PolvOne.

### MATERIAL SAFETY DATA SHEET BLACK 9001 ABS

Version Number 1.1 Revision Date 03/26/2014

Page 1 of 8 Print Date 4/1/2014

#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012

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	:	BLACK 9001 ABS
Product code	:	CC10132476
Chemical Name	:	Mixture
CAS-No.	:	Mixture
Product Use	:	Industrial Applications

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight percent
Styrene	100-42-5	0.1 - 1
Rutile, antimony chromium buff	68186-90-3	1 - 5
Carbon black	1333-86-4	5 - 10

#### 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

<b>Routes of Exposure:</b>	: Inhalation, Ingestion, Skin contact
Acute exposure	
Inhalation	: Resin particles, like other inert materials, can be mechanically irritating.
Ingestion	: May be harmful if swallowed.
Eyes	: Resin particles, like other inert materials, are mechanically irritating to eyes.
Skin	: Experience shows no unusual dermatitis hazard from routine handling.

PolyOne.

# MATERIAL SAFETY DATA SHEET **BLACK 9001 ABS**

Version Number 1.1 Revision Date 03/26/2014 Page 2 of 8 Print Date 4/1/2014

Medical Conditions       : None known.         Aggravated by Exposure:			
	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, also under the eyelids, for a least 15 minutes. If eye 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	: not applicable		
Flammable Limits Upper explosion limit Lower explosion limit Auto-ignition temperature Suitable extinguishing media	<ul> <li>not applicable</li> <li>not applicable</li> <li>not applicable</li> <li>Carbon dioxide blanket, Water spray, Dry powder, Foam.</li> </ul>		
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	: 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	: Should not be released into the environment. The product should no be allowed to enter drains, water courses or the soil.		
Methods for cleaning up	: Clean up promptly by sweeping or vacuum. Package all material in plastic, cardboard or metal containers for disposal.		
	7. HANDLING AND STORAGE		



# MATERIAL SAFETY DATA SHEET **BLACK 9001 ABS**

ersion Number 1.1 evision Date 03/26/2014		Page 3 of 8 Print Date <i>4/1/2014</i>
Handling	:	Take measures to prevent the build up of electrostatic charge. Heat only in areas with appropriate exhaust ventilation.
Storage	:	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep in a dry, cool 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)		

<u>PolyOne</u>

## MATERIAL SAFETY DATA SHEET **BLACK 9001 ABS**

Version Number 1.1 Revision Date 03/26/2014 Page 4 of 8 Print Date 4/1/2014

Components	Value	Exposure time	Exposure type	List:
Carbon black	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
	3 mg/m3	Time Weighted Average (TWA):	Inhalable fraction.	ACGIH
Rutile, antimony chromium buff	0.5 mg/m3	Recommended exposure limit (REL):	as Cr	NIOSH
	0.5 mg/m3	PEL:	as Cr	OSHA Z1
	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
	0.5 mg/m3	Time Weighted Average (TWA):	as Sb	MX OEL
Styrene	20 ppm	Time Weighted Average (TWA):		ACGIH
	40 ppm	Short Term Exposure Limit (STEL):		ACGIH
	50 ppm 215 mg/m3	Recommended exposure limit (REL):		NIOSH
	100 ppm 425 mg/m3	Short Term Exposure Limit (STEL):		NIOSH
	100 ppm	Time Weighted Average (TWA):		OSHA Z2
	200 ppm	Ceiling Limit Value:		OSHA Z2
	600 ppm	Maximum concentration:		OSHA Z2
	50 ppm 215 mg/m3	Time Weighted Average (TWA):		OSHA Z1A
	100 ppm 425 mg/m3	Short Term Exposure Limit (STEL):		OSHA Z1A
	50 ppm 215 mg/m3	Time Weighted Average (TWA):		MX OEL
	100 ppm 425 mg/m3	Short Term Exposure Limit (STEL):		MX OEL

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Page 5 of 8 Print Date 4/1/2014

P<u>olyOne</u>

POLYONE C	CORPORATION

### MATERIAL SAFETY DATA SHEET BLACK 9001 ABS

Version Number 1.1 Revision Date 03/26/2014

Form Appearance Colour Odour Melting point/range Boiling Point: Water solubility	<ul> <li>solid</li> <li>pellets</li> <li>BLACK</li> <li>very faint</li> <li>Not determined</li> <li>not applicable</li> <li>insoluble</li> </ul>	Evapouration rate Specific Gravity Bulk density Vapour pressure Vapour density pH	<ul> <li>Not applicable</li> <li>Not determined</li> <li>Not established</li> <li>not applicable</li> <li>not applicable</li> <li>not applicable</li> </ul>
	10. STABILITY AND	REACTIVITY	
Stability	: The product is stable	e if stored and handled as	prescribed.
Hazardous Polymerization	: Will not occur.		
Conditions to avoid	: Keep away from oxi decomposition, do n	dizing agents and open fla ot overheat.	ame. To avoid thermal
Incompatible Materials	: Incompatible with st	rong acids and oxidizing	agents.
Hazardous decomposition products		2), carbon monoxide (CO ous materials, and smoke	

#### 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
100-42-5	Styrene	Irritant	Eyes, Respiratory system.
		Systemic effects	Eyes, Skin, Respiratory system, Liver, central nervous system (CNS).
68186-90-3	Rutile, antimony chromium buff	Irritant	Eyes, Skin, Respiratory system.
1333-86-4	Carbon black	Systemic effects	Eyes, 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
100-42-5	Styrene	LC50	12 gm/m3	rat
		Oral LD50	2,650 mg/kg	rat
1333-86-4	Carbon black	Oral LD50	>15,400 mg/kg	rat
		Dermal LD50	> 3 gm/kg	rabbit

Carcinogenicity

## MATERIAL SAFETY DATA SHEET **BLACK 9001 ABS**

Version Number 1.1 Revision Date 03/26/2014 Page 6 of 8 Print Date 4/1/2014

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

CAS-No.	Chemical Name	OSHA	IARC	NTP
100-42-5	Styrene	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:

Styrene 100-42-5 Irritating to eyes, skin, and respiratory tract with many CNS effects such as narcosis, cramps and respiratory tract paralysis.

#### 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.

Persistence and degradability	: Not readily biodegradable.
Environmental Toxicity	: Chemicals are not readily available as they are bound within the polymer matrix.
Bioaccumulation Potential	: Chemicals are not readily available as they are bound within the polymer matrix.
Additional advice	: no data available
	13. DISPOSAL CONSIDERATIONS
Product	: Like most thermoplastic plastics 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



# MATERIAL SAFETY DATA SHEET **BLACK 9001 ABS**

sion Number 1.1 ision Date 03/26/2014			Page 7 o Print Date <i>4/1/20</i>		
	applicable	federal, state/provincial and lo	cal regulations.		
Contaminated packaging	material ha transportati	is preferred when possible. The sthe responsibility for propertion and disposal in accordance neural and local regulations.	waste classification,		
	14. TRANSP	ORT INFORMATION			
U.S. DOT Classification	: Not regulat	ed for transportation.			
ICAO/IATA	: Refer to sp	Refer to specific regulation.			
IMO/IMDG (maritime)	: Refer to sp	ecific regulation.			
	15. REGULA	TORY INFORMATION			
US Regulations:					
-					
OSHA Status	: Classified a	as hazardous based on compor	ients.		
TSCA Status	: All compo TSCA Inve	nents of this product are listed entory.	on or exempt from the		
US. EPA CERCLA Hazardo	us Substances (40 C	CFR 302)			
not applicable					
California Proposition 65	n : Not applica	ıble			
65 SARA Title III Section 302 H	Extremely Hazardou		Applicable under this regulation		
65 SARA Title III Section 302 H	Extremely Hazardou	us Substance	Applicable under this regulation		
65 SARA Title III Section 302 H Unless specific chemicals are SARA Title III Section 313 T	Extremely Hazardou e identified under th Coxic Chemicals:	us Substance his section, this product is Not			
65 SARA Title III Section 302 H Unless specific chemicals are SARA Title III Section 313 T	Extremely Hazardou e identified under th Coxic Chemicals:	us Substance			
65 SARA Title III Section 302 H Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name CHROMIUM III COMPO	Extremely Hazardou identified under th Coxic Chemicals: identified under th UNDSCHROMIUM	us Substance his section, this product is Not his section, this product is Not CAS-No.	Applicable under this regulation		
65 SARA Title III Section 302 H Unless specific chemicals are SARA Title III Section 313 T Unless specific chemicals are Chemical Name	Extremely Hazardou identified under th Coxic Chemicals: identified under th UNDSCHROMIUN	us Substance his section, this product is Not his section, this product is Not CAS-No. M III 68186-90-3	Applicable under this regulation		

PolvOne

## MATERIAL SAFETY DATA SHEET **BLACK 9001 ABS**

Version Number 1.1 Revision Date 03/26/2014 Page 8 of 8 Print Date 4/1/2014

Canadian Regulations:

CAS-No.	Weight	NPRI ID#
	percent	
68186-90-3	1.00 - 5.00	
100-42-5	0.10 - 1.00	
	68186-90-3	percent           68186-90-3         1.00 - 5.00

WHMIS Classification : D2A

WHMIS Ingredient Disclosure List

CAS-No.
1333-86-4
68186-90-3
100-42-5

:

DSL

All components of this product are on the Canadian Domestic Substances List (DSL) or are exempt.

National Inventories:

Australia AICS	:	Listed
China IECS	:	Listed
Europe EINECS	:	Listed
Japan ENCS	:	Listed
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.