MATERIAL SAFETY DATA SHEET 123473 GYA LLDPE MASTERBATCH

Version Number 1.0 Revision Date 04/01/2014 Page 1 of 7 Print Date 4/9/2014

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

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	:	123473 GYA LLDPE MASTERBATCH
Product code	:	CC10123473
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Barium sulfate	7727-43-7	1 - 5
Titanium dioxide	13463-67-7	30 - 60

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	: Resin particles, like other inert materials, can be mechanically irritating.
Ingestion	: May be harmful if swallowed.
Eyes	: Resin particles, like other inert materials, are mechanically irritating to eyes.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.
Chronic exposure	: Refer to Section 11 for Toxicological Information.

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MATERIAL SAFETY DATA SHEET 123473 GYA LLDPE MASTERBATCH

Version Number 1.0 Revision Date 04/01/2014 Page 2 of 7 Print Date 4/9/2014

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, also under the eyelids, for a least 15 minutes. If eye 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	: not applicable
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures Unusual Fire/Explosion Hazards	 not applicable not applicable not applicable Carbon dioxide blanket, Water spray, Dry powder, Foam. Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. 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	: 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.
	7. HANDLING AND STORAGE
Handling	: Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.

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MATERIAL SAFETY DATA SHEET 123473 GYA LLDPE MASTERBATCH

Version Number 1.0 Revision Date 04/01/2014 Page 3 of 7 Print Date 4/9/2014

Storage

: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool place.

8. EXPOSURE 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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Exposure limit(s)

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MATERIAL SAFETY DATA SHEET 123473 GYA LLDPE MASTERBATCH

Version Number 1.0 Revision Date 04/01/2014 Page 4 of 7 Print Date 4/9/2014

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
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	

:	solid
:	pellets
:	GREY
:	very faint
:	Not determined
:	not applicable
:	insoluble

Evapouration rate Specific Gravity : Not determined Bulk density : Not established Bulk density Vapour pressure : not applicable Vapour density : not applicable pH

- : Not applicable
- : Not established

 - not applicable :

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

MATERIAL SAFETY DATA SHEET 123473 GYA LLDPE MASTERBATCH

Version Number 1.0 Revision Date 04/01/2014 Page 5 of 7 Print Date 4/9/2014

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
7727-43-7	Barium sulfate	Irritant	Respiratory system.
		Systemic effects	Eyes, 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.

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. Wher 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,

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MATERIAL SAFETY DATA SHEET 123473 GYA LLDPE MASTERBATCH

Version Number 1.0 Revision Date 04/01/2014 Page 6 of 7 Print Date 4/9/2014

	14. TRANSPOR	T INFORMATIC)N		
U.S. DOT Classification :	Not regulated f	or transportation.			
ICAO/IATA :	Refer to specifi	c regulation.			
IMO/IMDG (maritime) :	Refer to specifi	c regulation.			
1	5. REGULATO	RY INFORMATI	ON		
US Regulations:					
OSHA Status :	Classified as ha	zardous based on	components.		
TSCA Status :	: All components of this product are listed on or exempt from the TSCA Inventory.				
US. EPA CERCLA Hazardous Sul	bstances (40 CFR	302)			
not applicable					
65	Not applicable	libetanca			
SARA Title III Section 302 Extrem	-				
Unless specific chemicals are iden	tified under this so	ection, this product	t is Not Applicabl	e under this reg	ulati
SARA Title III Section 313 Toxic	Chemicals:				
Unless specific chemicals are iden	tified under this so	ection, this product	t is Not Applicabl	e under this regu	ılati
Canadian Regulations:					
National Pollutant Release	Inventory (NPRI)				
Chemical Name	· · · · · · · · · · · · · · · · · · ·	CAS-No.	Weight percent	NPRI ID#	
Zinc ferrite brown spinel (C.I. P	igment Yellow	68187-51-9	0.10 - 1.00		

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MATERIAL SAFETY DATA SHEET 123473 GYA LLDPE MASTERBATCH

Version Number 1.0 Revision Date 04/01/2014

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Page 7 of 7 Print Date 4/9/2014

	WHMIS Classification	:	D2A 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 OTHED INCODMATION

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.