MATERIAL SAFETY DATA SHEET M1641 BLACK

Version Number 1.3 Revision Date 02/06/2007

Page 1 of 6 Print Date 11/26/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone Emergency telephone number	:	Product Stewardship (770) 590-3500 x.3563 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	M1641 BLACK
Product code	:	FO00005485
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Titanium dioxide	13463-67-7	0.1 - 1

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.
Medical Conditions Aggravated by Exposure:	: None known.



MATERIAL SAFETY DATA SHEET *M1641 BLACK*

Version Number 1.3 Revision Date 02/06/2007 Page 2 of 6 Print Date 11/26/2011

	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 ey irritation persists, seek medical attention.
Skin	: Wash off with soap and plenty of water. If skin irritation persists see medical attention.
	5. FIRE-FIGHTING MEASURES
Flash point	: No data available
Flammable Limits	
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Autoignition temperature	: Not applicable
Suitable extinguishing media	: 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), oxide of nitrogen (NOx), other hazardous materials, and smoke are all possible.
	5. 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 th soil. Should not be released into the environment.
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binde 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



MATERIAL SAFETY DATA SHEET **M1641 BLACK**

Titanium dioxide 10 mg/m3 Time Weighted Average (TWA): ACG 15 mg/m3 PEL: Total dust. OSHA 20 mg/m3 Short Term Exposure Limit (STEL): as Ti MX C 9. PHYSICAL AND CHEMICAL PROPERTIES Form : liquid Evaporation rate : Not establish Appearance : Viscous, liquid Specific Gravity: : Not determin Color : BLACK Bulk density : Not applicable Odor : Very faint Vapor pressure : Not determin Melting point/range : Not applicable pH : Not applicable Water solubility : Immiscible immiscible : Not applicable	ion Number 1.3 sion Date 02/06/2007					Print D	Page 3 ate 11/26/.
and contamination. Store in a cool dry 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 : Safety shoes. Measures : Handle in accordance with good industrial hygiene and safety pra Considerations : 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 Lis Titanium dioxide 10 mg/m3 Time Weighted Average (TWA): OSH/ OSH/ 20 mg/m3 Short Term Exposure Limit as Ti MX C Socous : Sliquid Specific Gravity: : Not establish Appearance : Viscous, liquid Specific Gravity: : Not determin' Color : BLACK Bulk density : Not applicable Odor : Not applicable Odor : Wery faint		Р	eriodically clean hoods	s, ducts, a			
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MATERIAL SAFETY DATA SHEET M1641 BLACK

Version Number 1.3 Revision Date 02/06/2007		Page 4 of 6 Print Date 11/26/2011
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
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	:	Environmental toxicity has not been established for this mixture as a whole.
Bioaccumulation Potential	:	No data available



MATERIAL SAFETY DATA SHEET *M1641 BLACK*

Version Number 1.3 Revision Date 02/06/2007 Page 5 of 6 Print Date 11/26/2011

	13. DISPOSAL CONSIDERATIONS
Product	: Where possible recycling is preferred to disposal or incineration. Th 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 materia 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 (air)	: 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 Hazardou	us Substances (40 CFR 302)
Not applicable	
California Propositior 65	n : Not applicable
SARA Title III Section 302 E	Extremely Hazardous Substance
Unlaga anagifia ahamiaala ana	identified under this section, this product is Not Applicable under this regula

MATERIAL SAFETY DATA SHEET *M1641 BLACK*

Version Number 1.3 Revision Date 02/06/2007 Page 6 of 6 Print Date 11/26/2011

SARA Title III Section 313 Toxic Chemicals:

Unless specific chemicals are identified under this section, this product is Not Applicable under this regulation

Canadian Regulations:

Chemical Name		•	CAS-No.	Weight %	NPRI ID#
Phenol, nonyl-, phosphite (3:1)		26523-78-4	0.10 - 1.00	178
Zinc stearate			557-05-1	0.10 - 1.00	231
Zinc neodecanoate			27253-29-8	0.10 - 1.00	231
WHMIS Classification	:	Not controlled.			
DSL	:		s of this product a (DSL) or are exer	re on the Canadia mpt.	n Domestic
ational 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.