PolyOne

MATERIAL SAFETY DATA SHEET **MB142 LIVER**

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone:Emergency telephone:		Product Stewardship (770) 590-3500 x.3563 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	MB142 LIVER
Product code	:	FO00005730
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Iron oxide	1309-37-1	0.1 - 1
Lead chromate	7758-97-6	0.1 - 1
Titanium dioxide	13463-67-7	0.1 - 1
Barium sulfate	7727-43-7	5 - 10

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 and 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 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 for at least 15 minutes. If ey irritation persists, seek medical attention.
Skin	: Wash off with soap and plenty of water. If skin irritation persists seek medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: No data available
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	 No data available No data available Not applicable 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	 May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) unde fire conditions. 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	: 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. Refer to Section 13 of this MSDS for proper disposal methods.



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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. 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.

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Components	Value	Exposure time	Exposure type	List:
Barium sulfate	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	5 mg/m3	Recommended exposure limit (REL):	Respirable.	NIOSH
	10 mg/m3	Recommended exposure limit (REL):	Total	NIOSH
	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	OSHA Z1A
	10 mg/m3	Time Weighted Average (TWA):	Total dust.	OSHA Z1A
Iron oxide	5 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
	10 mg/m3	PEL:	Fume.	OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):	as Fe	MX OEL
	10 mg/m3	Short Term Exposure Limit (STEL):	as Fe	MX OEL
Lead chromate	0.012 mg/m3	Time Weighted Average (TWA):	as Cr	ACGIH
	0.05 mg/m3	Time Weighted Average (TWA):	as Pb	ACGIH
	0.005 mg/m3	Time Weighted Average (TWA):		OSHA
	0.0025 mg/m3	OSHA Action level:		OSHA
	0.001 mg/m3	Recommended exposure limit (REL):	as Cr(VI)	NIOSH
	0.1 mg/m3	Ceiling Limit Value:		OSHA Z2
	0.1 mg/m3	Ceiling Limit Value:	as CrO3	OSHA Z1A
	0.01 mg/m3	Time Weighted Average (TWA):		MX OEL
	1 mg/m3	PEL:	as Cr	OSHA Z1
	1 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	0.05 mg/m3	Time Weighted Average (TWA):		OSHA
	0.03 mg/m3	OSHA Action level:		OSHA
	0.05 mg/m3	Time Weighted Average (TWA):	as Pb	OSHA Z1A
	0.15 mg/m3	Time Weighted Average (TWA):	Dust and fume. as Pb	MX OEL
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1

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	10 mg/m3	Time Weighted Av (TWA):	erage	Total dust.	OSHA Z1A
	10 mg/m3	· · · · · · · · · · · · · · · · · · ·		as Ti	MX OEL MX OEL
	20 mg/m3		Short Term Exposure Limit		
	9. PHYSIC	CAL AND CHEMICA	AL PROI	PERTIES	
Form Appearance Color Odour Melting point/range Boiling Point: Water solubility	: NOT : Very : Not a : Not a	d ous, liquid `APPLICABLE faint applicable applicable iscible	Specific Bulk de Vapour	c Gravity : Not nsity : Not pressure : Not density : Not	established determined applicable determined determined applicable
	10. S	STABILITY AND RE	EACTIVI	ITY	
Stability		table.			
Hazardous Polymerization Conditions to avoid	: K	Vill not occur. Teep away from oxidiz ecomposition, do not o		s and open flame. To a	woid thermal
Incompatible Materials		Incompatible with strong acids and oxidizing agents., Avoid contact with acetal homopolymers and acetal copolymers during processing.			
Hazardous decomposition	: C	arbon dioxide (CO2),	carbon m	onoxide (CO), oxides o	of nitrogen

:	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.

products

<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
1309-37-1	Iron oxide	Systemic effects	Respiratory system.
7758-97-6	Lead chromate	Systemic effects	central nervous system (CNS), reproductive system.
13463-67-7	Titanium dioxide	Systemic effects	Respiratory system.
7727-43-7	Barium sulfate	Irritant	Respiratory system.

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	Systemic effects	Eyes, 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
7758-97-6	Lead chromate	Oral LD50	> 12 gm/kg	mouse

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
7758-97-6	Lead chromate	yes	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:

Lead chromate 7758-97-6 Systemic effects include neurotoxic, teratogenic, fetotoxic and reproductive with abdominal pain, anemia, pallor, decreased hand grip strength with characteristic "wrist drop".

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,

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	stat	e/provincial and lo	cal regulations		
	stat		cal legulations.		
	14. T	RANSPORT INF	ORMATION		
U.S. DOT Classification	: Ref	fer to specific regul	ation.		
ICAO/IATA (air)	: Ref	fer to specific regul	ation.		
IMO / IMDG (maritime)	: Ref	fer to specific regul	ation.		
	15. RE	GULATORY IN	FORMATION		
US Regulations:					
OSHA Status	: Cla	ssified as hazardou	is based on compor	nents.	
TSCA Status	: All components of this product are listed on or exempt from the TSCA Inventory.				
US. EPA CERCLA Hazardo	us Substanc	es (40 CFR 302)			
Not applicable					
California Propositio 65	Cal che	ifornia to cause ca	ncer., WARNING! e State of California	emical known to the State of This product contains a a to cause birth defects or	
SARA Title III Section 302	Extremely F	Iazardous Substand	ce		
Unless specific chemicals are	e identified	under this section.	this product is Not	Applicable under this regul	
L			Ĩ		
	Foxic Chem	icals:			
SARA Title III Section 313					
Unless specific chemicals are		under this section,			
Unless specific chemicals are Chemical Name	e identified		CAS-No.	Weight %	
Unless specific chemicals are Chemical Name CHROMIUM VI COMPC	e identified DUNDSCHF	ROMIUM			
Unless specific chemicals are Chemical Name CHROMIUM VI COMPC COMPOUNDSLEAD CO	e identified DUNDSCHF MPOUNDS	ROMIUM	CAS-No.	Weight %	
Unless specific chemicals are Chemical Name CHROMIUM VI COMPC	e identified DUNDSCHF MPOUNDS	ROMIUM	CAS-No.	Weight %	
Unless specific chemicals are Chemical Name CHROMIUM VI COMPO COMPOUNDSLEAD CO COMPOUNDS, INORGA Canadian Regulations:	e identified DUNDSCHF MPOUNDS NIC	ROMIUM SLEAD	CAS-No.	Weight %	
Unless specific chemicals are Chemical Name CHROMIUM VI COMPC COMPOUNDSLEAD CO COMPOUNDS, INORGA	e identified DUNDSCHF MPOUNDS NIC	ROMIUM SLEAD tory (NPRI)	CAS-No. 7758-97-6	Weight %	

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Lead chromate		7758-97-6	0.10 - 1.00		
			0.10 - 1.00		
WHMIS Classification	:	D2A			
WHMIS Ingredient Disc	closi	ire List			
CAS-No.					
7758-97-6					
DSL	:	All components of this product are on the Canadian Domestic			
		Substances List (DSL) or are e	exempt.		
lational Inventories:					
Australia AICS	:	Not determined			
China IECS	:	Not determined			
Europe EINECS	:	Not determined			
Japan ENCS	:	Not determined			
Korea KECI	:	Not determined			
Philippines PICCS	:	Not determined			

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.