Not determined Appearance : pellets Specific Gravity : Not established Colour : BLUE Bulk density Odour : very faint Vapour pressure : not applicable Melting point/range : Not determined Vapour density : not applicable Boiling Point: : not applicable : not applicable pН

Water solubility : insoluble

## 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.

Hazardous decomposition

products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen

(NOx), other hazardous materials, and smoke are all possible.

## 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
25973-55-1	Phenol, 2-(2H-	Systemic effects	Kidney, Liver, reproductive
	benzotriazol-2-yl)-4,6-		system.
	bis(1,1-dimethylpropyl)-		
70624-18-9	1,6-Hexanediamine, N,N'-	Irritant	Eyes, Skin, Respiratory
	bis(2,2,6,6-tetramethyl-4-		system.
	piperidinyl)-,polymer with		
	2,4,6-trichloro-1,3,5-		
	triazine, reaction products		
68187-11-1	Aluminum chromium	Irritant	Eyes, Skin.
	cobalt oxide (C.I. Pigment		
	Blue 36)		
68909-79-5	Hematite, chromium green	Irritant	Eyes, Skin.
	black		
1345-16-0	Cobalt aluminate blue	Irritant	Eyes, Skin, Respiratory
	spinel (C.I. Pigment Blue		system.
	28)		
		sensitizer	Skin.

LC50 / LD50



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

CAS-No.	Chemical Name	Route	Value	Species
70624-18-9	1,6-Hexanediamine, N,N'-	Oral LD50	> 2,000 mg/kg	rat
	bis(2,2,6,6-tetramethyl-4-	Dermal LD50	> 3,000  mg/kg	rat
	piperidinyl)-,polymer with			
	2,4,6-trichloro-1,3,5-			
	triazine, reaction products			

### Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
68187-11-1	Aluminum chromium cobalt	no	2B	no
	oxide (C.I. Pigment Blue 36)			
1345-16-0	Cobalt aluminate blue spinel	no	2B	no
	(C.I. Pigment Blue 28)			

#### 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.

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

Aluminum chromium cobalt oxide (C.I. Pigment Blue 36) 68187-11-1 The bi- and trivalent forms of chrome have a low order of acute toxicity, but may cause skin sensitization and irritation to the eyes. No effects have been reported for chromium (III) oxide. Chromium (III) compounds are not considered carcinogenic in animals or humans.

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

Hematite, chromium green black 68909-79-5 The bi- and trivalent forms of chrome have a low order of acute toxicity, but may cause skin sensitization and irritation to the eyes. No effects have been reported for chromium (III) oxide. Chromium (III) compounds are not considered carcinogenic in animals or humans.

#### 12. ECOLOGICAL INFORMATION

Persistence and degradability : Not readily biodegradable.

Environmental Toxicity : Chemicals are not readily available as they are bound within the

polymer matrix.

Bioaccumulation Potential : Chemicals are not readily available as they are bound within the

polymer matrix.



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Additional advice : no data available

13. DISPOSAL CONSIDERATIONS

Product : Like most thermoplastic plastics the product can be recycled. 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 : Not regulated for transportation.

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)

not applicable

California Proposition : Not applicable

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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:



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

Chemical Name	CAS-No.	Weight percent
COBALT COMPOUNDSCOBALT COMPOUNDS,	1345-16-0	10.00 - 30.00
INORGANICCOBALT COMPOUNDS, ORGANIC		
COBALT COMPOUNDSCOBALT COMPOUNDS,	68187-11-1	5.00 - 10.00
INORGANICCOBALT COMPOUNDS,		
ORGANICCHROMIUM COMPOUNDS		
CHROMIUM III COMPOUNDSCHROMIUM III	68909-79-5	5.00 - 10.00
COMPOUNDSCHROMIUM COMPOUNDS		

#### Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Cobalt aluminate blue spinel (C.I. Pigment Blue	1345-16-0	10.00 - 30.00	
28)			
Aluminum chromium cobalt oxide (C.I. Pigment	68187-11-1	5.00 - 10.00	
Blue 36)			
Hematite, chromium green black	68909-79-5	5.00 - 10.00	

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

CAS-No.	
68909-79-5	

DSL : All components of this product are on the Canadian Domestic

Substances List (DSL) or are exempt.

National Inventories:

Australia AICS : Listed

China IECS : Not determined

Europe EINECS : Listed

Japan ENCS : Not determined

Korea KECI : Not determined

Philippines PICCS : Not determined

## 16. OTHER INFORMATION



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Revision Date 08/12/2009 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.