MATERIAL SAFETY DATA SHEET 70500TF SOFT DALLAS GREEN

Version Number 1.6 Revision Date 12/27/2012

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

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	:	70500TF SOFT DALLAS GREEN
Product code	:	FO00001936
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Quartz	14808-60-7	0.1 - 1
Titanium dioxide	13463-67-7	0.1 - 1
Diphenyloxide-4,4'-disulfohydrazide	80-51-3	1 - 5
Silica, amorphous, fumed, crystal-free	112945-52-5	1 - 5
Calcium carbonate	1317-65-3	10 - 30

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants 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. See sections 8 and 11 for special precautions. Do not use this pigment in polymers at temperatures over 200°C (392°F). Decomposition of diarylide pigments in polymers at temperatures over 200°C (392°F) may produce trace amounts of monoazo dyes, which in turn can decompose to produce aromatic amines. The amount and type of degradation products formed depend on the dwell time, formulation and processing conditions as well as temperature. As conditions become more severe, as when temperatures move into the 240-300°C (464-572°F) range, trace quantities of 3,3'-dichlorobenzidine can be generated. 3,3'-dichlorobenzidine is classified as a suspect carcinogen by NTP and IARC, is classified as Acute Toxicity category 4 and Carcinogen Category 1B according to 1272/2008EC (CLP), and is regulated by OSHA as a suspect carcinogen. In order to avoid the generation of and exposure to 3,3'-dichlorobenzidine, do not use diarylide pigments in polymers when temperatures exceed 200°C (392°F). Handle with care. Organic dusts have the potential to be explosive with static spark or flame initiation.

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POTENTIAL HEALTH EFFECTS : Inhalation, Skin contact, Ingestion **Routes of Exposure:** Acute exposure Inhalation : Inhalation of airborne droplets may cause irritation of the respiratory tract. Ingestion : May be harmful if swallowed. Eyes : May cause eye and skin irritation. Skin : Experience shows no unusual dermatitis hazard from routine handling. **Chronic exposure** : Refer to Section 11 for Toxicological Information. **Medical Conditions** : None known. Aggravated by Exposure: 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. Rinse immediately with plenty of water for at least 15 minutes. If eye Eyes : 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 : no data available Flammable Limits Upper explosion limit : no data available Lower explosion limit no data available : Not applicable Auto-ignition temperature : Suitable extinguishing media Carbon dioxide blanket, Water spray, Dry powder, Foam. : Special Fire Fighting : Fullface self-contained breathing apparatus (SCBA) used in positive Procedures pressure mode should be worn to prevent inhalation of airborne contaminants. Unusual Fire/Explosion : May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under Hazards fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.

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	6. ACCIDENTAL RELEASE MEASURES
Personal precautions	: Wear appropriate personal protection during cleanup, such as impervious gloves, boots and coveralls.
Environmental precautions	: The product should not be allowed to enter drains, water courses or the soil. Should not be released into the environment.
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Package all material in appropriate container for disposal.
	7. HANDLING AND STORAGE
Handling	: Heat only in areas with appropriate exhaust ventilation. Processing fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials.
Storage	: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store in a cool dry place.
8. EXF	OSURE 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:
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
Diphenyloxide-4,4'- disulfohydrazide	0.1 mg/m3	Time Weighted Average (TWA):	Inhalable fraction.	ACGIH
Quartz	0.025 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	0.05 mg/m3	Recommended exposure limit (REL):	Respirable dust.	NIOSH
	0.1 mg/m3	Time Weighted Average (TWA):	Respirable dust.	OSHA Z1A
	0.1 mg/m3	Time Weighted Average (TWA):	Respirable.	Z3
	0.3 mg/m3	Time Weighted Average (TWA):	Total dust.	Z3
	0.1 mg/m3	Time Weighted Average (TWA):		MX OEL
Silica, amorphous, fumed, crystal-free	0.8 mg/m3	Time Weighted Average (TWA):		Z3
· · ·	10 mg/m3	Time Weighted Average (TWA):	Inhalable particulate.	MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Respirable dust.	MX OEL
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 Appearance Colour Odour Melting point/range Boiling Point: Water solubility
- liquid
 viscous, liquid
 GREEN
 very faint
 not applicable
 not applicable
 immiscible
- Evaporation rate Specific Gravity Bulk density Vapour pressure Vapour density pH
- Not established
 Not determined
 Not applicable
 Not determined
 Not determined
 Not applicable

10. STABILITY AND REACTIVITY

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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	:	Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing.
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 may result in product degradation. As a general rule of thumb, degradation begins to occur after one hour at 177 °C (350 °F), after 10 minutes at 204 °C (400 °F), and within 5 minutes at 232 °C (450 °F). Do not use this pigment in polymers at temperatures over 200°C (392 °F). Decomposition of diarylide pigments in polymers at temperatures over 200°C (392 °F). Decomposition of diarylide pigments in polymers at temperatures over 200°C (392 °F) may produce trace amounts of monoazo dyes, which in turn can decompose to produce aromatic amines. The amount and type of degradation products formed depend on the dwell time, formulation and processing conditions as well as temperature. As conditions become more severe, as when temperatures move into the 240-300°C ($464-572$ °F) range, trace quantities of $3,3'$ -dichlorobenzidine can be generated. $3,3'$ -dichlorobenzidine is classified as a suspect carcinogen by NTP and IARC, is classified as Acute Toxicity category 4 and Carcinogen Category 1B according to 1272/2008EC (CLP), and is regulated by OSHA as a suspect carcinogen. In order to avoid the generation of and exposure to $3,3'$ -dichlorobenzidine, do not use diarylide pigments in polymers when temperatures exceed 200°C (392 °F). Handle with care. Organic dusts have the potential to be explosive with static spark or flame initiation.

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
14808-60-7	Quartz	Systemic effects	Eyes, Respiratory system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
80-51-3	Diphenyloxide-4,4'- disulfohydrazide	Irritant	Eyes, Skin.
112945-52-5	Silica, amorphous, fumed, crystal-free	Irritant	Eyes, Respiratory system.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.

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	Systemic effects	Eyes, Skin, Respiratory
	•	system.

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
112945-52-5	Silica, amorphous, fumed, crystal-free	Oral LD50	3,160 mg/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
14808-60-7	Quartz	no	1	no
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:

Quartz 14808-60-7 This material in its free releasable form may cause respiratory tract irritation. Long-term exposure may cause coughing, chest pain, diminished chest expansion and possibly silicosis, which is a scarring of the lungs.

Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Environmental toxicity has not been established for this mixture as a whole.
Bioaccumulation Potential	: no data available
Additional advice	: no data available
	13. DISPOSAL CONSIDERATIONS
Product	: 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.

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Contaminated packaging	:	material has the transportation a	responsibility fo	sible. The generation proper waste cl cordance with ap tions.	assification	,
	1	4. TRANSPORT	[INFORMATI	ON		
U.S. DOT Classification	:	Refer to specific	regulation.			
ICAO/IATA	:	Refer to specific	regulation.			
IMO/IMDG (maritime)	:	Refer to specific	c regulation.			
	15	S. REGULATOR	Y INFORMAT	ION		
US Regulations:						
OSHA Status	:	Classified as ha	zardous based or	n components.		
TSCA Status	:	All components		are listed on or e	xempt from	the
US. EPA CERCLA Hazardou	ıs Sub	stances (40 CFR 3	302)			
not applicable						
California Proposition 65	ι :	California to cau	use cancer., WAI	ains a chemical ka RNING! This pr California to caus	oduct conta	ins a
SARA Title III Section 302 E	xtrem	ely Hazardous Su	bstance			
Unless specific chemicals are	identi	fied under this se	ction, this produc	ct is Not Applica	ble under th	is regulat
SARA Title III Section 313 T	'oxic (Chemicals:				
Unless specific chemicals are	identi	fied under this se	ction, this produc	ct is Not Applica	ble under th	is regulat
Canadian Regulations:						
	ease I	nventory (NPRI)	CAS-No.	Weight		
National Pollutant Rel Chemical Name					NPRI	

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Phthalocyanine green			1328-53-6	1.00 - 5.00	
WHMIS Classification	:	D2A			
WHMIS Ingredient Dis	closu	ire List			
CAS-No. 1328-53-6					
DSL	:	All components Substances List		are on the Canadian empt.	Domestic
National Inventories:					
Australia AICS	:	Not determined			
China IECS	:	Not determined			
Europe EINECS	:	Listed			
Japan ENCS	:	Not determined			
Korea KECI	:	Not determined			
Philippines PICCS	:	Not determined			
		16 OTHER IN	FORMATION	J	

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.