PolvOne.

MATERIAL SAFETY DATA SHEET **MSDS X150-213-061-06**

Version Number 1.2 Revision Date 03/12/2014

Page 1 of 7 Print Date 3/19/2014

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

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	:	MSDS X150-213-061-06
Product code	:	VC10004134
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Titanium dioxide	13463-67-7	1 - 5
Calcium carbonate	471-34-1	5 - 10
Talc	14807-96-6	5 - 10

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole. All ingredients are bound and potential for hazardous exposure as shipped is minimal. However, some vapors may be released upon heating or processing. 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. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Ingestion, Skin contact
Acute exposure	
Inhalation	: Resin particles, like other inert materials, can be mechanically 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.

PolyOne.

MATERIAL SAFETY DATA SHEET **MSDS X150-213-061-06**

Version Number 1.2 Revision Date 03/12/2014 Page 2 of 7 Print Date 3/19/2014

Medical Conditions : None known. Aggravated by Exposure:			
	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 or 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. FIREFIGHTING MEASURES		
Flash point	: not applicable		
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 not applicable not applicable Not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. 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	: Should not be released into the environment. The product should not be allowed to enter drains, water courses or the soil.		
Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal.		

PolyOne.

MATERIAL SAFETY DATA SHEET **MSDS X150-213-061-06**

Version Number 1.2 Revision Date 03/12/2014 Page 3 of 7 Print Date 3/19/2014

		7. HANDLING AND STORAGE
Handling	:	Take measures to prevent the build up of electrostatic charge. 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. Keep in a dry, cool place.
8. EX	POSU	RE CONTROLS/PERSONAL PROTECTION
Respiratory protection	:	No personal respiratory protective equipment normally required. If dusty conditions occur wear appropriate respiratory protection.
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. This product may contain residual vinyl chloride monomer (VCM) (CAS number 75-01-4) below 8.5 ppm (0.00085%). It is unlikely, under normal working conditions with adequate ventilation, that the exposure limits will be exceeded for residual VCM. However, the user should take the necessary precautions (e.g. mechanical ventilation, local exhaust ventilation, air-monitoring, respiratory protection, etc.) to ensure airborne levels of any vapors including VCM or dusts that may be released during heating or processing are below regulated levels.
Engineering measures	:	Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.
Exposure limit(s)		

PolyOne

MATERIAL SAFETY DATA SHEET **MSDS X150-213-061-06**

Version Number 1.2 Revision Date 03/12/2014 Page 4 of 7 Print Date 3/19/2014

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
	5 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	OSHA Z1A
	15 mg/m3	Time Weighted Average (TWA):	Total dust.	OSHA Z1A
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
	5 mg/m3	Recommended exposure limit (REL):	Respirable.	NIOSH
	10 mg/m3	Recommended exposure limit (REL):	Total	NIOSH
Talc	2 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	2 mg/m3	Recommended exposure limit (REL):	Respirable.	NIOSH
	2 mg/m3	Time Weighted Average (TWA):	Respirable dust.	OSHA Z1A
	0.1 mg/m3	Time Weighted Average (TWA):	Respirable.	Z3
	0.3 mg/m3	Time Weighted Average (TWA):	Total dust.	Z3
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

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility solid
pellets, powder
WHITE
very faint
Not determined
not applicable
insoluble

Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH

- : Not applicable
- : Not determined
- : Not established
- not applicablenot applicable
- : not applicable

10. STABILITY AND REACTIVITY

Stability

: The product is stable if stored and handled as prescribed.

blvUn<u>e</u>

MATERIAL SAFETY DATA SHEET **MSDS X150-213-061-06**

Version Number 1.2 Revision Date 03/12/2014

Page 5 of 7 Print Date 3/19/2014

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), other hazardous materials, and smoke are all possible. Prolonged heating (approximately 30 minutes or more) above 392 °F (200 °C) or short term heating at 482 °F (250 °C) may result in product decomposition and evolution of carbon monoxide and hydrogen chloride.

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
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
471-34-1	Calcium carbonate	Irritant	Eyes, Skin.
14807-96-6	Talc	Systemic effects	Eyes, Respiratory system,
			Skin.

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
471-34-1	Calcium carbonate	Oral LD50Oral LD50Oral LD50	6,450 mg/kg6,450 mg/kg6,450 mg/kg	ratratmouse

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
14807-96-6	Talc	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.

PolyOne.

MATERIAL SAFETY DATA SHEET MSDS X150-213-061-06

Version Number 1.2 Revision Date 03/12/2014 Page 6 of 7 Print Date 3/19/2014

NTP Carcinogen Classifications:

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

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

Persistence and degradability Environmental Toxicity	: Not readily biodegradable.		
Environmental Toxicity			
	: Adverse ecological impact is not known or expected under normal use.		
Bioaccumulation Potential	: no data available		
Additional advice	: not applicable		
	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	: Not regulated for transportation.		
IMO/IMDG (maritime)	: Not regulated for transportation.		
	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 S	Substances (40 CFR 302)		
not applicable			

PolyOne

MATERIAL SAFETY DATA SHEET **MSDS X150-213-061-06**

Version Number 1.2 Revision Date 03/12/2014 Page 7 of 7 Print Date 3/19/2014

California Proposition 65	:	Not applicable
SARA Title III Section 302 Extr	em	ely Hazardous Substance
Unless specific chemicals are id	enti	fied under this section, this product is Not Applicable under this regulation
SARA Title III Section 313 Tox	ic C	Chemicals:
Unless specific chemicals are id	enti	fied under this section, this product is Not Applicable under this regulation
Canadian Regulations:		
National Pollutant Release	se Iı	nventory (NPRI)
not applicable		
WHMIS Classification	:	D2A
DSL	:	All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.
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.