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SAFETY DATA SHEET

X ST-3163-1 ESD Black

Section 1. Identification	n	
GHS product identifier	:	X ST-3163-1 ESD Black
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	EM10029670
Product type	:	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



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Signal word	:	No signal word.
Hazard statements	:	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	:	EM10029670

CAS number/other identifiers

Ingredient name	%	CAS number
Carbon black	5 - 10	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

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.



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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	::	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Over-exposure signs/symptoms		
Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Indication of immediate medical at	tentio	n and special treatment needed, if necessary

Notes to physician Specific treatments	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 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

Suitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or CO_2 .
Unsuitable extinguishing media	:	None known.



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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
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	nt 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.

Section 7. Handling and storage

Precautions for safe handling



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Protective measures	:	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational	:	Eating, drinking and smoking should be prohibited in areas where this
hygiene		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
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: Permissible Exposure Level 3 mg/m3 Form: Inhalable fraction
Appropriate engineering controls Environmental exposure controls	 Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	

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Hygiene measures Eye/face protection	:	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. 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	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	solid [Pellets.]]
Color	BLACK	
Odor	: Not available.	
Odor threshold	: Not available.	
pH	: Not available.	
Melting point	: Not available.	
Boiling point	: Not available.	
Flash point	: Not available.	
Burning time	: Not available.	
Burning rate	: Not available.	

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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	:	Not available.
Partition coefficient: n-	:	Not available.
octanol/water		
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
SADT	:	Not available.
Viscosity	:	Dynamic: 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.
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
Carbon black				
	LD50 Oral	Rat	15,400 mg/kg	-
Conclusion/Summary	: Mixture.Not fully tested.			
		7/14		

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Irritation/Corrosion				
Conclusion/Summary Skin Eyes Respiratory		: N	lixture.Not fully lixture.Not fully lixture.Not fully	tested.
Sensitization				
Conclusion/Summary Skin Respiratory			lixture.Not fully lixture.Not fully	
Mutagenicity				
Conclusion/Summary		: N	lixture.Not fully	tested.
Carcinogenicity				
Conclusion/Summary <u>Classification</u>		: N	lixture.Not fully	tested.
Product/ingredient name	OSHA	L	IARC	NTP
Carbon black			2B	
<u>Reproductive toxicity</u> Conclusion/Summary		: N	lixture.Not fully	tested.
<u>Teratogenicity</u>			-	
Conclusion/Summary		: N	lixture.Not fully	tested.
Specific target organ toxicity Not available.	v (single	exposu	<u>re)</u>	
Specific target organ toxicity Not available.	<u> (repea</u>	ted exp	<u>osure)</u>	
Aspiration hazard Not available.				
Information on the likely rou exposure	tes of	: N	ot available.	



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Potential acute health effects

Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects Potential delayed effects	:	Not available. Not available.
Long term exposure		
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		

Numerical measures of toxicity

Acute toxicity estimates

Not available.



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Section 12. Ecological information

Toxicity

Product/ingredient name	Result		Species	Exposure	
Carbon black					
	Acute EC50 37.563 mg/l Fresh		Aquatic invertebrates.	48 h	
	water		Water flea		
	Acute LC50 61.547 mg/l Fresh		Aquatic invertebrates.	48 h	
	water		Water flea		
X ST-3163-1 ESD Black					
Remarks - Acute - Aquatic	Chemicals	are not readily available	as they are bound within the	e polymer matrix.	
invertebrates.:					
Conclusion/Summary	: Chemicals are not readily available as they are bound within the			ind within the	
		polymer matrix.			
Persistence and degradability	7				
Conclusion/Summary	:	Chemicals are not read	tily available as they are bou	und within the	
Conclusion/Summary	•	polymer matrix.	ing available as they are bot	ind wrunn the	
		F J			
Conclusion/Summary	:	Chemicals are not read	lily available as they are bou	ind within the	
·		polymer matrix.			
Bioaccumulative potential					
Mobility in soil					
		N			
Soil/water partition coefficie	ent :	Not available.			
(KOC)			offecto or oritical horarda		
Other adverse effects	:	No known significant	effects or critical hazards.		

Section 13. Disposal considerations



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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

Section 14. Transport information

U.S. DOT Classification	:	Not regulated for transportation.
ICAO/IATA	:	Consult mode specific transport rules
IMO/IMDG (maritime)	:	Consult mode specific transport rules

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 Burley, Nat 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(a) - Proposed test rules. 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: Not listed
		United States - TSCA 6 - Final risk management: Not listed
		United States - TSCA 6 - Proposed risk management: Not listed
		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: Not listed
		United States - EPA Clean water act (CWA) section 311 -

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Hazardous substances: Not 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)	:	Not 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)

not applicable

SARA 311/312

Classification

Not applicable.

:

Composition/information on ingredients

Name	%	Classification
Carbon black	5 - 10	СН

SARA 313

Not applicable.

State regulations		
Massachusetts	:	The following components are listed:
		Carbon black
New York	:	None of the components are listed.
New Jersey	:	The following components are listed:
		Carbon black
Pennsylvania	:	The following components are listed:
		Carbon black

California Prop. 65



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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	:	All components are listed or exempted.
International regulations		
International lists	:	 Australia inventory (AICS): All components are listed or exempted. Taiwan inventory (CSNN): All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined. EINECS: All components are listed or exempted. Japan inventory: All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Korea inventory: All components are listed or exempted. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted.
Chemical Weapons Convention List Schedule I Chemicals Chemical Weapons Convention List Schedule II Chemicals	:	Not listed
Chemical Weapons Convention List Schedule III Chemicals	:	Not listed

Section 16. Other information

History		
Date of printing	:	05/29/2015
Date of issue/Date of revision	:	05/28/2015
Date of previous issue	:	06/27/2013
Version	:	1.1
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 = Internediate 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



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References

Not available.

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Notice to reader

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