PolyOne

MATERIAL SAFETY DATA SHEET **CL.NVY.LLDPE**

Version Number 1.1 Revision Date 03/29/2014

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1.	PROD	UCT AND COMPANY IDENTIFICATION
POLYONE CORPORAT		OH 44012
	,	
Telephone	:	1 (440) 930-1000 or 1 (866) POLYONE
Emergency telephone number	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	CL.NVY.LLDPE
Product code	:	CC10145426
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use		Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
1,6-Hexanediamine, N,N'-bis(2,2,6,6- tetramethyl-4-piperidinyl)-,polymer with 2,4,6-trichloro-1,3,5-triazine, reaction products	70624-18-9	5 - 10
Titanium dioxide	13463-67-7	0.1 - 1
Chromium (III) oxide	1308-38-9	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	: Resin particles, like other inert materials, can be mechanically irritating.
Ingestion Eyes	May be harmful if swallowed.Resin particles, like other inert materials, are mechanically irritating to

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	eyes.
Skin	: 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 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 seek medical attention.
	5. FIREFIGHTING MEASURES
Flash point	: not applicable
Flammable Limits	
Upper explosion limit	: not applicable
Lower explosion limit Auto-ignition temperature	not applicablenot applicable
Suitable extinguishing media	: 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.

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		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	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.

Exposure limit(s)

Components	Value	Exposure time	Exposure type	List:
Chromium (III) oxide	0.5 mg/m3	Recommended exposure	as Cr	NIOSH
		limit (REL):		
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
Titanium dioxide	10 mg/m3	Time Weighted Average		ACGIH
		(TWA):		
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average	Total dust.	OSHA Z1A
		(TWA):		
	10 mg/m3	Time Weighted Average	as Ti	MX OEL
		(TWA):		
	20 mg/m3	Short Term Exposure Limit	as Ti	MX OEL
		(STEL):		

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour : solid : pellets : BLUE Evapouration rate Specific Gravity Bulk density Not applicableNot determinedNot established

Vapour pressure

Vapour density

Toxicity Overview

This product contains the following components which in their pure form have the following characteristics:

11. TOXICOLOGICAL INFORMATION

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing

CAS-No.	Chemical Name	Effect	Target Organ
70624-18-9	1,6-Hexanediamine, N,N'- bis(2,2,6,6-tetramethyl-4- piperidinyl)-,polymer with 2,4,6-trichloro-1,3,5- triazine, reaction products	Irritant	Eyes, Skin, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
1308-38-9	Chromium (III) oxide	Irritant	Eyes, Skin.
		sensitizer	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
70624-18-9	1,6-Hexanediamine, N,N'-	Oral LD50	> 2,000 mg/kg	rat
	bis(2,2,6,6-tetramethyl-4-	Dermal LD50	> 3,000 mg/kg	rat
	piperidinyl)-,polymer with			
	2,4,6-trichloro-1,3,5-			
	triazine, reaction products			

Carcinogenicity

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

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Odour

-		ot applicable isoluble	pH	:	not applicable
	1	0. STABILITY AND RE	EACTIVITY		
Stability	:	The product is stable if	stored and handled as p	resc	cribed.
Hazardous Polymerization	:	Will not occur.			
Conditions to avoid	:	Keep away from oxidized decomposition, do not o	0 0 1	me.	To avoid thermal
Incompatible Materials	:	Incompatible with stron	g acids and oxidizing a	gen	ts.
Hazardous decomposition products	:	Carbon dioxide (CO2), (NOx), other hazardous			e

: very faint

health data for the individual components which comprise the mixture.

: Not determined

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Melting point/range

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: not applicable

: not applicable

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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.

Additional Health Hazard Information:

Chromium (III) oxide 1308-38-9 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	: 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 Contaminated packaging	 Like most thermoplastic plastics the product can be recycled. When 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
Containinated packaging	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	: Refer to specific regulation.

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IMO/IMDG (maritime)	: Refer t	to specific regulation.		
	15. REGU	JLATORY INFORMA	TION	
US Regulations:				
OSHA Status	: Classif	fied as hazardous based	on components.	
TSCA Status		omponents of this produc Inventory.	et are listed on or exe	empt from the
US. EPA CERCLA Hazar	dous Substances	(40 CFR 302)		
Chemical Name	CAS-No.	RQ for component	RQ for Mixture/Product	
Chromium (III) oxide	1308-38-9	010 lbs	524 LB	
California Proposi 65	tion : Not ap	pplicable		
65	-	-		
65 SARA Title III Section 30	2 Extremely Haza	ardous Substance	luct is Not Applicab	le under this regulati
65	2 Extremely Haza	ardous Substance	luct is Not Applicab	le under this regulati
65 SARA Title III Section 30 Unless specific chemicals	2 Extremely Haza	ardous Substance ler this section, this prod	luct is Not Applicab	le under this regulati
65 SARA Title III Section 30 Unless specific chemicals SARA Title III Section 31	2 Extremely Haza are identified und 3 Toxic Chemica	ardous Substance ler this section, this prod		
65 SARA Title III Section 30 Unless specific chemicals SARA Title III Section 31 Unless specific chemicals	2 Extremely Haza are identified und 3 Toxic Chemica	ardous Substance ler this section, this prod ls: ler this section, this prod	luct is Not Applicab	le under this regulati
65 SARA Title III Section 30 Unless specific chemicals SARA Title III Section 31	2 Extremely Haza are identified und 3 Toxic Chemica are identified und	ardous Substance ler this section, this prod ls: ler this section, this prod CA	luct is Not Applicab S-No. Weig	
65 SARA Title III Section 30 Unless specific chemicals SARA Title III Section 31 Unless specific chemicals Chemical Name CHROMIUM III COMI	2 Extremely Haza are identified und 3 Toxic Chemica are identified und	ardous Substance ler this section, this prod ls: ler this section, this prod CA	luct is Not Applicab S-No. Weig	le under this regulati
65 SARA Title III Section 30 Unless specific chemicals SARA Title III Section 31 Unless specific chemicals Chemical Name CHROMIUM III COMI COMPOUNDS	2 Extremely Haza are identified und 3 Toxic Chemica are identified und	ardous Substance ler this section, this prod ls: ler this section, this prod CA MIUM 1308	luct is Not Applicab S-No. Weig	le under this regulati
65 SARA Title III Section 30 Unless specific chemicals SARA Title III Section 31 Unless specific chemicals Chemical Name CHROMIUM III COMI COMPOUNDS Canadian Regulations:	2 Extremely Haza are identified und 3 Toxic Chemica are identified und	ardous Substance ler this section, this prod ls: ler this section, this prod CA MIUM 1308	luct is Not Applicab S-No. Weig	le under this regulati

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

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CAS-No. 1308-38-9 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:	
Australia AICS	: Listed
China IECS	: Listed
Europe EINECS	: Listed
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.