

MATERIAL SAFETY DATA SHEET

ADOBE CLAY SUBSTRATE

Version Number 1.0 Revision Date 01/07/2003 Page 1 of 7 Print Date 11/7/2011

1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

NON-EMERGENCY TELEPHONE	:	Product Stewardship (770) 271-5902
Emergency telephone number	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	ADOBE CLAY SUBSTRATE
Product code	:	CC10029026
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Components	CAS-No.	Weight %
Paraffin waxes and Hydrocarbon waxes	8002-74-2	10 - 30
Carbon black	1333-86-4	1 - 5
Chromium (III) oxide	1308-38-9	5 - 10
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 Ingestion Eyes	 Resin particles, like other inert materials, can be mechanically irritating. May be harmful if swallowed. Resin particles, like other inert materials, are mechanically irritating to eves.
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 cas doubt seek medical advice.	ses of
Ingestion	: Do not induce vomiting without medical advice. When sympton persist or in all cases of doubt seek medical advice.	ns
Eyes	: Rinse immediately with plenty of water, also under the eyelids, f least 15 minutes. If eye irritation persists, seek medical attention	
Skin	: Wash off with soap and plenty of water. If skin irritation persists medical attention.	s seek
	5. FIRE-FIGHTING MEASURES	
Flash point	: Not applicable	
Flammable Limits Upper explosion limit Lower explosion limit Autoignition temperature Suitable extinguishing media	 Not applicable Not applicable Not relevant Carbon dioxide blanket, Water spray, dry powder, foam. 	
Special Fire Fighting Procedures Unusual Fire/Explosion	 Fullface self-contained breathing apparatus (SCBA) used in posir pressure mode should be worn to prevent inhalation of airborne contaminants. None 	tive
Hazards		
	5. 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 be allowed to enter drains, water courses or the soil.	d not
Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Package all materia plastic, cardboard or metal containers for disposal. Refer to Section of this MSDS for proper disposal methods.	
	7. HANDLING AND STORAGE	
Handling	: Take measures to prevent the build up of electrostatic charge. He	eat



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	01	nly in areas with appropriate e	xhaust ventilation.	
Storage		eep containers dry and tightly nd contamination. Keep in a c		absorption
8. F	EXPOSURE	CONTROLS / PERSONAL	PROTECTION	
Respiratory protection	: No personal respiratory protective equipment normally require		equired.	
Eye/Face Protection	: Sa	afety glasses with side-shields		
Hand protection	: P	rotective gloves.		
Skin and body protection	: L	ong sleeved clothing.		
Additional Protective Measures	: Sa	afety shoes.		
General Hygiene Considerations		andle in accordance with good Vash hands before breaks and a		afety practic
Engineering measures : Heat only in areas with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at machinery.				
Engineering measures				Provide
				Provide
Exposure limit(s)	aj	ppropriate exhaust ventilation	at machinery.	
				List:
Exposure limit(s) Components	aı Value	ppropriate exhaust ventilation Exposure time Time Weighted Average	at machinery. Exposure type Total dust. as carbon	List: ACGIH
Exposure limit(s) Components Carbon black	ap Value 3.5 mg/m3	Exposure time Time Weighted Average (TWA):	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon	List: ACGIH OSHA Z
Exposure limit(s) Components Carbon black Carbon black Chromium (III) oxide Chromium (III) oxide	ap Value 3.5 mg/m3 3.5 mg/m3	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black	List: ACGIH OSHA Z ACGIH OSHA Z
Exposure limit(s) Components Carbon black Carbon black Chromium (III) oxide Chromium (III) oxide Titanium dioxide	ar Value 3.5 mg/m3 3.5 mg/m3 0.5 mg/m3	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA):	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black as Cr	List: ACGIH OSHA Z ACGIH OSHA Z
Exposure limit(s) Components Carbon black Carbon black Chromium (III) oxide Chromium (III) oxide	ar Value 3.5 mg/m3 3.5 mg/m3 0.5 mg/m3 1 mg/m3	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black as Cr as Cr	List: ACGIH OSHA Z ACGIH OSHA Z ACGIH
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Exposure limit(s) Components Carbon black Carbon black Chromium (III) oxide Chromium (III) oxide Titanium dioxide Titanium dioxide	ap Value 3.5 mg/m3 3.5 mg/m3 0.5 mg/m3 1 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black as Cr as Cr Dust. Total dust. DPERTIES	List: ACGIH OSHA Z ACGIH OSHA Z OSHA Z
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Exposure limit(s) Components Carbon black Carbon black Chromium (III) oxide Chromium (III) oxide Titanium dioxide Titanium dioxide Form Appearance	ap Value 3.5 mg/m3 3.5 mg/m3 0.5 mg/m3 1 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO L Evapo system Specifi	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black as Cr as Cr Dust. Total dust.	List: ACGIH OSHA Z ACGIH OSHA Z ACGIH OSHA Z applicable. determined
Exposure limit(s) Components Carbon black Carbon black Chromium (III) oxide Chromium (III) oxide Titanium dioxide Titanium dioxide Form Appearance Color	ap Value 3.5 mg/m3 3.5 mg/m3 0.5 mg/m3 1 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle : GRE	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRO the Evapo the Specificity Bulk do	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black as Cr as Cr Dust. Total dust. SPERTIES ration rate : Not ic Gravity : Not lensity : Not	List: ACGIH OSHA Z ACGIH OSHA Z ACGIH OSHA Z applicable. determined established
Exposure limit(s) Components Carbon black Carbon black Chromium (III) oxide Chromium (III) oxide Titanium dioxide Titanium dioxide Form Appearance Color Odor	44 Value 3.5 mg/m3 3.5 mg/m3 0.5 mg/m3 1 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle : GRE : Very	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRC the Evapo the Specificity PA Bulk do faint Vapor	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black as Cr as Cr Dust. Total dust. SPERTIES ration rate : Not ic Gravity : Not pressure : Not	List: ACGIH OSHA Z ACGIH OSHA Z ACGIH OSHA Z applicable. determined established applicable
Exposure limit(s) Components Carbon black Carbon black Chromium (III) oxide Chromium (III) oxide Titanium dioxide Titanium dioxide Form Appearance Color	44 Value 3.5 mg/m3 3.5 mg/m3 0.5 mg/m3 10 mg/m3 10 mg/m3 15 mg/m3 9. PHYSIC : Solid : Pelle : GRE : Very : Not c	Exposure time Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: Time Weighted Average (TWA): PEL: CAL AND CHEMICAL PRC the Evapo the Specificity PA Bulk do faint Vapor	at machinery. Exposure type Total dust. as carbon black Total dust. as carbon black as Cr as Cr Dust. Total dust.	List: ACGIH OSHA Z ACGIH OSHA Z ACGIH OSHA Z applicable. determined established

10. STABILITY AND REACTIVITY



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

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
8002-74-2	Paraffin waxes and	Systemic effects	Eyes, Skin, Respiratory system.
	Hydrocarbon waxes		
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
1308-38-9	Chromium (III) oxide	Irritant	Eyes, Skin.
		sensitizer	Skin.
13463-67-7	Titanium dioxide	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
8002-74-2	Paraffin waxes and	Oral LD50	> 2,000 mg/kg	rat
	Hydrocarbon waxes			
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit

Carcinogenicity:

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

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.

2B - The component is possibly carcinogenic to humans.



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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.

Additional Health Hazard Information:

Chromium (III) oxide 1308-38-9 The bi and trivalent forms of chrome have a low order of acute toxicity but may cause dermatitis, pulmonary sensitization and corrosive effect on eyes.

	12. ECOLOGICAL INFORMATION
Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Chemicals are not readily available as they are bound within the matrix of the polymer.
Bioaccumulation Potential	: Chemicals are not readily available as they are bound within the matrix of the polymer.
Additional advice	: No data available.
	13. DISPOSAL CONSIDERATIONS
Product	: Like most thermoplastics the product can be recycled. 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 materia has the responsibility for proper waste classification, transportation and disposal in accordance with applicable federal, state/provincial and local regulations.
	14. TRANSPORT INFORMATION
	: Refer to specific regulation.
U.S. DOT Classification	. Refer to specific regulation.



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		15.	REGULATORY	INFORMATIC	DN	
US Degulation						
US Regulation						
OSHA	Status	:	Classified as haza	rdous based on c	components.	
TSCA	Status	: All components of this product are listed on or exempt from the TSCA Inventory.				
US. EPA CER	CLA Hazardous S	Subst	ances (40 CFR 30	2)		
No	ot applicable					
Califor 65	nia Proposition	: '	This product does	not contain a sub	ostance listed by Calif	ornia Prop 65.
05						
SARA Title III	Section 313 Tox	ic Ch	nemicals:			
_	Section 313 Tox	ic Ch	nemicals:	and y	XX : 1 - 6(_
[Chemical Name			CAS-No. 1308-38-9	Weight % 05.57	7
E	Chemical Name CHROMIUM III			CAS-No. 1308-38-9	Weight % 05.57	
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Japan ENCS	:	Not determined

Korea KECI : Listed.

Philippines PICCS : Listed.

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.