## MATERIAL SAFETY DATA SHEET LIGHT OLIVE Q410-3-5

Version Number 1.0 Revision Date 12/11/2006

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### 1. PRODUCT AND COMPANY IDENTIFICATION

### POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	Product Stewardship (770) 271-5902 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	LIGHT OLIVE Q410-3-5
Product code	:	CC10094498
Chemical Name	:	Mixture
CACNO		Mintune

CAS-No.:MixtureProduct Use:Industrial Applications

### 2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Calcium carbonate	1317-65-3	1 - 5
Chromium (III) oxide	1308-38-9	1 - 5
Nickel, (1-butanamine)[[2,2'-thiobis[4-(1,1,3,3-tetra methylbutyl)phenolato]](2-)-O,O',S]-	14516-71-3	1 - 5
Titanium dioxide	13463-67-7	5 - 10
Nickel antimony yellow rutile (C.I. Pigment Yellow 53)	8007-18-9	10 - 30

### **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	<ul> <li>Resin particles, like other inert materials, can be mechanically irritating.</li> <li>May be harmful if swallowed.</li> <li>Resin particles, like other inert materials, are mechanically irritating to eyes.</li> </ul>

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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 see medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: Not applicable
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures	<ul> <li>Not applicable</li> <li>Not applicable</li> <li>Not applicable</li> <li>Carbon dioxide blanket, water spray, dry powder, foamnone.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne</li> </ul>
Unusual Fire/Explosion Hazards	<ul> <li>contaminants.</li> <li>Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.</li> </ul>
	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

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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. EXI	POSUI	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)		

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Components	Value	Exposure time	Exposure type	List:
Nickel antimony yellow rutile (C.I. Pigment Yellow 53)	1 mg/m3	PEL:	as Ni	OSHA Z1
Tigment Tenow 55)	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.2 mg/m3	Time Weighted Average (TWA):	Inhalable fraction. as Ni	ACGIH
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Chromium (III) oxide	0.5 mg/m3	Time Weighted Average (TWA):	as Cr	ACGIH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
Nickel, (1-butanamine)[[2,2'-t hiobis[4-(1,1,3,3-tetra methylbutyl)phenolato ]](2-)-O,O',S]-	1 mg/m3	PEL:	as Ni	OSHA Z1
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form
Appearance
Color
Odor
Melting point/range
Boiling Point:
Water solubility

# Solid Pellets GREEN Very faint Not determined Not applicable Insoluble

### Evaporation rate : Specific Gravity: : Bulk density : Vapor pressure : Vapour density : PH :

## Not applicable Not determined Not established Not applicable Not applicable Not applicable

### **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.

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Hazardous decomposition products

: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.

### 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
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory system.
1308-38-9	Chromium (III) oxide	Irritant	Eyes, Skin.
		sensitizer	Skin.
14516-71-3	Nickel, (1-butanamine)[[2,2'-thiob is[4-(1,1,3,3-tetramethylbu tyl)phenolato]](2-)-O,O',S] -	sensitizer	Skin.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
8007-18-9	Nickel antimony yellow rutile (C.I. Pigment Yellow 53)	Irritant	Eyes, Skin.
		sensitizer	Skin.

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
14516-71-3	Nickel, (1-butanamine)[[2,2'-thiobis[4 -(1,1,3,3-tetramethylbutyl)phe nolato]](2-)-O,O',S]-	no	1	no
13463-67-7	Titanium dioxide	no	2B	no
8007-18-9	Nickel antimony yellow rutile (C.I. Pigment Yellow 53)	no	1	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.

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### 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.

### Additional Health Hazard Information:

Nickel, (1-butanamine)[[2,2'-thiobis[4-(1,1,3,3-tetramethylbutyl)phenolato]](2-)-O,O',S]- 14516-71-3 Skin sensitizer "nickel itch", with pulmonary, brain, liver, kidney and muscle effects.

#### Additional Health Hazard Information:

Nickel antimony yellow rutile (C.I. Pigment Yellow 53) 8007-18-9 Skin sensitizer "nickel itch", with pulmonary, brain, liver, kidney and muscle effects.

	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
	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 (air)	: Refer to specific regulation.
IMO / IMDG (maritime)	: Refer to specific regulation.
	15. REGULATORY INFORMATION
US Regulations:	

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sion Number 1.0 ision Date 12/11/2006				Prir	nt Date 1	Page 7 1/25/2
OSHA Status : Classified as ha	azardous b	ased on a	component	ts.		
TSCA Status : All component	ts of this n	roduct ar	e listed on	orevem	nt from the	TSCA
Inventory.	is of this p	iouuer ui	e listea oli	orexem	pt nom un	1501
US. EPA CERCLA Hazardous Substances (40 CFR	302)					
Not applicable						
California Proposition : WARNING! T 65 California to ca			ns a chemi	cal knov	vn to the S	tate of
SARA Title III Section 302 Extremely Hazardous Su	ubstance					
Unless specific chemicals are identified under this se	ection, thi	s product	is Not Ap	plicable	under this	regula
SARA Title III Section 313 Toxic Chemicals:						
Unless specific chemicals are identified under this se	ection, this					regula
Unless specific chemicals are identified under this see Chemical Name		CAS-N	lo.	Weight	%	regula
Unless specific chemicals are identified under this se Chemical Name NICKEL COMPOUNDSANTIMONY COMPOU		CAS-N 8007-18	lo. 3-9	Weight 10.00	% - 30.00	regula
Unless specific chemicals are identified under this se Chemical Name NICKEL COMPOUNDSANTIMONY COMPOU CHROMIUM III COMPOUNDS		CAS-N 8007-18 1308-38	lo. 3-9 3-9	Weight 10.00 - 1.00 -	% - 30.00 5.00	regula
Unless specific chemicals are identified under this se Chemical Name NICKEL COMPOUNDSANTIMONY COMPOU		CAS-N 8007-18	lo. 3-9 3-9	Weight 10.00	% - 30.00 5.00	regula
Unless specific chemicals are identified under this see Chemical Name NICKEL COMPOUNDSANTIMONY COMPOU CHROMIUM III COMPOUNDS NICKEL COMPOUNDS		CAS-N 8007-18 1308-38	lo. 3-9 3-9	Weight 10.00 - 1.00 -	% - 30.00 5.00	regula
Unless specific chemicals are identified under this se Chemical Name NICKEL COMPOUNDSANTIMONY COMPOU CHROMIUM III COMPOUNDS		CAS-N 8007-18 1308-38	lo. 3-9 3-9	Weight 10.00 - 1.00 -	% - 30.00 5.00	regula
Unless specific chemicals are identified under this second chemical Name NICKEL COMPOUNDSANTIMONY COMPOU CHROMIUM III COMPOUNDS NICKEL COMPOUNDS Canadian Regulations: National Pollutant Release Inventory (NPRI)	INDS	CAS-N 8007-18 1308-38 14516-7	40. 3-9 3-9 71-3	Weight 10.00 - 1.00 - 1.00 -	% - 30.00 5.00 5.00	
Unless specific chemicals are identified under this second chemical Name NICKEL COMPOUNDSANTIMONY COMPOU CHROMIUM III COMPOUNDS NICKEL COMPOUNDS Canadian Regulations: National Pollutant Release Inventory (NPRI) Chemical Name	JNDS	CAS-N 8007-18 1308-38 14516-7	10. 3-9 3-9 71-3 Weight	Weight 10.00 - 1.00 - 1.00 - t %	% - 30.00 5.00 5.00	
Unless specific chemicals are identified under this se Chemical Name NICKEL COMPOUNDSANTIMONY COMPOU CHROMIUM III COMPOUNDS NICKEL COMPOUNDS Canadian Regulations: National Pollutant Release Inventory (NPRI) Chemical Name Nickel antimony yellow rutile (C.I. Pigment	INDS	CAS-N 8007-18 1308-38 14516-7	40. 3-9 3-9 71-3	Weight 10.00 - 1.00 - 1.00 - t %	% - 30.00 5.00 5.00	
Unless specific chemicals are identified under this second chemical Name NICKEL COMPOUNDSANTIMONY COMPOU CHROMIUM III COMPOUNDS NICKEL COMPOUNDS Canadian Regulations: National Pollutant Release Inventory (NPRI) Chemical Name	JNDS	CAS-N 8007-18 1308-38 14516-7	No. 3-9 71-3 Weight 10.00 -	Weight 10.00 - 1.00 - 1.00 - 1.00 - 1.00 - 30.00	% - 30.00 5.00 5.00 NPRI ID 168	
Unless specific chemicals are identified under this se Chemical Name NICKEL COMPOUNDSANTIMONY COMPOU CHROMIUM III COMPOUNDS NICKEL COMPOUNDS Canadian Regulations: National Pollutant Release Inventory (NPRI) Chemical Name Nickel antimony yellow rutile (C.I. Pigment Yellow 53)	JNDS CAS-N 8007-1	CAS-N 8007-18 1308-38 14516-7	To. 3-9 3-9 71-3 Weight 10.00 - 10.00 -	Weight 10.00 - 1.00 - 1.00 - 1.00 - 1.00 - 30.00	%           - 30.00           5.00           5.00           168           17	
Unless specific chemicals are identified under this second chemical Name NICKEL COMPOUNDSANTIMONY COMPOUNDS NICKEL COMPOUNDS Canadian Regulations: National Pollutant Release Inventory (NPRI) Chemical Name Nickel antimony yellow rutile (C.I. Pigment Yellow 53) Chromium (III) oxide	JNDS CAS-N 8007-1 1308-3	CAS-N 8007-18 1308-38 14516-7 14516-7 10. 8-9 8-9	To. 3-9 71-3 Weight 10.00 - 1.00 -	Weight 10.00 - 1.00	%           - 30.00           5.00           5.00           100           168           117           69	
Unless specific chemicals are identified under this second chemical Name NICKEL COMPOUNDSANTIMONY COMPOUNDS NICKEL COMPOUNDS Canadian Regulations: National Pollutant Release Inventory (NPRI) Chemical Name Nickel antimony yellow rutile (C.I. Pigment Yellow 53) Chromium (III) oxide Nickel,	JNDS CAS-N 8007-1	CAS-N 8007-18 1308-38 14516-7 14516-7 10. 8-9 8-9	To. 3-9 3-9 71-3 Weight 10.00 - 10.00 -	Weight 10.00 - 1.00	%           - 30.00           5.00           5.00           168           17	
Unless specific chemicals are identified under this second chemical Name NICKEL COMPOUNDSANTIMONY COMPOUNDS NICKEL COMPOUNDS Canadian Regulations: National Pollutant Release Inventory (NPRI) Chemical Name Nickel antimony yellow rutile (C.I. Pigment Yellow 53) Chromium (III) oxide	JNDS CAS-N 8007-1 1308-3	CAS-N 8007-18 1308-38 14516-7 14516-7 10. 8-9 8-9	To. 3-9 71-3 Weight 10.00 - 1.00 -	Weight 10.00 - 1.00	%           - 30.00           5.00           5.00           100           168           117           69	
Unless specific chemicals are identified under this second chemical Name NICKEL COMPOUNDSANTIMONY COMPOU CHROMIUM III COMPOUNDS NICKEL COMPOUNDS Canadian Regulations: National Pollutant Release Inventory (NPRI) Chemical Name Nickel antimony yellow rutile (C.I. Pigment Yellow 53) Chromium (III) oxide Nickel, (1-butanamine)[[2,2'-thiobis[4-(1,1,3,3-tetrameth	JNDS CAS-N 8007-1 1308-3	CAS-N 8007-18 1308-38 14516-7 14516-7 10. 8-9 8-9	To. 3-9 71-3 Weight 10.00 - 1.00 -	Weight 10.00 - 1.00	%           - 30.00           5.00           5.00           100           168           117           69	
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8007-18-9 1308-38-9 14516-71-3		
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	:	Listed
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.