EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 1 of 17 Print Date 11/17/2018

SAFETY DATA SHEET

EARL GREY ASA 271331

Section 1. Identification	on	
GHS product identifier	:	EARL GREY ASA 271331
Chemical name	:	Mixture
CAS number	:	Mixture
Other means of identification	:	CC10271331
Product type	:	solid
Relevant identified uses of the subs	tance	or mixture and uses advised against
Product use	:	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).

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		
Signal word	:	No signal word.
		1/17

EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 2 of 17 Print Date 11/17/2018

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	:	CC10271331

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	25 - 50	13463-67-7
2-Propenenitrile, polymer with Ethenylbenzene	25 - 50	9003-54-7
Carbon black	0 - 1	1333-86-4
Styrene	0 - 0.3	100-42-5

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



EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017

Page 3 of 17 Print Date 11/17/2018

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.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
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	:	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.
C		

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 attention and special treatment needed, if necessary

Notes to physician	:	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	:	No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training.

P<u>olyOne</u>

EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 4 of 17 Print Date 11/17/2018

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

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 nitrogen oxides 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 specialized 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 containment and cleaning up		
Small spill	:	Move containers from spill area. Vacuum or sweep up material and

'nе

EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 5 of 17 Print Date 11/17/2018

Large spill

place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

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

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
Styrene	OSHA PEL 1989 (1989-03-01)
	PEL: Permissible Exposure Level 215 mg/m3 50 ppm
	Short-term exposure limit (STEL). A limit value beyond which
	there should be no exposure and which refers to a period of fifteen
	minutes, unless otherwise stated. 425 mg/m3 100 ppm
	OSHA PEL Z2 (1993-06-30)
	PEL: Permissible Exposure Level 100 ppm
	Ceiling-A concentration that should not be exceeded at any time
	during any part of the working day. 200 ppm
L	and the second s



EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017

	Acceptable Maximum Peak (AMP) 600 ppm NIOSH REL (1994-06-01) Time Weighted Average (TWA) 215 mg/m3 50 ppm Short-term exposure limit (STEL). A limit value beyond which there should be no exposure and which refers to a period of fifteen minutes, unless otherwise stated. 425 mg/m3 100 ppm ACGIH TLV (1997-05-21) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 85 mg/m3 20 ppm TLV-STEL: Threshold Limit Value - Short Time Exposure Level 170 mg/m3 40 ppm
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
Titanium dioxide	OSHA PEL 1989 (1989-03-01)PEL: Permissible Exposure Level 10 mg/m3Form: Total dustOSHA PEL (1993-06-30)PEL: Permissible Exposure Level 15 mg/m3Form: Total dustNIOSH REL (1994-06-01)ACGIH TLV (1996-05-18)TLV-TWA: Threshold Limit Value - Time weighted average PEL:Permissible Exposure Level 10 mg/m3
2-Propenenitrile, polymer with Ethenylbenzene	
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.

<u>PolyOne</u>

EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017

Page 7 of 17 Print Date 11/17/2018

Individual protection measures		
Hygiene measures	Wash hands, forearms and face thoroughly after handling che products, before eating, smoking and using the lavatory and a of the working period. Appropriate techniques should be used remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safe showers are close to the workstation location.	it the end l to d
Eye/face protection	Safety eyewear complying with an approved standard should when a risk assessment indicates this is necessary to avoid ex- liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment in higher degree of protection: safety glasses with side-shields.	posure to
Skin protection		
Hand protection	Chemical-resistant, impervious gloves complying with an app standard should be worn at all times when handling chemical if a risk assessment indicates this is necessary.	
Body protection	Personal protective equipment for the body should be selected on the task being performed and the risks involved and should approved by a specialist before handling this product.	
Other skin protection	Appropriate footwear and any additional skin protection meas should be selected based on the task being performed and the involved and should be approved by a specialist before handli product.	risks
Respiratory protection	Based on the hazard and potential for exposure, select a respin meets the appropriate standard or certification. Respirators mu used according to a respiratory protection program to ensure p fitting, training, and other important aspects of use.	ust be

Section 9. Physical and chemical properties

Appearance

Physical state	:	solid [Pellets.]
Color	:	GREY
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.

Jne

EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 8 of 17 Print Date 11/17/2018

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- octanol/water	:	Not available.
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
Styrene				
	LD50 Oral	Rat	2,650 mg/kg	-
		o.//=		



EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 9 of 17 Print Date 11/17/2018

	LD50 Oral	Rat	5,000 mg/kg	-
	LC50 Inhalation	Rat	2,770 ppm	4 h
	LC50 Inhalation	Rat	11.8 mg/l	4 h
Carbon black				
	LD50 Oral	Rat	15,400 mg/kg	-
Titanium dioxide				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-
2-Propenenitrile, polymer wi	th Ethenylbenzene			
	LD50 Oral	Rat	1,800 mg/kg	-
C	NC	we Net fuller tested		

Conclusion/Summary

: Mixture.Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Styrene	Eyes - Mild irritant	Human			-
	Skin - Mild irritant	Rabbit			-
	Skin - Moderate irritant	Rabbit			-
	Eyes - Severe irritant	Rabbit			-
	Eyes - Moderate irritant	Rabbit		24 hrs	-
Titanium dioxide	Skin - Mild irritant	Human		72 hrs	-
Conclusion/Summary					
Skin		lixture.Not fu			
Eyes Respiratory		lixture.Not fu lixture.Not fu			
<u>Sensitization</u>					
Conclusion/Summary					
Skin		lixture.Not fu			
Respiratory	: M	lixture.Not fu	lly tested.		
Mutagenicity					
Conclusion/Summary	: M	lixture.Not fu	lly tested.		



EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 10 of 17 Print Date 11/17/2018

Product/ingredient name OSHA IARC NTP Styrene 2B Reasonably anticipated to be a human carcinogen. Carbon black 2B Titanium dioxide 2B 2-Propenentirile, polymer with Ethenylbenzene 3 Reasonably anticipated to be a human carcinogen. Reproductive toxicity 3 Reasonably anticipated to be a human carcinogen. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Not available. Eye contact : Potential acute health effects : Not available. Specific target or critical hazards. Inhalation : No known significant effects or critical hazards. Skin contact : Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No specific data. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No specific d	Conclusion/Summary Classification	:	Mixture.Not fu	lly tested.
Styrene 2B Reasonably anticipated to be a human carcinogen. Carbon black 2B Titanium dioxide 2B 2-Propenentitrile, polymer 3 with Ethenylbenzene 3 Reproductive toxicity Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Not available. Potential acute health effects Eye contact : Not available. 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. Ingestion : No known significant effects or critical hazards. Skin contact : No known significant effects or critical hazards. Industion : No known significant effects or critical hazards. Symptoms related to the physical, chemical and toxicological characteristics	Product/ingredient	OSHA	IARC	NTP
Carbon black 2B Titanium dioxide 2B 2-Progenentitile, polymer 3 With Ethenylbenzene 3 Reproductive toxicity Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Not available. Aspiration hazard Not available. Potential acute health effects Eye contact : Not available. Eye contact : No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. Ingestion : 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. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No specific data. Skin contact : No specific data. No specific data.			2B	Reasonably anticipated to be a human carcinogen.
Titanium dioxide 2B 2-Propenenitrile, polymer 3 with Ethenylbenzene 3 Reproductive toxicity Conclusion/Summary Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Potential acute health effects Eye contact : No known significant effects or critical hazards. Inhalation Skin contact : No known significant effects or critical hazards. Skin contact Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No known significant effects or critical hazards. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No specific data. Shin contact : No specific data.				
2-Propenenitrile, polymer 3 Reproductive toxicity Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Potential acute health effects Eye contact : Inhalation : No known significant effects or critical hazards. Inhealtion Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No known significant effects or critical hazards. Inhalation Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No specific data. Sin contact : No specific data.				
with Ethenylbenzene Reproductive toxicity Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Potential acute health effects Eye contact : No known significant effects or critical hazards. Inhalation Skin contact : No known significant effects or critical hazards. No known significant effects or critical hazards. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No specific data. Sin contact : No specific data.				
Conclusion/Summary : Mixture.Not fully tested. Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. . . Potential acute health effects : Not available. Potential acute health effects : No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. Skin contact : No known significant effects or critical hazards. Symptoms related to the physical, chemical and toxicological characteristics . Eye contact : 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. Symptoms related to the physical, chemical and toxicological characteristics . Symptomateriation : No specific data.			5	
Teratogenicity Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available.	<u>Reproductive toxicity</u>			
Conclusion/Summary : Mixture.Not fully tested. Specific target organ toxicity (single exposure) Not available.	Conclusion/Summary	:	Mixture.Not fu	lly tested.
Specific target organ toxicity (single exposure) Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Information on likely routes of exposure Potential acute health effects Eye contact : Inhalation : No known significant effects or critical hazards. Skin contact : No known significant effects or critical hazards. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No known significant effects or critical hazards. Indexton : 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. Skin contact : No specific data. <	<u>Teratogenicity</u>			
Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Information on likely routes of exposure Potential acute health effects Eye contact : Inhalation : No known significant effects or critical hazards. Skin contact : No known significant effects or critical hazards. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No known significant effects or critical hazards. Infaction : 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 : Inhalation : No specific data. Inhalation : No specific data. Skin contact : No specific data. Skin contact : No specific data.	Conclusion/Summary	:	Mixture.Not fu	lly tested.
Not available. Aspiration hazard Not available. Information on likely routes of exposure intervention of the section of the sect	Specific target organ toxicity Not available.	(single expo	<u>sure)</u>	
Not available. Information on likely routes of exposure Not available. 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. Symptoms related to the physical, chemical and toxicological characteristics Eye contact : No specific data. Inhalation : No specific data. Skin contact : No specific data.		(repeated ex	<u>kposure)</u>	
exposure 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. Inhalation : No specific data. Skin contact : No specific data.	Aspiration hazard Not available.			
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 characteristicsEye contact:No specific data.Inhalation:No specific data.Skin contact:No specific data.Skin contact:No specific data.	-	f :	Not available.	
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 characteristicsEye contact:No specific data.Inhalation:No specific data.Skin contact:No specific data.Skin contact:No specific data.	Potential acute health effects			
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 characteristicsEye contact:No specific data.Inhalation:No specific data.Skin contact:No specific data.	Eve contact	:	No known sign	ificant 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 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.				
Eye contact:No specific data.Inhalation:No specific data.Skin contact:No specific data.				
Inhalation:No specific data.Skin contact:No specific data.	Symptoms related to the phys	ical, chemic	al and toxicolog	gical characteristics
Inhalation:No specific data.Skin contact:No specific data.	Eye contact	:	No specific dat	a.
Skin contact : No specific data.			-	
	Skin contact		-	
	Ingestion			

10/17



EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 11 of 17 Print Date 11/17/2018

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	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
Styrene			
	Acute LC50 9,900 µg/l Fresh water	Fish - Fish	96 h
	Acute LC50 9.1 mg/l Marine water	Fish - Fish	96 h
	Acute LC50 4,020 µg/l Fresh water	Fish - Fish	96 h
	Acute LC50 4.7 mg/l Fresh water	Fish - Fish	96 h
	Acute LC50 4,080 µg/l Fresh water	Fish - Fish	96 h
	Acute LC50 23,000 µg/l Fresh	Aquatic invertebrates.	48 h
	water	Daphnia	
	Acute EC50 4,700 µg/l Fresh water	Aquatic invertebrates.	48 h
	11/17		



EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 12 of 17 Print Date 11/17/2018

		Daphnia	
	Acute LC50 59,000 µg/l Fresh	Aquatic invertebrates.	48 h
	water	Daphnia	40 11
	Acute LC50 52 mg/l Marine water	Aquatic invertebrates.	48 h
	C C	Crustaceans	
	Acute EC50 33 mg/l Fresh water	Aquatic plants - Algae	96 h
	Acute EC50 720 µg/l Fresh water	Aquatic plants - Algae	96 h
	Acute EC50 1,400 µg/l Fresh water	Aquatic plants - Algae	72 h
	Acute EC50 78,000 µg/l Marine	Aquatic plants - Algae	96 h
	water		
	Acute NOEC 63 µg/l Fresh water	Aquatic plants - Algae	4 d
Carbon black		I	
	Acute EC50 37.563 mg/l Fresh	Aquatic invertebrates.	48 h
	water	Daphnia	40.1
	Acute LC50 61.547 mg/l Fresh	Aquatic invertebrates.	48 h
Titanium dioxide	water	Daphnia	
Thamum dioxide	Acute LC50 > 1,000,000 μg/l	Fish - Fish	96 h
	Marine water	F1511 - F1511	90 11
	Acute LC50 > 1,000 mg/l Fresh	Fish - Fish	96 h
	water		50 II
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates.	48 h
		Daphnia	
	Acute LC50 6.5 mg/l Fresh water	Aquatic invertebrates.	48 h
		Daphnia	
	Acute LC50 3 mg/l Fresh water	Aquatic invertebrates.	48 h
		Crustaceans	
	Acute LC50 15.9 mg/l Fresh water	Aquatic invertebrates.	48 h
		Crustaceans	
	Acute LC50 3.6 mg/l Fresh water	Aquatic invertebrates.	48 h
		Crustaceans	40.1
	Acute LC50 11 mg/l Fresh water	Aquatic invertebrates. Crustaceans	48 h
	Acute LC50 13.4 mg/l Fresh water	Aquatic invertebrates.	48 h
	Acute LC50 15.4 high Flesh water	Crustaceans	40 11
	Acute EC50 27.8 mg/l Fresh water	Aquatic invertebrates.	48 h
	riedie EC30 27.0 mg/11105h water	Daphnia	10 11
	Acute EC50 19.3 mg/l Fresh water	Aquatic invertebrates.	48 h
	6	Daphnia	
	Acute EC50 35.306 mg/l Fresh	Aquatic invertebrates.	48 h
	water	Daphnia	
EARL GREY ASA 271331			
Remarks - Acute - Aquatic	Chemicals are not readily available a	s they are bound within the	e polymer matrix.
invertebrates.:			
Conclusion/Summary	: Chemicals are not readil	y available as they are bou	nd within the
	12/17		

PolyOne.

EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 13 of 17 Print Date 11/17/2018

		polymer matrix.
Persistence and degradability		
Conclusion/Summary	:	Chemicals are not readily available as they are bound within the polymer matrix.
Conclusion/Summary	:	Chemicals are not readily available as they are bound within the polymer matrix.

Bioaccumulative potential

Diouccumulative potential				
Product/ingredient name	LogPow	BCF	Potential	
Styrene	0.35	13.49	low	
Titanium dioxide		-	low	

Mobility in soil

Soil/water partition coefficient	:	Not available.
(KOC)		
Other adverse effects	:	No known significant effects or critical hazards.

Section 13. Disposal considerations

|--|

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

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

Section 14. Transport information

PolyOne.

EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 14 of 17 Print Date 11/17/2018

U.S.DOT 49CFR Ground/Air/Water	:	Not regulated for transportation.
International Air ICAO/IATA	:	Not classified as dangerous goods under transport regulations.
International Water IMO/IMDG	:	Not classified as dangerous goods 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: Not listed United States - TSCA 6 - Final risk management: Not listed United States - TSCA 6 - Final 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(d) - Health and safety studies: 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 Acrylonitrile
	United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Acrylonitrile
	United States - EPA Clean water act (CWA) section 311 - 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

14/17

ne

EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 15 of 17 Print Date 11/17/2018

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		NT-4 12-4-4
DEA List I Chemicals (Precursor Chemicals)	:	Not listed
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
Styrene	0 - 0.3	F, AH, CH
Carbon black	0 - 1	СН
Titanium dioxide	25 - 50	СН
2-Propenenitrile, polymer with Ethenylbenzene	25 - 50	АН

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Rutile, antimony chromium buff	68186-90-3	0 - 3
	Styrene	100-42-5	0 - 0.3
Supplier notification	Styrene	100-42-5	0 - 0.3
	Rutile, antimony chromium buff	68186-90-3	0 - 3

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.

<u>PolyOne</u>

EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 16 of 17 Print Date 11/17/2018

State regulations		None of the common and listed
Massachusetts New York	:	None of the components are listed. The following components are listed:
New TOIK	•	Styrene
New Jersey	:	The following components are listed: 2-Propenenitrile, polymer with Ethenylbenzene Titanium dioxide Rutile, antimony chromium buff Carbon black Styrene
Pennsylvania	:	The following components are listed: Titanium dioxide
		Rutile, antimony chromium buff
		Silica, amorphous
		Carbon black
		Styrene
<u>California Prop. 65</u> WARNING: This product contains a c	hemi	cal known to the State of California to cause cancer.
United States inventory (TSCA 8b)	:	All components are listed or exempted.
Canada inventory	:	At least one component is not listed in DSL but all such components are listed in NDSL.
International regulations		
Inventory list		
Australia	:	All components are listed or exempted.
Canada	:	At least one component is not listed in DSL but all such components are listed in NDSL.
China	:	All components are listed or exempted.
Europe inventory	:	At least one component is not listed in EINECS but all such components are listed in ELINCS.
		Please contact your supplier for information on the inventory status of
T		this material.
Japan New Zealand	:	Not determined. All components are listed or exempted.
		16/17

'nе

EARL GREY ASA 271331

Version Number 1.1 Revision Date 10/19/2017 Page 17 of 17 Print Date 11/17/2018

::	Not determined. All components are listed or exempted. All components are listed or exempted. Not determined.
:	All components are listed or exempted.
	:

Section 16. Other information

<u>History</u>		
Date of printing	:	11/17/2018
Date of issue/Date of revision	:	10/19/2017
Date of previous issue	:	10/18/2017
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 = Intermediate Bulk Container
		IMDG = International Maritime Dangerous Goods
		LogPow = logarithm of the octanol/water partition coefficient
		MARPOL = 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.