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Version Number 1.6 Revision Date 09/25/2015

Page 1 of 15 Print Date 09/30/2015

SAFETY DATA SHEET

Onflex-S FR 60A-3S1846 Black

Section 1. Identification		
GHS product identifier Chemical name CAS number Other means of identification Product type	:	Onflex-S FR 60A-3S1846 Black Mixture Mixture EM10015439 solid
<u>Relevant identified uses of the subs</u> Product use	tance :	e or mixture and uses advised against Industrial applications. Plastics.
Supplier's details	:	POLYONE CORPORATION 33587 Walker Road, Avon Lake, OH 44012
		1 (440) 930-1000 or 1 (866) POLYONE
Emergency telephone number (with hours of operation)	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident). CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

Section 2. Hazards identification

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. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status	:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	:	Not classified.

GHS label elements

Version Number 1.6 Revision Date 09/25/2015 Page 2 of 15 Print Date 09/30/2015

Signal word Hazard statements	:	No signal word. No known significant effects or critical hazards.
Precautionary statements		
General	:	Not applicable.
Prevention	:	Not applicable.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	:	None known.
Hazards not otherwise classified	:	None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	EM10015439

CAS number/other identifiers

Ingredient name	%	CAS number
Antimony trioxide	1 - 5	1309-64-4
Carbon black	1 - 5	1333-86-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures



Version Number 1.6	Page 3 of 15
Revision Date 09/25/2015	Print Date 09/30/2015

Eye contact	:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	:	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact Inhalation Skin contact Ingestion <u>Over-exposure signs/symptoms</u>	 No known significant effects or critical hazards.
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediate medical	attention and special treatment needed, if necessary
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

P<u>olyOne</u>

Version Number 1.6 Revision Date 09/25/2015 Page 4 of 15 Print Date 09/30/2015

Suitable extinguishing media Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or $\rm CO_2$. None known.
Specific hazards arising from the chemical	:	No specific fire or explosion hazard.
Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
Special protective actions for fire- fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel For emergency responders	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for containme	ent a	nd cleaning up
Small spill	:	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
		4/15

SAFETY DATA SHEET Onflex-S FR 60A-3S1846 Black

Version Number 1.6 Revision Date 09/25/2015



Page 5 of 15 Print Date 09/30/2015

Section 7. Handling and storage

Precautions for safe handling

Protective measures Advice on general occupational hygiene	:	Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits	
Antimony trioxide	OSHA PEL (1993-06-30) expressed as Sb	
	PEL: Permissible Exposure Level 0.5 mg/m3	
	NIOSH REL (1994-06-01) expressed as Sb	
	Time Weighted Average (TWA) 0.5 mg/m3	
	OSHA PEL 1989 (1989-03-01) expressed as Sb	
	PEL: Permissible Exposure Level 0.5 mg/m3	
Carbon black	OSHA PEL 1989 (1989-03-01)	
	PEL: Permissible Exposure Level 3.5 mg/m3	
	OSHA PEL (1993-06-30)	
	PEL: Permissible Exposure Level 3.5 mg/m3	
	NIOSH REL (1994-06-01)	
	Time Weighted Average (TWA) 3.5 mg/m3	
	Time Weighted Average (TWA)	
	ACGIH TLV (2010-12-06)	
	TLV-TWA: Threshold Limit Value - Time weighted average PEL:	
5/15		



Version Number 1.6 Revision Date 09/25/2015

Page 6 of 15 Print Date 09/30/2015

	Permissible Exposure Level 3 mg/m3 Form: Inhalable fraction
Appropriate engineering controls :	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls :	
Individual protection measures	
Hygiene measures :	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection :	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection :	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection :	~
Other skin protection :	
Respiratory protection :	

<u>PolyOne</u>

Version Number 1.6 Revision Date 09/25/2015 Page 7 of 15 Print Date 09/30/2015

Section 9. Physical and chemical properties

Appearance

Physical state	:	solid [Pellets.]
Color	:	BLACK
Odor	:	Faint odor.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Burning time	:	Not available.
Burning rate	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive	:	Lower: Not available.
(flammable) limits		Upper: Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	Not available.
Solubility	:	Not available.
Solubility in water	:	insoluble in water.
Partition coefficient: n-	:	Not available.
octanol/water		
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
SADT		Not available.
	:	Dynamic: Not available.
Viscosity	:	Kinematic: Not available.
		Kinematic: Not available.

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Keep away from extreme heat and oxidizing agents.
Incompatible materials	:	Keep away from strong acids. Oxidizer.

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Version Number 1.6 Revision Date 09/25/2015

Page 8 of 15 Print Date 09/30/2015

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 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.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Antimony trioxide				
	LD50 Oral	Rat	34,000 mg/kg	-
Carbon black				
	LD50 Oral	Rat	15,400 mg/kg	-
Conclusion/Summary	: Mixtu	re.Not fully tested.		

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Antimony trioxide	Eyes - Mild irritant	Rabbit			-
Conclusion/Summary					
Skin	: N	/ixture.Not fu	Illy tested.		
Eyes	: N	/ixture.Not fu	Illy tested.		
Respiratory	: N	lixture.Not fu	Illy tested.		
<u>Sensitization</u>					
Conclusion/Summary					
Skin		/lixture.Not fu			
Respiratory	: N	lixture.Not fu	illy tested.		
<u>Mutagenicity</u>					
Conclusion/Summary	: N	/lixture.Not fu	ally tested.		
Carcinogenicity					
Conclusion/Summary Classification	: N	/lixture.Not fu	Illy tested.		
Product/ingredient	OSHA	IARC	NTP		
r rouuct/ingrement	USHA	IAKU	NIP		



Version Number 1.6 Revision Date 09/25/2015

Page 9 of 15 Print Date 09/30/2015

			1	
name				
Antimony trioxide		2B		
Carbon black		2B		
<u>Reproductive toxicity</u>				
Conclusion/Summary	:	Mixture.Not fully	tested.	
<u>Teratogenicity</u>				
Conclusion/Summary	:	Mixture.Not fully	tested.	
Specific target organ toxicity (s Not available.	ingle expo	osure)		
Specific target organ toxicity (r Not available.	<u>epeated e</u>	<u>xposure)</u>		
Aspiration hazard Not available.				
nformation on the likely routes xposure	s of :	Not available.		
Potential acute health effects				
Eye contact	:	No known signific	ant effects or critical haz	ards.
Inhalation	:		ant effects or critical haz	
Skin contact	:	No known signific	ant effects or critical haz	ards.
Ingestion	:	No known signific	ant effects or critical haz	ards.
symptoms related to the physics	<u>al, chemic</u>	cal and toxicologica	l characteristics	
Eye contact	:	No specific data.		
Inhalation	:	No specific data.		
Skin contact	:	No specific data.		
Ingestion	:	No specific data.		
Delayed and immediate effects a	and also c	hronic effects from	short and long term ex	<u>kposure</u>
<u>Short term exposure</u>				
Potential immediate effects	:	Not available.		
Potential delayed effects		Not available.		
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PolyOne

Version Number 1.6 Revision Date 09/25/2015

Long term exposure

Page 10 of 15 Print Date 09/30/2015

Potential immediate effects Potential delayed effects	:	Not available. Not available.
Potential chronic health effects		
Conclusion/Summary	:	Mixture.Not fully tested.
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	No known significant effects or critical hazards.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	:	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Antimony trioxide			
	Acute LC50 > 530 mg/l Fresh water	Fish - Bluegill	96 h
	Acute LC50 > 1,000,000 µg/l Marine water	Fish - Mummichog	96 h
	Acute EC50 423,450 µg/l Fresh water	Aquatic invertebrates. Water flea	48 h
	Acute EC50 730 µg/l Fresh water	Aquatic plants - Green algae	72 h
	Acute EC50 760 µg/l Fresh water	Aquatic plants - Green algae	96 h
	Acute EC50 740 µg/l Fresh water	Aquatic plants - Green algae	96 h
Carbon black	•		
	Acute EC50 37.563 mg/l Fresh	Aquatic invertebrates.	48 h



Version Number 1.6 Revision Date 09/25/2015

Page 11 of 15 Print Date 09/30/2015

	water		Water flea	
		0 61.547 mg/l Fresh	Aquatic invertebrates.	48 h
	water	· · ····B/ · · · · · ·	Water flea	
Onflex-S FR 60A-3S1846 Blac	ck			
Remarks - Acute - Aquatic invertebrates.:	Chemicals	are not readily available a	s they are bound within the	e polymer matrix.
Conclusion/Summary	:	: Chemicals are not readily available as they are bound within the polymer matrix.		
Persistence and degradability	7			
Conclusion/Summary	:	Chemicals are not readil polymer matrix.	y available as they are bou	nd within the
Conclusion/Summary	:	Chemicals are not readil polymer matrix.	y available as they are bou	nd within the
Bioaccumulative potential <u>Mobility in soil</u>				
Soil/water partition coefficie (KOC)	ent :	Not available.		
Other adverse effects	:	No known significant ef	fects or critical hazards.	

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed



Version Number 1.6 Revision Date 09/25/2015 Page 12 of 15 Print Date 09/30/2015

Section 14. Transport information

U.S. DOT Classification	:	Not regulated for transportation.
ICAO/IATA	:	Not classified as dangerous good under transport regulations.
IMO/IMDG (maritime)	:	Not classified as dangerous good under transport regulations.

Section 15. Regulatory information

U.S. Federal regulations	:	United States - TSCA 12(b) - Chemical export notification: None
		of the components are listed.
		United States - TSCA 4(a) - Final Test Rules: Not listed
		United States - TSCA 4(a) - ITC Priority list: Not listed
		United States - TSCA 4(a) - Proposed test rules: Not listed
		United States - TSCA 4(f) - Priority risk review: Not listed
		United States - TSCA 5(a)2 - Final significant new use rules: Not
		listed
		United States - TSCA 5(a)2 - Proposed significant new use rules:
		Not listed
		United States - TSCA 5(e) - Substances consent order: Listed
		1,1'-(Ethane-1,2-diyl)bis[pentabromobenzene]
		1,1 -(Ethane-1,2-thy)/bis[pentabloinobenzene]
		United States - TSCA 6 - Final risk management: Not listed
		United States - TSCA 6 - Proposed risk management: Listed
		Lead
		Leau
		United States - TSCA 8(a) - Chemical risk rules: Not listed
		United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed
		United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not
		determined
		United States - TSCA 8(a) - Preliminary assessment report
		(PAIR): Not listed
		United States - TSCA 8(c) - Significant adverse reaction (SAR):
		Not listed
		United States - TSCA 8(d) - Health and safety studies: Not listed
		United States - EPA Clean water act (CWA) section 307 - Priority
		pollutants: Listed Benzene, methyl-
		Antimony trioxide
		Zinc borate
		Arsenic
		Lead
		United States - EPA Clean water act (CWA) section 311 -

ne.

Version Numbe	er 1.6
Revision Date	09/25/2015

Hazardous substances: Listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed United States - Department of commerce - Precursor chemical: Not listed

Clean Air Act Section 112(b)	:	Listed
Hazardous Air Pollutants (HAPs) Clean Air Act Section 602 Class I	:	Not listed
Substances Clean Air Act Section 602 Class II	:	Not listed
Substances DEA List I Chemicals (Precursor		Not listed
Chemicals)	•	
DEA List II Chemicals (Essential Chemicals)	:	Not listed

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Chemical Name	CAS-No.	RQ for component	
Zinc borate	1332-07-6	1,000 lb(s)	
		454 kg	
Arsenic	7440-38-2	1 lb(s)	
		0.454 kg	

SARA 311/312

Classification

Not applicable.

:

Composition/information on ingredients

Name	%	Classification
Antimony trioxide	1 - 5	AH, CH
Carbon black	1 - 5	CH

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Zinc borate	1332-07-6	1 - 5



Version Number 1.6 Revision Date 09/25/2015 Page 14 of 15 Print Date 09/30/2015

	Antimony trioxide	1309-64-4	1 - 5
Supplier notification	Zinc borate	1332-07-6	1 - 5
	Antimony trioxide	1309-64-4	1 - 5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations			
Massachusetts	:	The following components are listed: Carbon black Antimony trioxide Zinc borate	
New York	:	The following components are listed: Antimony trioxide Zinc borate	
New Jersey	:	The following components are listed: Carbon black Antimony trioxide	
Pennsylvania	:	Zinc borate The following components are listed: Carbon black	
		Antimony trioxide	
		Zinc borate	
California Prop. 65 WARNING: This product contains a chemical known to the State of California to cause cancer.			
United States inventory (TSCA 8b)	:	All components are listed or exempted.	
Canada inventory	:	Not determined.	
International regulations			
International lists	:	 Australia inventory (AICS): Not determined. Taiwan inventory (CSNN): Not determined. Malaysia Inventory (EHS Register): Not determined. EINECS: All components are listed or exempted. Japan inventory: Not determined. China inventory (IECSC): Not determined. 	
		A A / A F	

Version Number 1.6 Revision Date 09/25/2015 Page 15 of 15 Print Date 09/30/2015

Korea inventory: Not determined. New Zealand Inventory of Chemicals (NZIoC): Not determined. Philippines inventory (PICCS): Not determined.

Chemical Weapons Convention	:	Not listed
List Schedule I Chemicals		
Chemical Weapons Convention	:	Not listed
List Schedule II Chemicals		
Chemical Weapons Convention	:	Not listed
List Schedule III Chemicals		

Section 16. Other information

<u>History</u>		
Date of printing	:	09/30/2015
Date of issue/Date of revision	:	09/25/2015
Date of previous issue	:	05/21/2014
Version	:	1.6
Key to abbreviations	:	ATE = Acute Toxicity Estimate
•		BCF = Bioconcentration Factor
		GHS = Globally Harmonized System of Classification and Labelling of
		Chemicals
		IATA = International Air Transport Association
		IBC = Intermediate Bulk Container
		IMDG = International Maritime Dangerous Goods
		LogPow = logarithm of the octanol/water partition coefficient
		MARPOL $73/78$ = International Convention for the Prevention of Pollution
		From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine
		pollution)
		UN = United Nations
References	:	Not available.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.