MATERIAL SAFETY DATA SHEET GREEN CSPN

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

Telephone Emergency telephone number	:	Product Stewardship (440) 930-1395 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	GREEN CSPN
Product code	:	CC10095837
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Rutile, antimony chromium buff	68186-90-3	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. If overheated or burnt, the polymer releases formaldehyde.
Ingestion	: May be harmful if swallowed.
Eyes	: Particulates, like other inert materials can be mechanically irritating.
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.



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		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 of 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 seel medical attention.
		5. FIRE-FIGHTING MEASURES
Flash point	:	Not applicable
Flammable Limits		
Upper explosion limit		Not applicable
Lower explosion limit	:	Not applicable
Autoignition temperature	:	Not applicable
	•	11
Suitable extinguishing media	:	Carbon dioxide blanket, water spray, dry powder, foamnone.
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. If overheated or burnt, the polymer releases formaldehyde. May burn with invisible flame.
	6. A	CCIDENTAL 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 13 of this MSDS for proper disposal methods.
		7. HANDLING AND STORAGE
Handling	:	Take measures to prevent the build up of electrostatic charge. Open container only in a well-ventilated area. Heat only in areas with



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Storage	:	appropriate exhaust ventilation. Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.
8. EXPO	SUF	RE CONTROLS / PERSONAL PROTECTION
Respiratory protection	:	No personal respiratory protective equipment normally required. When temperatures exceed 230°C (446°F) and ventilation is inadequate to maintain concentrations below exposure limits, use a positive air supplied respirator. Air purifying respirators may not provide adequate protection.
Eye/Face Protection	:	Safety glasses with side-shields. Wear face-shield and protective suit for abnormal processing problems.
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:
Rutile, antimony	0.5 mg/m3	Time Weighted Average	as Cr	ACGIH
chromium buff		(TWA):		
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
	0.5 mg/m3	Time Weighted Average		MX OEL
		(TWA):		
	0.5 mg/m3	Time Weighted Average	as Sb	ACGIH
		(TWA):		
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average	as Sb	MX OEL
		(TWA):		
Titanium dioxide	10 mg/m3	Time Weighted Average		ACGIH
		(TWA):		
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	20 mg/m3	Short Term Exposure Limit	as Ti	MX OEL
		(STEL):		

9. PHYSICAL AND CHEMICAL PROPERTIES

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Form Appearance Color Odor Melting point/range Boiling Point: Water solubility	 Solid Pellets, Slabs GREEN formaldehyde 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
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: Stable.
: Will not occur.
: Maintain polymer temperature below 230°C (446°F). Avoid prolonger exposure at or above recommended processing temperature.
: Incompatible with strong oxidizers and with strong acids and bases (decomposes to form formaldehyde). At melt temperatures, acetal resins are incompatible with halogenated polymers such as vinyl (PVC) and any elastomers containing any halogenated polymers. At processing conditions, these materials are mutually destructive and involve rapid degradation. Even small amounts of such contaminants can cause sudden and spontaneous formaldehyde gas formation. Workplace fume well above threshold levels are a likely result. Unsaf pressurization of equipment such as extruder or mold can also result. Thoroughly purge and mechanically clean processing equipment to avoid even trace quantities of halogenated materials from coming in contact with the acetal. Prevent contamination of virgin or rework resin.
: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible. If overheated or burnt, the polymer releases formaldehyde. Decomposition of this material depends on the lenght of time it is exposed to elevated temperatures. At the recommended processing temperature of 210°C-220°C (410°F-428°F), decomposition should not be significant until after 30 minutes. Decomposition may be accelerated by contaminants, pigments and/or other additives.

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.

<u>Toxicity Overview</u> This product contains the following components which in their pure form have the following characteristics:

CAS-No.	Chemical Name	Effect	Target Organ



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68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, Respiratory system.
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.

Additional Health Hazard Information:

Rutile, antimony chromium buff 68186-90-3 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

12. ECOLOGICAL INFORMATION

Persistence and degradability	Not readily biodegradable.	
Environmental Toxicity	Chemicals are not readily available as they are bound v polymer matrix.	within the
Bioaccumulation Potential	Chemicals are not readily available as they are bound v polymer matrix.	within the
Additional advice	Not applicable	
	3. DISPOSAL CONSIDERATIONS	
Product	Like most thermoplastic plastics the product can be rec possible recycling is preferred to disposal or incineration generator of waste material has the responsibility for pr classification, transportation and disposal in accordanc applicable federal, state/provincial and local regulation	on. The roper waste e with
Contaminated packaging	Recycling is preferred when possible. The generator of has the responsibility for proper waste classification, tr and disposal in accordance with applicable federal, stat and local regulations.	ansportation

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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: 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 Substances (40 CFR 302) Not applicable California Proposition : Not applicable 65 SARA Title III Section 302 Extremely Hazardous Substance Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation SARA Title III Section 313 Toxic Chemicals: Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation CAS-No. Weight % Chemical Name CHROMIUM III COMPOUNDSANTIMONY 68186-90-3 1.00 - 5.00 COMPOUNDS

Canadian Regulations:

Chemical Name	CAS-No.	Weight %	NPRI ID#
Phthalocyanine green	1328-53-6	5.00 - 10.00	71
Rutile, antimony chromium buff	68186-90-3	1.00 - 5.00	69
		1.00 - 5.00	17

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	WHMIS Classification : D2B						
	WHMIS Ingredient Disclosure List						
	CAS-No. 1328-53-6 68186-90-3						
	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	Γ			

OTHER INFORMATION 10.

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.