

Version Number 1.0 Revision Date 08/16/2023 Page 1 of 15 Print Date 08/18/2023

SAFETY DATA SHEET

XRU-2920 PFA E420 CC SUPER STR GREEN

Section 1. Identification		
GHS product identifier Chemical name CAS number Other means of identification Product type		XRU-2920 PFA E420 CC SUPER STR GREEN Mixture Mixture CC10374051 solid
<u>Relevant identified uses of the subs</u> Product use	tance :	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.



Version Number 1.0 Revision Date 08/16/2023 Page 2 of 15 Print Date 08/18/2023

GHS label elements		
Signal word Hazard statements	:	No signal word. No known significant effects or critical hazards.
	·	
Precautionary statements		
	:	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.
		Not available.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10374051

CAS number/other identifiers

Ingredient name	%	CAS number
Cobalt titanate green spinel (Ni > 0.1%)	>= 10 - <= 25	68186-85-6
Titanium dioxide	>= 0.3 - <= 1	13463-67-7

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



Version Number 1.0	Page 3 of 15
Revision Date 08/16/2023	Print Date 08/18/2023

		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. 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 Over-exposure signs/symptoms	: : :	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.
Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Indication of immediate medical	attentio	n 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media



Version Number 1.0 Revision Date 08/16/2023 Page 4 of 15 Print Date 08/18/2023

Suitable extinguishing media Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or 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 sulfur oxides 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 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 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



Version Number 1.0 Revision Date 08/16/2023 Page 5 of 15 Print Date 08/18/2023

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
Cobalt titanate green spinel (Ni > 0.1%)	ACGIH TLV (1994-09-01) TWA 0.02 mg/m3 (CO) OSHA PEL 1989 (1989-03-01) TWA 1 mg/m3 (as Ni) OSHA PEL (1993-06-30) TWA 1 mg/m3 (as Ni)
Titanium dioxide	OSHA PEL 1989 (1989-03-01) TWA 10 mg/m3 Form: Total dust OSHA PEL (1993-06-30) TWA 15 mg/m3 Form: Total dust ACGIH TLV (2022-01-06)



Version Number 1.0 Revision Date 08/16/2023 Page 6 of 15 Print Date 08/18/2023

		TWA 0.2 mg/m3 Form: respirable fraction, nanoscale particles TWA 2.5 mg/m3 Form: respirable fraction, finescale particles
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		
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



Version Number 1.0 Revision Date 08/16/2023 Page 7 of 15 Print Date 08/18/2023

Appearance

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



Version Number 1.0 Revision Date 08/16/2023 Page 8 of 15 Print Date 08/18/2023

Conditions to avoid	: Keep away from extreme heat and oxidizing agents.
Incompatible materials	: Keep away from strong acids.
Hazardous decomposition products	 Oxidizer. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Product/ingredient name	Result	Species	Dose	Exposure	
Titanium oxide (TiO2)					
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h	
	Dusts and mists				
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-	
Conclusion/Summary	: Mixture	e.Not fully tested.			
Irritation/Corrosion					
Conclusion/Summary					
Skin		e.Not fully tested.			
Eyes	: Mixture.Not fully tested.				
Respiratory	: Mixtu	e.Not fully tested.			
Sensitization					
Conclusion/Summary					
Skin		e.Not fully tested.			
Respiratory	: Mixtu	e.Not fully tested.			
<u>Mutagenicity</u>					
Conclusion/Summary	: Mixtur	e.Not fully tested.			
Carcinogenicity					
Conclusion/Summary	: Mixtur	e.Not fully tested.			
Classification					

Product/ingredient name	OSHA	IARC	NTP
C.I. Pigment Green 50	-	2B1	Reasonably anticipated to be a human
			carcinogen.Known to be a human carcinogen.



Version Number 1.0 Revision Date 08/16/2023 Page 9 of 15 Print Date 08/18/2023

Titanium oxide (TiO2)	-	2B -
Reproductive toxicity		
Conclusion/Summary	:	Mixture.Not fully tested.
Teratogenicity		
Conclusion/Summary	:	Mixture.Not fully tested.
Specific target organ toxicity (s Not available.	single expo	<u>osure)</u>
Specific target organ toxicity (n Not available.	repeated e	exposure)
Aspiration hazard Not available.		
Information on the likely route exposure	es of :	Not available.
Potential acute health effects		
Eye contact Inhalation Skin contact Ingestion Symptoms related to the physic	: : : cal, chemio	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.
Eye contact Inhalation	:	No specific data. No specific data.
Skin contact		No specific data.
Ingestion	:	No specific data.
Delayed and immediate effects	and also c	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	:	Not available.
		9/15



Version Number 1.0 Revision Date 08/16/2023

Page 10 of 15 Print Date 08/18/2023

Potential delayed effects	:	Not available.
Potential chronic health effects		
Conclusion/Summary	:	Mixture.Not fully tested.
General Carcinogenicity Mutagenicity Teratogenicity Developmental effects Fertility effects <u>Numerical measures of toxicity</u> <u>Acute toxicity estimates</u> N/A	::	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. Not available. Not available. No known significant effects or critical hazards.
Other 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.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure		
Titanium oxide (TiO2)					
	Acute LC50 > 1,000 Mg/l	Fish - Fundulus heteroclitus	96 h		
	Marine water				
	Acute LC50 3 Mg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 h		
	Acute LC50 6.5 Mg/l Fresh	Daphnia - Daphnia pulex	48 h		
	water				
XRU-2920 PFA E420 CC SUPI	ER STR GREEN				
Remarks - Acute - Aquatic invertebrates.:	Chemicals are not readily availabl	e as they are bound within the po	lymer matrix.		
Conclusion/Summary	: Chemicals are not readily available as they are bound within the polymer matrix.				



Version Number 1.0 Revision Date 08/16/2023 Page 11 of 15 Print Date 08/18/2023

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.
<u>Bioaccumulative potential</u> Not available.		
Mobility in soil		
Soil/water partition coefficient (KOC)	:	Not available.
Other adverse effects	:	No known significant effects 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

Section 14. Transport information

U.S.DOT 49CFR Ground/Air/Water : Not regulated for transportation.



Version Number 1.0 Revision Date 08/16/2023

Page 12 of 15 Print Date 08/18/2023

International Air : Consult mode specific transport rules ICAO/IATA : Consult mode specific transport rules International Water IMO/IMDG

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(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) - Chemical Data Reporting (CDR): Not determined
		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 Cobalt titanate green spinel (Ni > 0.1%)
		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)	:	Listed

Clean Air Act Section 112(b)



Version Number 1.0 Revision Date 08/16/2023 Page 13 of 15 Print Date 08/18/2023

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	:	Not listed
Chemicals)		

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

<u>SARA 311/312</u>

Classification

Not applicable.

:

Composition/information on ingredients

No products were found.

Name	%	Classification
C.I. Pigment Green 50	>= 10 - <= 25	CARCINOGENICITY - Category 1A
Titanium oxide (TiO2)	>= 0.3 - <= 1	CARCINOGENICITY - Category 2

SARA 313

Form R - Reporting requirements

Product name	CAS number	%
Cobalt titanate green spinel (Ni $> 0.1\%$)	68186-85-6	>= 7 - < 13

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	: None of the components are listed.	
New York	: None of the components are listed.	
New Jersey	: The following components are listed: Cobalt titanate green spinel (Ni > 0.1%)	
Pennsylvania	: The following components are listed:	
13/15		



Version Number 1.0 Revision Date 08/16/2023 Page 14 of 15 Print Date 08/18/2023

Cobalt titanate green spinel (Ni > 0.1%)

California Prop. 65

WARNING: This product can expose you to chemicals including Cobalt titanate green spinel (Ni > 0.1%), which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Cobalt titanate green spinel (Ni $> 0.1\%$)	-	-
Titanium dioxide	-	-

United States inventory (TSCA 8b)	:	All components are active or exempted.
Canada inventory	:	All components are listed or exempted.
International regulations Inventory list		
Australia	:	Not determined.
Canada	:	All components are listed or exempted.
China	:	All components are listed or exempted.
Eurasian Economic Union	:	Russian Federation inventory: Not determined.
Japan	:	Japan inventory (CSCL): All components are listed or exempted.
		Japan inventory (ISHL): Not determined.
New Zealand	:	All components are listed or exempted.
Philippines	:	All components are listed or exempted.
Republic of Korea	:	All components are listed or exempted.
Taiwan	:	All components are listed or exempted.
Thailand	:	All components are listed or exempted.
Turkey	:	Not determined.
United States	:	All components are active or exempted.
Viet Nam	:	Not determined.

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 and the associated label are not required



Version Number 1.0 Revision Date 08/16/2023 Page 15 of 15 Print Date 08/18/2023

on SDSs or products leaving a facility 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 trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual. History

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Version	:	1.0
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.