PolyOne

MATERIAL SAFETY DATA SHEET P0469DNPCM WOLVERINE TUXEDO GRAY

Version Number 1.4 Revision Date 10/21/2010 Page 1 of 8 Print Date 1/15/2012

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	:	P0469DNPCM WOLVERINE TUXEDO GRAY
Product code	:	FO00003039
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
Titanium dioxide	13463-67-7	5 - 10

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.

PolyOne

MATERIAL SAFETY DATA SHEET P0469DNPCM WOLVERINE TUXEDO GRAY

Version Number 1.4 Revision Date 10/21/2010 Page 2 of 8 Print Date 1/15/2012

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 Special Fire Fighting	 no data available no data available Not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive
Procedures	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.



MATERIAL SAFETY DATA SHEET **P0469DNPCM WOLVERINE TUXEDO GRAY**

Version Number 1.4 Revision Date 10/21/2010 Page 3 of 8 Print Date 1/15/2012

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
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.



MATERIAL SAFETY DATA SHEET P0469DNPCM WOLVERINE TUXEDO GRAY

Version Number 1.4 Revision Date 10/21/2010 Page 4 of 8 Print Date 1/15/2012

Components	Value	Exposure time	Exposure type	List:
Silica, cristobalite	0.025	Time Weighted Average	Respirable fraction.	ACGIH
	mg/m3	(TWA):		
	0.05	Time Weighted Average	Respirable dust.	OSHA Z1A
	mg/m3	(TWA):		
	0.05	Time Weighted Average	Respirable.	Z3
	mg/m3	(TWA):		
	0.15	Time Weighted Average	Total dust.	Z3
	mg/m3	(TWA):		
	0.05	Time Weighted Average		MX OEL
	mg/m3	(TWA):		
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 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
 : GREY
 : very faint
 : not applicable
 : not applicable
 : immiscible
- Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH
- Not established
 Not determined
 Not applicable
 Not determined
 Not determined
 Not determined
 Not applicable

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MATERIAL SAFETY DATA SHEET P0469DNPCM WOLVERINE TUXEDO GRAY

Version Number 1.4 Revision Date 10/21/2010

Page 5 of 8 Print Date 1/15/2012

	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).

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
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:

PolvOne

MATERIAL SAFETY DATA SHEET P0469DNPCM WOLVERINE TUXEDO GRAY

Version Number 1.4 Revision Date 10/21/2010 Page 6 of 8 Print Date 1/15/2012

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.

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.

	12. ECOLOGICAL INFORMATION
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 Contaminated packaging	 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. 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.
	: Refer to specific regulation.
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MATERIAL SAFETY DATA SHEET **P0469DNPCM WOLVERINE TUXEDO GRAY**

Version Number 1.4 Revision Date 10/21/2010

Page 7 of 8 Print Date 1/15/2012

S Regulations:					
OSHA Status	: Classified as hazar	dous based on	components	5.	
TSCA Status	: All components of TSCA Inventory.	f this product a	re listed on	or exem	pt from the
S. EPA CERCLA Hazardous	Substances (40 CFR 302	2)			
not applicable					
California Proposition	: WARNING! This	cancer., WAR	NING! Thi	is produ	ct contains a
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	chemical known to other reproductive	harm.	antornia to		tur derects of
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MATERIAL SAFETY DATA SHEET P0469DNPCM WOLVERINE TUXEDO GRAY

Version Number 1.4 Revision Date 10/21/2010	Page 8 of 8 Print Date 1/15/2012
CAS-No. 103-23-1 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).
National Inventories:	Quantity use in Canada is restricted by regulations.
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.