PolvOne

MATERIAL SAFETY DATA SHEET VERT LOGIGRAFT GRN

Version Number 1.2 Revision Date 03/13/2014

Product Use

Page 1 of 7 Print Date 3/27/2014

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	:	VERT LOGIGRAFT GRN
Product code	:	CC10146832
Chemical Name	:	Mixture
CAS-No.	:	Mixture

: Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
8-Oxa-3,5-dithia-4-stannatetradecanoic acid, 10-ethyl-4,4-dimethyl-7-oxo-, 2-ethylhexyl	57583-35-4	1 - 5
ester		
Stannane, methyltris(2- ethylhexyloxycarbonylmethylthio)-	57583-34-3	1 - 5
Calcium stearate	1592-23-0	1 - 5
Titanium dioxide	13463-67-7	1 - 5

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	: Particulates, like other inert materials can be mechanically irritating. Excessive inhalation of product vapors, especially during heating or processing, may be irritating to respiratory system.

PolyOne.

MATERIAL SAFETY DATA SHEET **VERT LOGIGRAFT GRN**

Version Number 1.2 Revision Date 03/13/2014 Page 2 of 7 Print Date 3/27/2014

Ingestion Eyes Skin	 May be harmful if swallowed. Particulates, like other inert materials can be mechanically irritatin Experience shows no unusual dermatitis hazard from routine hand 	
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 cas doubt seek medical advice.	es of
Ingestion	: Do not induce vomiting without medical advice. When sympton persist or in all cases of doubt seek medical advice.	ıs
Eyes	: Rinse immediately with plenty of water, also under the eyelids, for 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
	5. FIREFIGHTING MEASURES	
Flash point	: not applicable	
Flammable Limits		
Upper explosion limit	: not applicable	
Lower explosion limit	: not applicable	
Auto-ignition 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 positi pressure mode should be worn to prevent inhalation of airborne contaminants.	tive
Unusual Fire/Explosion Hazards	 Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitroge (NOx), other hazardous materials, and smoke are all possible. M emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under conditions. 	[ay
	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 be allowed to enter drains, water courses or the soil.	l not

PolyOne

MATERIAL SAFETY DATA SHEET VERT LOGIGRAFT GRN

Version Number 1.2 Revision Date 03/13/2014 Page 3 of 7 Print Date 3/27/2014

Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal.
	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. EX	POSURE 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.

Exposure limit(s)

Components	Value	Exposure time	Exposure type	List:
Calcium stearate	10 mg/m3	Time Weighted Average (TWA):		ACGIH
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

Evapouration rate

: Not applicable

MATERIAL SAFETY DATA SHEET VERT LOGIGRAFT GRN

Version Number 1.2 Revision Date 03/13/2014

Appearance Colour Odour Melting point/range Boiling Point: Water solubility	: pelletsSpecific Gravity: Not determined: GREENBulk density: Not established: very faintVapour pressure: not applicable: Not determinedVapour density: not applicable: not applicablepH: not applicable: insoluble::
	10. STABILITY AND REACTIVITY
Stability	: The product is stable if stored and handled as prescribed.
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	: Avoid contact with strong oxidizers. Also, avoid contact with acetal or acetal copolymers and with amine containing materials during processing. At processing conditions, these materials are mutually destructive and involve rapid degradation. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of these materials from coming in contact with each other. Prevent cross contamination of feedstocks.
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 (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
57583-35-4	8-Oxa-3,5-dithia-4-	Irritant	Eyes, Skin.
	stannatetradecanoic acid,		
	10-ethyl-4,4-dimethyl-7-		
	oxo-, 2-ethylhexyl ester		
57583-34-3	Stannane, methyltris(2-	Irritant	Eyes, Skin.
	ethylhexyloxycarbonylmet		
	hylthio)-		
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.

LC50 / LD50

Page 4 of 7 Print Date 3/27/2014

PolyOne

MATERIAL SAFETY DATA SHEET VERT LOGIGRAFT GRN

Version Number 1.2 Revision Date 03/13/2014 Page 5 of 7 Print Date 3/27/2014

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

CAS-No.	Chemical Name	Route	Value	Species
57583-34-3	Stannane, methyltris(2- ethylhexyloxycarbonylmet hylthio)-	Oral LD50	920 mg/kg	rat
1592-23-0	Calcium stearate	Oral LD50	> 10 gm/kg	rat

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

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
	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.

PolyOne.

MATERIAL SAFETY DATA SHEET **VERT LOGIGRAFT GRN**

Version Number 1.2 Revision Date 03/13/2014 Page 6 of 7 Print Date 3/27/2014

	: Not regulated	for transportation.		
ICAO/IATA	: Refer to specif	ic regulation.		
IMO/IMDG (maritime)	: Refer to specif	ic regulation.		
· · · ·		RY INFORMATI	ON	
	15, KEGULATU		UN	
US Regulations:				
OSHA Status	: Classified as h	azardous based on	components.	
TSCA Status	: All componen TSCA Invento	ts of this product a ry.	re listed on or ex	empt from the
US. EPA CERCLA Hazardou	is Substances (40 CFR	. 302)		
not applicable				
not upprouore				
California Propositior 65	a : WARNING! California to c		ns a chemical kn	own to the State of
SADA T:41- III Saatian 202 F	Sectore and the sectore of the secto	1		
SARA Title III Section 302 E		ubstance		
Unless specific chemicals are	-		t is Not Applicab	le under this regul
	-		t is Not Applicab	le under this regul
Unless specific chemicals are	identified under this s		t is Not Applicab	le under this regul
Unless specific chemicals are SARA Title III Section 313 T	identified under this s oxic Chemicals:	ection, this product		
Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are	identified under this s oxic Chemicals:	ection, this product	t is Not Applicab	le under this regul
Unless specific chemicals are SARA Title III Section 313 T	identified under this s oxic Chemicals:	ection, this product	<u>t is Not Applicab</u> No. Weig	
Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name ZINC COMPOUNDS	identified under this s oxic Chemicals:	ection, this product ection, this product CAS-N	<u>t is Not Applicab</u> No. Weig	le under this regul
Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name ZINC COMPOUNDS Canadian Regulations:	identified under this s 'oxic Chemicals: identified under this s	ection, this product ection, this product CAS-N 68187-1	<u>t is Not Applicab</u> No. Weig	le under this regul
Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name ZINC COMPOUNDS Canadian Regulations: National Pollutant Rel	identified under this s 'oxic Chemicals: identified under this s	ection, this product ection, this product CAS-N 68187-:	t is Not Applicab No. Weig 51-9 5.00	le under this regul ht percent - 10.00
Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name ZINC COMPOUNDS Canadian Regulations:	identified under this s 'oxic Chemicals: identified under this s	ection, this product ection, this product CAS-N 68187-1	<u>t is Not Applicab</u> No. Weig	le under this regul
Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name ZINC COMPOUNDS Canadian Regulations: National Pollutant Rel	identified under this s 'oxic Chemicals: identified under this s ease Inventory (NPRI)	ection, this product ection, this product CAS-N 68187-:	t is Not Applicab No. Weig 51-9 5.00 Weight	le under this regul ht percent - 10.00

PolyOne

MATERIAL SAFETY DATA SHEET VERT LOGIGRAFT GRN

Version Number 1.2 Revision Date 03/13/2014 Page 7 of 7 Print Date 3/27/2014

WHMIS Classification	:	D2A
WHMIS Ingredient Disclosure List		
CAS-No. 57583-34-3		
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.