## MATERIAL SAFETY DATA SHEET MM481 BLACK 2040 TYPE

Version Number 1.1 Revision Date 03/13/2014 Page 1 of 7 Print Date 3/21/2014

### 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	:	MM481 BLACK 2040 TYPE
Product code	:	FO20024610
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Naphtha (petroleum), heavy alkylate	64741-65-7	1 - 5
Naphtha, petroleum, hydrotreated heavy	64742-48-9	1 - 5
Miscellaneous Zinc Compounds	0-05-5	1 - 5
Calcium oxide	1305-78-8	1 - 5
Stoddard solvent	8052-41-3	1 - 5
Miscellaneous Barium Compounds	0-08-8	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 and skin irritation.

PolyOne.

# MATERIAL SAFETY DATA SHEET MM481 BLACK 2040 TYPE

Version Number 1.1 Revision Date 03/13/2014 Page 2 of 7 Print Date 3/21/2014

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.
	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. FIREFIGHTING MEASURES
Flash point	: no data available
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media Special Fire Fighting Procedures	<ul> <li>no data available</li> <li>no data available</li> <li>Not applicable</li> <li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li> <li>Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne</li> </ul>
Unusual Fire/Explosion Hazards	<ul> <li>contaminants.</li> <li>May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) under fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), other hazardous materials, and smoke are all possible.</li> </ul>
	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.
	: Soak up with inert absorbent material (e.g. sand, silica gel, acid

PolyOne.

# MATERIAL SAFETY DATA SHEET MM481 BLACK 2040 TYPE

Version Number 1.1 Revision Date 03/13/2014 Page 3 of 7 Print Date 3/21/2014

	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. EX	POSURE 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.

PolyOne

# MATERIAL SAFETY DATA SHEET MM481 BLACK 2040 TYPE

Version Number 1.1 Revision Date 03/13/2014 Page 4 of 7 Print Date 3/21/2014

Components	Value	Exposure time	Exposure type	List:
Calcium oxide	2 mg/m3	Time Weighted Average (TWA):		ACGIH
	2 mg/m3	Recommended exposure limit (REL):		NIOSH
	5 mg/m3	PEL:		OSHA Z1
	5 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	2 mg/m3	Time Weighted Average (TWA):		MX OEL
Stoddard solvent	100 ppm	Time Weighted Average (TWA):		ACGIH
	350 mg/m3	Recommended exposure limit (REL):		NIOSH
	1,800	Ceiling Limit Value and		NIOSH
	mg/m3	Time Period (if specified):		mobil
	500 ppm 2,900 mg/m3	PEL:		OSHA Z1
	100 ppm 525 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	100 ppm 523 mg/m3	Time Weighted Average (TWA):		MX OEL
	200 ppm 1,050 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Miscellaneous Barium Compounds	0.5 mg/m3	Time Weighted Average (TWA):	as Ba	ACGIH
*	0.5 mg/m3	PEL:	as Ba	OSHA Z1

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility

liquid
viscous, liquid
BLACK
very faint
not applicable
not applicable
immiscible

Evapouration 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**

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.

PolyOne

# MATERIAL SAFETY DATA SHEET *MM481 BLACK 2040 TYPE*

Version Number 1.1 Revision Date 03/13/2014 Page 5 of 7 Print Date 3/21/2014

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
0-05-5	Miscellaneous Zinc	Systemic effects	Eyes, Skin, Respiratory
	Compounds		system.
1305-78-8	Calcium oxide	Irritant	Skin.
		Systemic effects	Eyes, Skin, Respiratory
			system.
		Corrosive	Skin.
8052-41-3	Stoddard solvent	Systemic effects	Kidney, Liver, central nervous
			system (CNS).
		Irritant	Eyes, Skin, Respiratory
			system.
0-08-8	Miscellaneous Barium	Irritant	Respiratory system, Eyes.
	Compounds		
		Systemic effects	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
8052-41-3	Stoddard solvent	Oral LD50	> 5,000 mg/kg	rat
		Dermal LD50	> 3,000 mg/kg	rabbit

### **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

PolyOne.

# MATERIAL SAFETY DATA SHEET MM481 BLACK 2040 TYPE

Version Number 1.1 Revision Date 03/13/2014 Page 6 of 7 Print Date 3/21/2014

	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	: Refer to specific regulation.
ICAO/IATA	: 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 Hazardo	us Substances (40 CFR 302)
not applicable	
California Proposition 65	<ul> <li>WARNING! This product contains a chemical known to the State of California to cause cancer.</li> </ul>
SARA Title III Section 302 H	Extremely Hazardous Substance
Unless specific chemicals are	e identified under this section, this product is Not Applicable under this regula
SARA Title III Section 313 7	Foxic Chemicals:

# MATERIAL SAFETY DATA SHEET MM481 BLACK 2040 TYPE

Version Number 1.1 Revision Date 03/13/2014 Page 7 of 7 Print Date 3/21/2014

Chemical Name	CAS-No.	Weight percent
ZINC COMPOUNDS	0-05-5	1.00 - 5.00
BARIUM COMPOUNDS	0-08-8	1.00 - 5.00
ZINC COMPOUNDS	136-53-8	0.10 - 1.00

Canadian Regulations:

National Pollutant Release Inventory (NPRI)

Chemical Name	CAS-No.	Weight	NPRI ID#
		percent	
Miscellaneous Zinc Compounds	0-05-5	1.00 - 5.00	241
2-Ethylhexanoic acid zinc salt	136-53-8	0.10 - 1.00	

WHMIS Classification : D2B

WHMIS Ingredient Disclosure List

CAS-No.	
1305-78-8	
8052-41-3	
0-08-8	

DSL

DSL status has not been determined. Quantity use in Canada may be restricted by regulations.

National 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

:

#### **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.