MATERIAL SAFETY DATA SHEET

TRANSL. GREEN #4

Version Number 1.0 Revision Date 08/29/2007 Page 1 of 6 Print Date 11/30/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
TRANSL. GREEN #4
CC10103654
Mixture
Mixture
Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Titanium dioxide	13463-67-7	0.1 - 1

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 end-user (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 Ingestion Eyes	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to
Skin	eyes. : 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.



MATERIAL SAFETY DATA SHEET **TRANSL. GREEN #4**

Version Number 1.0 Revision Date 08/29/2007 Page 2 of 6 Print Date 11/30/2011

	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 o 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 see medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: Not applicable
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	 Not applicable Not applicable 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	: 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. Refer to Section 1 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

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MATERIAL SAFETY DATA SHEET TRANSL. GREEN #4

Version Number 1.0 Revision Date 08/29/2007 Page 3 of 6 Print Date 11/30/2011

10 mg/m3Time Weighted Average (TWA):as TiMX OEL	8. E	XPOSURE	CONTROLS / PERSON	AL PROTECTION	
Hand protection : Protective gloves Skin and body protection : Long sleeved clothing Additional Protective : Safety shoes Measures : Safety shoes General Hygiene : Handle in accordance with good industrial hygiene and safety practic Considerations :: Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery. Engineering measures :: Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery. Exposure limit(s) : Maue Exposure time Exposure type List: Titanium dioxide 10 mg/m3 Time Weighted Average (TWA): OSHA Z: 15 mg/m3 PEL: Total dust. OSHA Z: 10 mg/m3 Time Weighted Average (STEL): MX OEL OHEYSICAL AND CHEMICAL PROPERTIES Porm Solid Evaporation rate : Not applicable Appearance : pellets Specific Gravity : Not applicable Appearance : pellets Specific Gravity : Not applicable Additional : Not determined Vapour density : Not applicable Bol	Respiratory protection	: N	o personal respiratory pro	tective equipment norm	ally required.
Skin and body protection : Long sleeved clothing Additional Protective : Safety shoes Measures : Handle in accordance with good industrial hygiene and safety practic General Hygiene : Handle in accordance with good industrial hygiene and safety practic Considerations : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery. Engineering measures : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery. Exposure limit(s) : Total dust. OSHAZ Components Value Exposure time Exposure type List: Titanium dioxide 10 mg/m3 Time Weighted Average as Ti MX OEL 10 mg/m3 Short Term Exposure Limit as Ti MX OEL (TWA): : as Ti MX OEL 20 mg/m3 Short Term Exposure Limit as Ti MX OEL Godur : Very faint Vapour pressure Not applicable Appearance : pellets Specific Gravity : Not applicable Odour : Very faint Vapour density : Not applicable Melting point/range : Not determined Vapo	Eye/Face Protection	: S	afety glasses with side-shi	elds	
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Hazardous Polymerization : Will not occur.		10. 8	STABILITY AND REAC	TIVITY	
	Stability	: S	table.		
Conditions to avoid : Keep away from oxidizing agents and open flame. To avoid therma	Hazardous Polymerization	1 : W	Vill not occur.		
	Conditions to avoid	: K	eep away from oxidizing	agents and open flame.	To avoid thermal

MATERIAL SAFETY DATA SHEET TRANSL. GREEN #4

Version Number 1.0 Revision Date 08/29/2007 Page 4 of 6 Print Date 11/30/2011

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.

decomposition, do not overheat.

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.

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	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.	
Additional advice	No data available	
	3. DISPOSAL CONSIDERATIONS	
Product	Like most thermoplastic plastics the product can be recycled. Wh possible recycling is preferred to disposal or incineration. The	iere

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MATERIAL SAFETY DATA SHEET **TRANSL. GREEN #4**

rsion Number 1.0 vision Date 08/29/2007		Page 5 of 6 Print Date 11/30/2011
		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.
	1	4. TRANSPORT INFORMATION
U.S. DOT Classification	:	Not regulated for transportation.
ICAO/IATA (air)	:	Refer to specific regulation.
IMO / IMDG (maritime)	:	Refer to specific regulation.
	15	S. 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 Sub	stances (40 CFR 302)
Not applicable		
California Proposition 65	:	Not applicable
SARA Title III Section 302 Ex	xtrem	ely Hazardous Substance
Unless specific chemicals are	identi	fied under this section, this product is Not Applicable under this regulation
SARA Title III Section 313 To	oxic C	Chemicals:
Unless specific chemicals are	identi	fied under this section, this product is Not Applicable under this regulation
Canadian Regulations:		

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MATERIAL SAFETY DATA SHEET TRANSL. GREEN #4

Version Number 1.0 Revision Date 08/29/2007 Page 6 of 6 Print Date 11/30/2011

National Pollutant Release	National Pollutant Release Inventory (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	:	Listed	
China IECS	:	Listed	
Europe EINECS	:	Listed	
Japan ENCS	:	Not determined	
Korea KECI	:	Listed	
Philippines PICCS	:	Listed	
		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.