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SAFETY DATA SHEET

T433.6 KYNAR720 CC DBL LT.BLUE

Section 1. Identification	on		
GHS product identifier Chemical name CAS number Other means of identification Product type	: : :	T433.6 KYNAR720 CC DBL LT.BLUE Mixture Mixture CC01060655 solid	
Relevant identified uses of the substance or mixture and uses advised againstProduct use:Industrial applications. Plastics.			
Supplier's details	:	Colorant Chromatics Chromatics, Inc. 19 Francis J. Clarke Circle, Bethel, CT 06801, USA	
Emergency telephone number (with hours of operation)	:	+1 800 242 2296 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 for health effects. All ingredients are bound in a polymer matrix and potential for hazardous exposure as shipped is minimal. 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.

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GHS label elements		
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	:	CC01060655

CAS number/other identifiers

Ingredient name	%	CAS number
Titanium dioxide	5 - 10	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 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 attention and special treatment needed, if necessary				
Notes to physician	:	Treat symptomatically. Contact poison treatment specialist		
Specific treatments	:	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		

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

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	:	No specific fire or explosion hazard.
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suitable training.

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chemical Hazardous thermal decomposition products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
Special protective actions for fire- fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel For emergency responders	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and materials for containment and 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

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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
Titanium dioxide		OSHA PEL 1989 (1989-03-01) PEL: Permissible Exposure Level 10 mg/m3 Form: Total dust OSHA PEL (1993-06-30) PEL: Permissible Exposure Level 15 mg/m3 Form: Total dust NIOSH REL (1994-06-01)
		ACGIH TLV (1996-05-18) TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 10 mg/m3
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		

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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	: 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

:	solid [Pellets.]
:	BLUE
:	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
Titanium dioxide				
	LC50 Inhalation	Rat - Male	6.82 Mg/l	4 h
	LD50 Dermal	Rabbit	> 5,000 mg/kg	-

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Conclusion/Summary	:	No results availab	le.
Irritation/Corrosion			
Conclusion/Summary Skin Eyes Respiratory	:	No results availab Mixture. Mixture.	le.
<u>Sensitization</u>			
Conclusion/Summary Skin Respiratory		No results availab Mixture.	le.
Mutagenicity			
Conclusion/Summary	:	No results availab	le.
Carcinogenicity			
Conclusion/Summary Classification	:	No results availab	le.
Product/ingredient name	OSHA	IARC	NTP
Titanium dioxide		2B	
Reproductive toxicity			
Conclusion/Summary	:	No results availab	le.
Teratogenicity			
Conclusion/Summary	:	No results availab	le.
Specific target organ toxicity Not available.	<u> (single expo</u>	<u>sure)</u>	
Specific target organ toxicity Not available.	<u>(repeated ex</u>	<u>xposure)</u>	
Aspiration hazard Not available.			
Information on the likely rou exposure	tes of :	Not 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	:	No results available.
General Carcinogenicity Mutagenicity Teratogenicity Developmental effects	:	No known significant effects or critical hazards. 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.

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Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Titanium dioxide			
	Acute LC50 > 1,000,000 μg/l	Fish - Fish	96 h
	Marine water		
	Acute LC50 > 1,000 mg/l Fresh water	Fish - Fish	96 h
	Acute LC50 13 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute LC50 6.5 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 19.3 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 27.8 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute EC50 35.306 mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
	Acute LC50 3 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute LC50 15.9 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute LC50 3.6 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute LC50 11 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h
	Acute LC50 13.4 mg/l Fresh water	Aquatic invertebrates. Crustacean Order	48 h

Conclusion/Summary

: Not available.

Persistence and degradability

Conclusion/Summary

: Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Titanium dioxide		352.00	low

Mobility in soil

Soil/water partition coefficient : Not available.

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(KOC) 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 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: The following components are listed: 1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with1,1-difluoroethene
		United States - TSCA 4(a) - Final Test Rules: Listed 1-Propene , 1,1,2,3,3,3-hexafluoro-, polymer with1,1-difluoroethene
		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

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-	isted
	Jnited States - TSCA 5(a)2 - Proposed significant new use rule Not listed
-	United States - TSCA 5(e) - Substances consent order: Not list
	Jnited States - TSCA 6 - Final risk management: Not listed
	Jnited States - TSCA 6 - Proposed risk management: Not liste
τ	Jnited States - TSCA 8(a) - Chemical risk rules: Not listed
τ	United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed
τ	United States - TSCA 8(a) - Chemical Data Reporting (CDR):
d	letermined
τ	United States - TSCA 8(a) - Preliminary assessment report
(PAIR): Not listed
t	United States - TSCA 8(c) - Significant adverse reaction (SAR)
-	Not listed
	Jnited States - TSCA 8(d) - Health and safety studies: Not list
U	United States - EPA Clean water act (CWA) section 307 - Prior
-	oollutants: Not listed
	United States - EPA Clean water act (CWA) section 311 -
-	Hazardous substances: Not listed
	United States - EPA Clean air act (CAA) section 112 - Acciden
	release prevention - Flammable substances: Not listed
	United States - EPA Clean air act (CAA) section 112 - Acciden
	release prevention - Toxic substances: Not listed
	Jnited States - Department of commerce - Precursor chemical
N	Not listed

Clean Air Act Section 112(b)	:	Listed
Hazardous Air Pollutants (HAPs)		
Clean Air Act Section 602 Class I	:	Not listed
Substances		NT / 1º / 1
Clean Air Act Section 602 Class II	:	Not listed
Substances DEA List I Chemicals (Precursor		Not listed
Chemicals)	:	Not listed
DEA List II Chemicals (Essential		Not listed
Chemicals)	•	1 of listed
Chemicals		

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

Classification

Not applicable.

:

Composition/information on ingredients

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Name	%	Classification
Titanium dioxide	5 - 10	СН
SARA 313 Not applicable.		
<u>State regulations</u> Massachusetts	: The following components are Titanium dioxide	listed:
New York	: None of the components are lis	ited.
New Jersey	: The following components are Cobalt aluminate blue spinel Titanium dioxide	
Pennsylvania	: The following components are Cobalt aluminate blue spinel	
	Titanium dioxide	
<u>California Prop. 65</u> WARNING: This product contains a c	hemical known to the State of Califor	rnia to cause cancer.
United States inventory (TSCA 8b)	: All components are listed or ex	kempted.
Canada inventory	: All components are listed or ex	kempted.
International regulations		
International lists	Taiwan inventory (CSNN): Malaysia Inventory (EHS Re Japan inventory: Not determ China inventory (IECSC): A Korea inventory: All compon New Zealand Inventory of C are listed or exempted. EINECS: All components are	All components are listed or exempted. All components are listed or exempted. hemicals (NZIoC): All components
Chemical Weapons Convention List Schedule I Chemicals	: Not listed	
Chemical Weapons Convention List Schedule II Chemicals	: Not listed	
Chemical Weapons Convention List Schedule III Chemicals	: Not listed	

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Section 16. Other information

History		
Date of printing	:	12/02/2015
Date of issue/Date of revision	:	11/26/2015
Date of previous issue	:	00/00/0000
Version	:	1.0
Key to abbreviations	:	ATE = Acute Toxicity Estimate
e e		BCF = Bioconcentration Factor
		GHS = Globally Harmonized System of Classification and Labelling of
		Chemicals
		IATA = International Air Transport Association
		IBC = Intermediate Bulk Container
		IMDG = International Maritime Dangerous Goods
		LogPow = logarithm of the octanol/water partition coefficient
		MARPOL $73/78$ = International Convention for the Prevention of Pollution
		From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine
		pollution)
		UN = United Nations
References	:	Not available.

Notice to reader

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