MATERIAL SAFETY DATA SHEET **P8217DNPCM VIPCO CLAY**

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone Emergency telephone	:	1 (440) 930-1000 or 1 (866) POLYONE CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	P8217DNPCM VIPCO CLAY
Product code	:	FO00002729
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Silica, cristobalite	14464-46-1	0.1 - 1
Naphthalene	91-20-3	0.1 - 1
Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	68412-38-4	1 - 5
Rutile, antimony chromium buff	68186-90-3	1 - 5
Spinels, chromium (III) copper black	68186-91-4	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.

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Eyes Skin	May cause eye and skin irritation.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 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 Lower explosion limit Autoignition temperature Suitable extinguishing media	 no data available no data available Not applicable 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.

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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.
	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	SURE 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

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Components	Value	Exposure time	Exposure type	List:
Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	1 mg/m3	Recommended exposure limit (REL):	Fume. as Mn	NIOSH
	3 mg/m3	Short Term Exposure Limit (STEL):	Fume. as Mn	NIOSH
	5 mg/m3	Ceiling Limit Value:	as Mn	OSHA Z1
	5 mg/m3	Ceiling Limit Value:	as Mn	OSHA Z1A
	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
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
Spinels, chromium (III) copper black	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
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

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	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 mg/m3	Recommended exposure limit (REL):		NIOSH
	15 ppm 75 mg/m3	Short Term Exposure Limit (STEL):		NIOSH
	10 ppm 50 mg/m3	PEL:		OSHA Z1
	10 ppm 50 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	15 ppm 75 mg/m3	Short Term Exposure Limit (STEL):		OSHA Z1A
	10 ppm 50 mg/m3	Time Weighted Average (TWA):		MX OEL
	15 ppm 75 mg/m3	Short Term Exposure Limit (STEL):		MX OEL

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
- Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH
- : Not established
- Not determinedNot applicable
- : Not applicable : Not determined
 - Not determined
- : Not determined
- : Not applicable

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

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°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:

CAS-No.	Chemical Name	Effect	Target Organ
14464-46-1	Silica, cristobalite	Systemic effects	Respiratory system.
		Irritant	Eyes, Skin, Respiratory
			system.
91-20-3	Naphthalene	Irritant	Eyes.
		Systemic effects	Eyes, Respiratory system, central nervous system (CNS).
		Toxic	Refer to LC50 / LD50 Data on MSDS
68412-38-4	Manganese antimony titanium brown rutile (C.I. Pigment Yellow 164)	Irritant	Eyes, Skin.
68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, Respiratory system.
68186-91-4	Spinels, chromium (III) copper black	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
91-20-3	Naphthalene	LC50	> 340 mg/m3	rat
		Oral LD50	490 mg/kg	rat
		Dermal LD50	> 20 gm/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
14464-46-1	Silica, cristobalite	no	1	no
91-20-3	Naphthalene	no	2B	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.

2B - The component is possibly carcinogenic to humans.

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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:

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.

Additional Health Hazard Information:

Spinels, chromium (III) copper black 68186-91-4 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.

Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Environmental toxicity has not been established for this mixture as a whole.
Bioaccumulation Potential	: no data available
Additional advice	: no data available
	13. DISPOSAL CONSIDERATIONS
Product	: Where possible recycling is preferred to disposal or incineration. Th 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:	

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sion Date 10/21/2010					Pi	rint Date	Page 8 1/15/2
OSHA Status :	Classified as ha	azardous t	based on co	omponen	ts.		
TSCA Status :	All component TSCA Inventor		broduct are	listed or	or exer	npt from t	he
US. EPA CERCLA Hazardous Subs	tances (40 CFR	302)					
not applicable							
California Proposition : 65	WARNING! T California to ca chemical know other reproduct	use cance n to the S	er., WARN tate of Cali	ING! TI	nis produ	uct contair	ns a
SARA Title III Section 302 Extreme	-		s product i	s Not Ar	plicable	undor thi	rogula
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SARA Title III Section 313 Toxic C	hemicals:						
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		1.00 - 5.00	
Zinc	7440-66-6	0.10 - 1.00	
1,2,4-Trimethylbenzene	95-63-6	0.10 - 1.00	
Naphthalene	91-20-3	0.10 - 1.00	

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.	
103-23-1	
68412-38-4	
68186-90-3	
68186-91-4	
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:

Philippines PICCS	:	Not determined
Korea KECI	:	Not determined
Japan ENCS	:	Not determined
Europe EINECS	:	Not determined
China IECS	:	Not determined
Australia AICS	:	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.