PolvOne

MATERIAL SAFETY DATA SHEET **DB4321 BLACK**

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1. PRODUCT AND COMPANY IDENTIFICATION

POLYONE CORPORATION 8155 Cobb Center Drive, Kennesaw, GA 30152

Telephone Emergency telephone	:	Product Stewardship (770) 590-3500 x.3563 CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).
Product name	:	DB4321 BLACK
Product code	:	FO20017688
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

2. COMPOSITION/INFORMATION ON REGULATED INGREDIENTS

Components	CAS-No.	Weight percent
Carbon black	1333-86-4	0.1 - 1
Stoddard solvent	8052-41-3	0.1 - 1
Antimony trioxide	1309-64-4	1 - 5
Calcium carbonate	1317-65-3	1 - 5
Alkanes, C14-17, chloro	85535-85-9	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.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.

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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 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. 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 Unusual Fire/Explosion Hazards	 Fullface self-contained breathing apparatus (SCBA) used in positive pressure mode should be worn to prevent inhalation of airborne contaminants. May emit Hydrogen Chloride (HCl) or Carbon Monoxide (CO) unde fire conditions. 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	: The product should not be allowed to enter drains, water courses or the soil. Should not be released into the environment.
Methods for cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Package all material in appropriate container for disposal. Refer to Section 13 of this MSDS for proper disposal methods.

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		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	POSU	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.
Exposure limit(s)		

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Components	Value	Exposure time	Exposure type	List:
Antimony trioxide	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	ACGIH
	0.5 mg/m3	Recommended exposure limit (REL):	as Sb	NIOSH
	0.5 mg/m3	PEL:	as Sb	OSHA Z1
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	OSHA Z1A
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
Carbon black	3.5 mg/m3	Time Weighted Average (TWA):		ACGIH
	3.5 mg/m3	Recommended exposure limit (REL):		NIOSH
	0.1 mg/m3	Recommended exposure limit (REL):		NIOSH
	3.5 mg/m3	PEL:		OSHA Z1
	3.5 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	3.5 mg/m3	Time Weighted Average (TWA):		MX OEL
	7 mg/m3	Short Term Exposure Limit (STEL):		MX OEL
Stoddard solvent	100 ppm	Time Weighted Average (TWA):		ACGIH
	350 mg/m3	Recommended exposure limit (REL):		NIOSH
	1,800 mg/m3	Ceiling Limit Value and Time Period (if specified):		NIOSH
	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

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

: liquid

Evaporation rate

: Not established

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Appearance Colour Odour Melting point/range Boiling Point: Water solubility	: B : ve : no	scous, liquid LACK ery faint ot applicable ot applicable nmiscible	Specific Gravity Bulk density Vapour pressure Vapour density pH	::	Not applicable Not determined
	1	0. STABILITY AND RE	EACTIVITY		
Stability	:	Stable			
Hazardous Polymerization	:	Will not occur.			
Conditions to avoid	:	Keep away from oxidiz decomposition, do not o	001	me.	To avoid thermal
Incompatible Materials	:	Incompatible with stron with acetal homopolym			
Hazardous decomposition products	:	Carbon dioxide (CO2), (NOx), hydrogen chlori smoke are all possible.	de (HCl), other hazardo	ous 1	materials, and

°F), and within 5 minutes at 232 °C (450 °F).

degradation. As a general rule of thumb, degradation begins to occur after one hour at 177 $^{\circ}$ C (350 $^{\circ}$ F), after 10 minutes at 204 $^{\circ}$ C (400

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
1333-86-4	Carbon black	Systemic effects	Eyes, Respiratory system.
8052-41-3	Stoddard solvent	Systemic effects	Kidney, Liver, central nervous system (CNS).
		Irritant	Eyes, Skin, Respiratory
			system.
1309-64-4	Antimony trioxide	Systemic effects	Eyes, Respiratory system.
		sensitizer	Skin.
1317-65-3	Calcium carbonate	Irritant	Eyes, Skin.
		Systemic effects	Eyes, Skin, 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
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1333-86-4	Carbon black	Oral LD50	> 15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit
8052-41-3	Stoddard solvent	Oral LD50	> 5,000 mg/kg	rat
		Dermal LD50	> 3,000 mg/kg	rabbit
1309-64-4	Antimony trioxide	Oral LD50	> 34,600 mg/kg	rat

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
1309-64-4	Antimony trioxide	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.

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). The IARC 2B listing only pertains to airborne, unbound carbon black particles of respirable size. 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:

Antimony trioxide 1309-64-4 Can cause eye irritation. Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Additional symptoms of skin contact may include: antimony measles (a red, pimply rash).

	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

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Additional advice	: no data available				
	13. DISPOSAL CONSIDERATIONS				
roduct : Where possible recycling is preferred to disposal or inciner generator of waste material has the responsibility for proper 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 Hazardous	Substances (40 CFR 302)				
not applicable					
California Proposition 65	: WARNING! This product contains a chemical known to the State of California to cause cancer., WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.				
SARA Title III Section 302 Ex	remely Hazardous Substance				
Unless specific chemicals are id	lentified under this section, this product is Not Applicable under this regu				

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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-N	lo.	Weight percent	NPRI ID#	
Antimony trioxide		1309-6	4-4	0.10 - 1.00		
WHMIS Classification	:	D2A				
WHMIS Ingredient Disc	closure	e List				
CAS-No. 1309-64-4						
DSL	:	All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.				
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.