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SAFETY DATA SHEET

XRU-2859 FEP CC ULTRAHIGH STR ORANGE

| Section 1. Identification | | | |
|--|---|--|--|
| GHS product identifier Chemical name CAS number Other means of identification Product type | : | XRU-2859 FEP CC ULTRAHIGH STR ORANGE Mixture Mixture CC10346855 solid | |
| Relevant identified uses of the substance or mixture and uses advised against Product 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. 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. |



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| 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 | : | CC10346855 |

CAS number/other identifiers

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. 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. |
| Skin contact | : | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |



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| 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, act | ute a | nd 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 attention 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. 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 chemical | : | No specific fire or explosion hazard. |
| Hazardous thermal decomposition products | : | Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds |
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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 a | 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

| 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 |



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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

| Appropriate engineering controls Environmental exposure controls | : | Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |
|---|---|---|
| Individual protection measures | | |
| Hygiene measures Eye/face protection | : | Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. |
| Skin protection | | |



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| 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 Color Odor | : | solid [Pellets.] ORANGE 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. |
| | | |



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| Decomposition temperature SADT Viscosity | : | Not available. Not available. Dynamic: Not available. Kinematic: Not applicable. |
|--|---|---|
| <u>Aerosol product</u> | | |
| Heat of combustion | : | Not available. |
| Ignition distance | : | Not available. |
| Enclosed space ignition - Time equivalent | : | Not available. |
| Enclosed space ignition - | : | Not available. |
| Deflagration density | | |
| Flame height | : | Not available. |
| Flame duration | : | 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

Information on toxicological effects

Acute toxicity

Conclusion/Summary : Mixture.Not fully tested.

Irritation/Corrosion



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| Conclusion/Summary Skin Eyes Respiratory | :: | Mixture.Not fully tested. Mixture.Not fully tested. Mixture.Not fully tested. |
|--|-------|--|
| Sensitization | | |
| Conclusion/Summary Skin Respiratory | : | Mixture.Not fully tested. Mixture.Not fully tested. |
| Mutagenicity | | |
| Conclusion/Summary | : | Mixture.Not fully tested. |
| <u>Carcinogenicity</u> | | |
| Conclusion/Summary | : | Mixture.Not fully tested. |
| <u>Reproductive toxicity</u> | | |
| Conclusion/Summary | : | Mixture.Not fully tested. |
| <u>Teratogenicity</u> | | |
| Conclusion/Summary | : | Mixture.Not fully tested. |
| Specific target organ toxicity (single Not available. | expo | osure) |
| <u>Specific target organ toxicity (repea</u> Not available. | ted e | xposure) |
| Aspiration hazard Not available. | | |
| Information on the likely routes of exposure | : | Not available. |
| 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. |



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Symptoms related to the physical, chemical and toxicological characteristics

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

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

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



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Toxicity

| Product/ingredient name | Result | | Species | Exposure | |
|--|-----------|--|----------------------------|------------------|--|
| XRU-2859 FEP CC ULTRAHIGH STR ORANGE | | | | | |
| Remarks - Acute - Aquatic invertebrates.: | Chemicals | Chemicals are not readily available as they are bound within the polymer matrix. | | | |
| Conclusion/Summary | : | Chemicals are not readil polymer matrix. | y available as they are l | bound within the | |
| Persistence and degradability | | | | | |
| Conclusion/Summary | : | Chemicals are not reading polymer matrix. | ly available as they are | bound within the | |
| Conclusion/Summary | : | Chemicals are not readi polymer matrix. | ly available as they are | bound within the | |
| Bioaccumulative potential Not available. | | | | | |
| <u>Mobility in soil</u> | | | | | |
| Soil/water partition coefficien (KOC) | nt : | Not available. | | | |
| Other adverse effects | : | No known significant ef | ffects or critical hazards | 5. | |

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 |
|------------------|--|
|------------------|--|

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

Section 15. Regulatory information



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United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Listed Phosphoric acid, zinc salt (2:3) United States - EPA Clean water act (CWA) section 311 -Hazardaus substances: Not listed

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) Hazardous Air Pollutants (HAPs) | : | Not listed |
|---|---|------------|
| 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

SARA 311/312

Classification

Not applicable.

:

Composition/information on ingredients

No products were found.

SARA 313

Form R - Reporting requirements

| Product name | CAS number | % |
|--------------------------------|------------|--------------|
| Bismuth vanadium oxide (BiVO4) | 14059-33-7 | >= 10 - < 30 |
| | | |

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.



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| State regulations | | |
|--|---|--|
| Massachusetts | : | None of the components are listed. |
| New York | : | None of the components are listed. |
| New Jersey | : | None of the components are listed. |
| Pennsylvania | : | None of the components are listed. |
| California Prop. 65 | | |
| This product does not require a Safe Harbor warning under California Prop. 65. | | |
| United States inventory (TSCA 8b) | : | All components are active or exempted. |
| | | |
| Canada inventory | : | All components are listed or exempted. |
| | | |
| International regulations | | |
| <u>Inventory list</u> | | |
| 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.)



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 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.



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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

| Histor | | |
|--------------------------------|---|--|
| Date of printing | : | 11/10/2023 |
| Date of issue/Date of revision | : | 11/09/2023 |
| Date of previous issue | : | 06/05/2023 |
| 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.