MATERIAL SAFETY DATA SHEET 19500-002 BLACK LC PLASTISOL

Version Number 1.1 Revision Date 07/15/2003

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 2700 Papin Street, St. Louis, MO 63103

NON-EMERGENCY TELEPHONE	:	Product Stewardship, (314) 771-1800
Emergency telephone number	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	19500-002 BLACK LC PLASTISOL
Product code	:	FO00008167
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Carbon black	1333-86-4	0.1 - 1
Calcium carbonate	471-34-1	1 - 5

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.

POTENTIAL HEALTH EFFECTS

Routes of Exposure:	: Inhalation, Skin contact, Ingestion
Acute exposure	
Inhalation	: Inhalation of airborne droplets may cause irritation of the respiratory tract.
Ingestion	: May be harmful if swallowed.
Eyes	: May cause eye/skin irritation.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.
Chronic exposure	: Refer to Section 11 for Toxicological Information.

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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 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 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	: No data available.
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media Special Fire Fighting Procedures	 No data available. No data available. Not applicable. Carbon dioxide blanket, dry powder, foam, water spray. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants.
Unusual Fire/Explosion Hazards	: May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions.
	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	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder universal binder, sawdust). Package all material in appropriate container for disposal. Refer to Section 13 of this MSDS for proper disposal methods.
	7. HANDLING AND STORAGE
Handling	: Heat only in areas with appropriate exhaust ventilation. Processing



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Storage	:	fume condensates may contain combustible or toxic residue. Periodically clean hoods, ducts, and other surfaces to minimize accumulation of these materials. Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store in a cool dry place.
8. EX	POSU	RE CONTROLS / PERSONAL PROTECTION
Respiratory protection	:	Under normal handling conditions a respirator may not be 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:
Carbon black	3.5 mg/m3	Time Weighted Average	Total dust. as carbon	ACGIH
		(TWA):	black	
Carbon black	3.5 mg/m3	PEL:	Total dust. as carbon	OSHA Z1
			black	
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
Calcium carbonate	10 mg/m3	Time Weighted Average	Total dust.	ACGIH
		(TWA):		
	3 mg/m3	Time Weighted Average	Respirable dust.	ACGIH
		(TWA):		

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form Appearance Color Odor Melting point/range Boiling Point: Water solubility
- : Liquid
 : Viscous, Liquid
 : BLACK
 : Very faint
 : Not applicable
 : Not applicable
 : Immiscible
- Evaporation rate Specific Gravity Bulk density Vapor pressure Vapor density pH
- Not established
 Not determined
 Not applicable.
 Not determined
 Not determined
 Not determined
 Not applicable.

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	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. 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).

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
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
471-34-1	Calcium carbonate	Irritant	Eyes, 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
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit
471-34-1	Calcium carbonate	Oral LD50	6,450 mg/kg	rat

Carcinogenicity:

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

1	CAS-No.	Chemical Name	OSHA	IARC	NTP
	1333-86-4	Carbon black	no	2B	no

IARC Carcinogen Classifications:

1 - The component is carcinogenic to humans.

2A - The component is probably carcinogenic to humans.

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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:

Carbon black 1333-86-4 Carcinogenicity: Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph Volume 65, issued in April 1996 concluded that, "There is sufficient evidence in experimental animals for the carcinogenicity of carbon black". Based on this evaluation, along with their evaluation of inadequate evidence of carcinogenicity in humans, IARC's overall evaluation is that "Carbon Black is possibly carcinogenic to humans (Group 2B). Carbon Black has not been listed as a carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety and Health (NIOSH) criteria document on carbon black recommends that only carbon black with PAH (polynuclear aromatic hydrocarbon) levels greater than 0.1% be considered suspect carcinogens.

	12. ECOLOGICAL INFORMATION
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.
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 ICAO/IATA IMO / IMDG	 Refer to specific regulation. Refer to specific regulation. Refer to specific regulation.

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	15	5. REGULATORY IN	FORMATION		
US Regulations:					
OSHA Status	:	Classified as hazardo	us based on compo	onents.	
TSCA Status	:	All components of th Inventory.	is product are liste	d on or exemp	pt from the TSC
US. EPA CERCLA Hazardous	Sub	stances (40 CFR 302)			
Not applicable					
California Proposition 65	:	WARNING! This pr California to cause ca		hemical know	n to the State o
SARA Title III Section 302 Ext	trem	ely Hazardous Substan	ce		
Not applicable					
Not applicable SARA Title III Section 313 To:	xic (Chemicals:			
	xic (Chemicals:			
SARA Title III Section 313 To: Not applicable Canadian Regulations: National Pollutant Relea			G. G. M.		
SARA Title III Section 313 To: Not applicable Canadian Regulations:	ise I		CAS-No. Not Available	Weight % 0.11	NPRI ID# 241
SARA Title III Section 313 To: Not applicable Canadian Regulations: National Pollutant Relea Chemical Name	ise I	nventory (NPRI)			
SARA Title III Section 313 To: Not applicable Canadian Regulations: National Pollutant Relea Chemical Name Misc00005- Misc Zinc Cp	ase I od's	nventory (NPRI)	Not Available een determined. Q	0.11	241
SARA Title III Section 313 To: Not applicable Canadian Regulations: National Pollutant Relea Chemical Name Misc00005- Misc Zinc Cp WHMIS Classification	ase I od's	nventory (NPRI) D2A DSL status has not b	Not Available een determined. Q	0.11	241
SARA Title III Section 313 To: Not applicable Canadian Regulations: National Pollutant Relea Chemical Name Misc00005- Misc Zinc Cp WHMIS Classification DSL	ase I od's	nventory (NPRI) D2A DSL status has not b	Not Available een determined. Q	0.11	241
SARA Title III Section 313 To: Not applicable Canadian Regulations: <u>National Pollutant Relea</u> <u>Chemical Name</u> <u>Misc00005- Misc Zinc Cp</u> WHMIS Classification DSL National Inventories:	d's :	nventory (NPRI) D2A DSL status has not b restricted by regulatic	Not Available een determined. Q	0.11	241
SARA Title III Section 313 To: Not applicable Canadian Regulations: <u>National Pollutant Relea</u> <u>Chemical Name</u> <u>Misc00005- Misc Zinc Cp</u> WHMIS Classification DSL National Inventories: Australia AICS	ise I d's : :	nventory (NPRI) D2A DSL status has not b restricted by regulation	Not Available een determined. Q	0.11	241



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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 when used in combination with any other materials and/or in any particular process or processing conditions.