PolvOne

MATERIAL SAFETY DATA SHEET 23432SB KHAKI PRODUCTION

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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	:	23432SB KHAKI PRODUCTION
Product code	:	FO0000932
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	•	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight %
Quartz	14808-60-7	0.1 - 1
Silica, amorphous	7631-86-9	1 - 5
Calcium carbonate	1317-65-3	10 - 30
Titanium dioxide	13463-67-7	10 - 30

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.	

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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 doubt seek medical advice.	s of
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 irritation persists, seek medical attention.	eye
Skin	: Wash off with soap and plenty of water. If skin irritation persists so medical attention.	eel
	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 positiv pressure mode should be worn to prevent inhalation of airborne contaminants.	ve
Unusual Fire/Explosion Hazards	 May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) und fire conditions. Carbon dioxide (CO2), carbon monoxide (CO), oxi 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 soil. Should not be released into the environment.	the
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid bind universal binder, sawdust). Package all material in appropriate container for disposal. Refer to Section 13 of this MSDS for prope 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. EXF	OSUF	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:
Calcium carbonate	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	20 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Quartz	5 mg/m3	PEL:	Respirable fraction.	OSHA Z1
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	0.1 mg/m3	Time Weighted Average (TWA):	Respirable.	Z3
	0.3 mg/m3	Time Weighted Average (TWA):	Total dust.	Z3
	0.1 mg/m3	Time Weighted Average (TWA):		MX OEL
	0.025 mg/m3	Time Weighted Average (TWA):	Respirable fraction.	ACGIH
Silica, amorphous	20 mppcf	PEL:	Total dust.	OSHA
	20 mppcf	PEL:	Total dust.	Z3
	0.8 mg/m3	Time Weighted Average (TWA):		Z3
	10 mg/m3	Time Weighted Average (TWA):		MX OEL
	10 mg/m3	Time Weighted Average (TWA):	Inhalable particulate.	MX OEL
	3 mg/m3	Time Weighted Average (TWA):	Respirable dust.	MX OEL
Titanium dioxide	10 mg/m3	Time Weighted Average (TWA):		ACGIH
	15 mg/m3	PEL:	Total dust.	OSHA Z1
	20 mg/m3	Short Term Exposure Limit (STEL):	as Ti	MX OEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Appearance Color Odor Melting point/range Boiling Point: Water solubility

liquid : Viscous, liquid : TAN : : Very faint : Not applicable : Not applicable : Immiscible

Evaporation rate Specific Gravity: Bulk density Vapor pressure Vapour density pН

: Not established Not determined Not applicable : Not determined : Not determined

10. STABILITY AND REACTIVITY

Stability

: Stable.

Hazardous Polymerization

: Will not occur.

- : :

 - : Not applicable

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 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
 :
 Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen

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
14808-60-7	Quartz	Systemic effects	Eyes, Respiratory system.
7631-86-9	Silica, amorphous	Irritant	Eyes, Respiratory system.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, Respiratory system.
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
7631-86-9	Silica, amorphous	Oral LD50Oral LD50	15,000 mg/kg22,500 mg/kg	mouserat

Carcinogenicity

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
14808-60-7	Quartz	no	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:

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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:

Quartz 14808-60-7 This material in its free releasable form may cause respiratory tract irritation. Long-term exposure may cause coughing, chest pain, diminished chest expansion and possibly silicosis, which is a scarring of the lungs.

whole. Bioaccumulation Potential : No data available Additional advice : No data available III. DISPOSAL CONSIDERATIONS Product : Where possible recycling is preferred to disposal or incineration. 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 mathas the responsibility for proper waste classification, transportatic and disposal in accordance with applicable federal, state/provincia and local regulations. U.S. DOT Classification : Refer to specific regulation. ICAO/IATA (air) : Refer to specific regulation. IMO / IMDG (maritime) : Refer to specific regulation. US Regulations: OSHA Status : Classified as hazardous based on components.		12. ECOLOGICAL INFORMATION
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Additional advice : No data available 13. DISPOSAL CONSIDERATIONS Product : Where possible recycling is preferred to disposal or incineration. 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 mat has the responsibility for proper waste classification, transportatic and disposal in accordance with applicable federal, state/provincia and local regulations. Locat regulations. : Recycling is preferred when possible. The generator of waste mat has the responsibility for proper waste classification, transportatic and disposal in accordance with applicable federal, state/provincia and local regulations. Locat regulations. : Recycling is preferred when possible. The generator of waste mat has the responsibility for proper waste classification, transportatic and local regulations. U.S. DOT Classification : Refer to specific regulation. ICAO/IATA (air) : Refer to specific regulation. IMO / IMDG (maritime) : Refer to specific regulation. US Regulations: : Classified as hazardous based on components. TSCA Status : All components of this product are listed on or exempt from the T liventory.	Environmental Toxicity	: Environmental toxicity has not been established for this mixture as a whole.
I3. DISPOSAL CONSIDERATIONS Product : Where possible recycling is preferred to disposal or incineration. 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 mather applicable federal, state/provincial and local regulations. Contaminated packaging : Recycling is preferred when possible. The generator of waste mather and disposal in accordance with applicable federal, state/provincia and local regulations. U.S. DOT Classification : Refer to specific regulation. ICAO/IATA (air) : Refer to specific regulation. IMO / IMDG (maritime) : Refer to specific regulation. US Regulations: OSHA Status : Classified as hazardous based on components. TSCA Status : All components of this product are listed on or exempt from the Transport.	Bioaccumulation Potential	: No data available
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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 T. Inventory.	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.
ICAO/IATA (air) : Refer to specific regulation. IMO / IMDG (maritime) : Refer to specific regulation. IS. 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 TA Inventory.		14. TRANSPORT INFORMATION
ICAO/IATA (air) : Refer to specific regulation. IMO / IMDG (maritime) : Refer to specific regulation. IS. 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 TA INVentory.		
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 Tainventory.	U.S. DOT Classification	: Refer to specific regulation.
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US Regulations: OSHA Status : Classified as hazardous based on components. TSCA Status : All components of this product are listed on or exempt from the TA Inventory.	IMO / IMDG (maritime)	: Refer to specific regulation.
OSHA Status : Classified as hazardous based on components. TSCA Status : All components of this product are listed on or exempt from the Tainventory.		15. REGULATORY INFORMATION
TSCA Status : All components of this product are listed on or exempt from the Ta Inventory.	US Regulations:	
Inventory.	OSHA Status	: Classified as hazardous based on components.
US. EPA CERCLA Hazardous Substances (40 CFR 302)	TSCA Status	: All components of this product are listed on or exempt from the TSCA Inventory.
	US. EPA CERCLA Hazardous	Substances (40 CFR 302)

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Not applicable

California Proposition : 65

: WARNING! This product contains a chemical known to the State of California to cause cancer.

SARA Title III Section 302 Extremely Hazardous Substance

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

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:

National Pollutant Release Inventory (NPRI)

Not applicable

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.	
7631-86-9	

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	: Listed
Japan ENCS	: Not determined
Korea KECI	: Not determined
Philippines PICCS	: Not determined

:

16. OTHER INFORMATION

<u>PolyOne</u>

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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.