PolyOne Colorant Chromatics

Version Number 1.1 Revision Date 08/07/2017 Page 1 of 14 Print Date 11/16/2018

SAFETY DATA SHEET

XRU-2451 FEP 9835 COMP. PREC BLACK 10%

Section 1. Identification		
GHS product identifier Chemical name CAS number Other means of identification Product type	:	XRU-2451 FEP 9835 COMP. PREC BLACK 10% Mixture Mixture CC10257892 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	:	Colorant Chromatics Chromatics, Inc. 19 Francis J. Clarke Circle, Bethel, CT 06801, USA
		+1 800 242 2296
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. Fluoropolymers heated above 350 C can evolve hydrogen fluoride and carbonyl fluoride as degradation products. Processing at elevated temperatures may release fumes that can cause polymer fume fever. The end-user (fabricator) should take necessary precautions (mechanical ventilation, local exhaust, respiratory protection, etc.) to protect employees from exposure to any vapors or dusts that may be released during heating or fabrication. See Sections 8 and 11 for special precautions. 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.

PolyOne Colorant Chromatics

Version Number 1.1 Revision Date 08/07/2017 Page 2 of 14 Print Date 11/16/2018

GHS label elements		
Signal word	:	No signal word.
Hazard statements	:	No known significant effects or critical hazards.
<u>Precautionary statements</u> General		Not applicable
0 0 1101 m	:	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	:	CC10257892

CAS number/other identifiers

Ingredient name	%	CAS number
Carbon black	0.1 - 1	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.

PolyOne Colorant Chromatics

Version Number 1.1	Page 3 of 14
Revision Date 08/07/2017	Print Date 11/16/2018

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	:	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.
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 atte	entio	on 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. 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	:	No specific fire or explosion hazard.
		3/14

PolyOne Colorant Chromatics

Version Number 1.1	Page 4 of 14
Revision Date 08/07/2017	Print Date 11/16/2018

chemical Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds
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 Methods and materials for containme	: ent ai	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).
Small spill Large 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. 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

PolyOne Colorant Chromatics

Version Number 1.1	Page 5 of 14
Revision Date 08/07/2017	Print Date 11/16/2018

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			
		I I I I I I I I I I I I I I I I I I I			
Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker			
		exposure to airborne contaminants.			
Environmental exposure controls	:	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					

PolyOne Colorant Chromotics

Version Number 1.1	Page 6 of 14
Revision Date 08/07/2017	Print Date 11/16/2018

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	:	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	:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

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.
Evaporation rate	:	Not available.

6/14

PolyOne Colorant Chromatics

Version Number 1.1 Revision Date 08/07/2017 Page 7 of 14 Print Date 11/16/2018

Flammability (solid, gas)	: Not available.	
Lower and upper explosive	: Lower: Not available	ble.
(flammable) limits	Upper: Not availa	ble.
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 ava	ilable.
·	Kinematic: Not av	ailable.

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	: Mixtu	re.Not fully tested.		

PolyOne Colorant Chromatics

Version Number 1.1 Revision Date 08/07/2017 Page 8 of 14 Print Date 11/16/2018

Irritation/Corrosion

Conclusion/Summary Skin Eyes Respiratory	:	Μ	ixture.Not fully ixture.Not fully ixture.Not fully	tested.	
Sensitization					
Conclusion/Summary Skin Respiratory	:		ixture.Not fully ixture.Not fully		
<u>Mutagenicity</u>					
Conclusion/Summary	:	М	ixture.Not fully	tested.	
Carcinogenicity					
Conclusion/Summary <u>Classification</u>	:	М	ixture.Not fully	tested.	
Product/ingredient name	OSHA		IARC	NTP	
Carbon black			2B		
<u>Reproductive toxicity</u> Conclusion/Summary <u>Teratogenicity</u>	:	М	ixture.Not fully	tested.	
Conclusion/Summary	:	М	ixture.Not fully	tested.	
<u>Specific target organ toxicity (single exposure)</u> Not available.					
Specific target organ toxicity Not available.	<u>(repeated</u>	expo	osure)		
Aspiration hazard Not available.					
Information on likely routes of exposure	of :	No	ot available.		
Potential acute health effects					
			8/14		

PolyOne Colorant Chromatics

Version Number 1.1 Revision Date 08/07/2017 Page 9 of 14 Print Date 11/16/2018

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 as well as 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 Carcinogenicity Mutagenicity Teratogenicity Developmental effects Fertility effects	::	No known significant effects or critical hazards. No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

PolyOne Colorant Chromatics

Version Number 1.1 Revision Date 08/07/2017 Page 10 of 14 Print Date 11/16/2018

Toxicity

Product/ingredient name	Result		Species	Exposure
Carbon black				
	Acute EC50 37.563 mg/l Fresh		Aquatic invertebrates.	48 h
	water		Daphnia	
	Acute LC5	0 61.547 mg/l Fresh	Aquatic invertebrates.	48 h
	water		Daphnia	
XRU-2451 FEP 9835 COMP.	PREC BLAC	CK 10%		
Remarks - Acute - Aquatic	Chemicals	are not readily available a	as they are bound within the	e polymer matrix.
invertebrates.:				
Conclusion/Summary	:	Chemicals are not readi	ly available as they are bou	nd within the
		polymer matrix.		
Persistence and degradability Conclusion/Summary Conclusion/Summary	:	polymer matrix.	ly available as they are bou ly available as they are bou	
Bioaccumulative potential <u>Mobility in soil</u>				
Soil/water partition coefficie (KOC)	ent :	Not available.		
Other adverse effects	:	No known significant el	ffects 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
	10/14

PolyOne Colorant Chromatics

Version Number 1.1 Revision Date 08/07/2017 Page 11 of 14 Print Date 11/16/2018

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 49CFR Ground/Air/Water	:	Not regulated for transportation.
International Air ICAO/IATA	:	Consult mode specific transport rules
International Water IMO/IMDG	:	Consult mode specific transport rules

Section 15. Regulatory information

U.S. Federal regulations :	United States - TSCA 12(b) - Chemical export notification: The following components are listed: 1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1,2,2-tetrafluoroethene
	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 - 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

PolyOne. Colorant Chromatics

Version Number 1.1	Page 12 of 14
Revision Date 08/07/2017	Print Date 11/16/2018

United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Not listed United States - EPA Clean water act (CWA) section 311 -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 Substances	:	Not listed
DEA List I Chemicals (Precursor	:	Not listed
Chemicals) DEA List II Chemicals (Essential		Not listed
Chemicals)	:	not fisted

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

Not applicable.

Composition/information on ingredients

Name	%	Classification
Carbon black	0.1 - 1	СН

<u>SARA 313</u>

Not applicable.

- -

State regulations	
Massachusetts	: None of the components are listed.
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

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PolyOne Colorant Chromatics

Version Number 1.1	Page 13 of 14
Revision Date 08/07/2017	Print Date 11/16/2018

<u>California Prop. 65</u> 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		
<u>Inventory list</u>		
Australia	:	Not determined.
Canada	:	Not determined.
China	:	Not determined.
Europe inventory	:	Not determined.
Japan	:	Not determined.
New Zealand	:	Not determined.
Philippines	:	Not determined.
Republic of Korea	:	Not determined.
Taiwan	:	Not determined.
Turkey	:	Not determined.
United States	:	All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.) :

Health	*	0
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. The customer is responsible for determining the PPE code for this material.

:	11/16/2018
:	08/07/2017
:	04/07/2017
:	1.1
:	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of
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PolyOne Colorant Chromatics

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Version Number 1.1 Revision Date 08/07/2017 Page 14 of 14 Print Date 11/16/2018

Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = 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 Not available.

References

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.