PolyOne Colorant Chromatics

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SAFETY DATA SHEET

T652.0 ECTFE HALAR500LC FOAM CONCENTRATE

| Section 1. Identification | on | |
|--|------------|--|
| GHS product identifier Chemical name CAS number Other means of identification Product type | : : : : : | T652.0 ECTFE HALAR500LC FOAM CONCENTRATE Mixture Mixture CC01060757 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 |
| 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 | : | 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 | : | CC01060757 |

CAS number/other identifiers

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. |
|-------------|---|---|
| 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 |

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| | surveillance for 48 hours. |
|--------------|---|
| Skin contact | : Flush contaminated skin with plenty of water. Remove contaminated |
| | clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion | : Wash out mouth with water. Remove victim to fresh air and keep at |
| | rest in a position comfortable for breathing. If material has been |
| | swallowed and the exposed person is conscious, give small quantities |
| | of water to drink. Do not induce vomiting unless directed to do so by |
| | medical personnel. Get medical attention if symptoms occur. |

Most important symptoms/effects, acute and delayed

| Potential acute health effects | |
|---------------------------------|---|
| Eye contact | : No known significant effects or critical hazards. |
| Inhalation | : No known significant effects or critical hazards. |
| Skin contact | : No known significant effects or critical hazards. |
| Ingestion | : No known significant effects or critical hazards. |
| Over-exposure signs/symptoms | |
| Eye contact | : No specific data. |
| Inhalation | : No specific data. |
| Skin contact | : No specific data. |
| Ingestion | : No specific data. |
| Indication of immediate medical | attention and special treatment needed, if necessary |
| Notes to physician | : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| Specific treatments | : No specific treatment. |
| Protection of first-aiders | : No action shall be taken involving any personal risk or without suitable training. |
| | -(¹ 11) |

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 CO_2 . None known. |
|--|---|---|
| Specific hazards arising from the | : | No specific fire or explosion hazard. |
| | | 3/13 |

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| chemical Hazardous thermal decomposition products | : | Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides 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 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

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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 None. **Appropriate engineering controls** Good general ventilation should be sufficient to control worker : exposure to airborne contaminants. Emissions from ventilation or work process equipment should be **Environmental exposure controls** : 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

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| | 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 | : | NO PIGMENT |
| Odor | : | Not available. |
| Odor threshold | : | Not available. |
| рН | : | Not available. |
| Melting point | : | Not available. |
| Boiling point | : | Not available. |
| Flash point | : | Not available. |
| Burning time | : | Not available. |
| Burning rate | : | Not available. |
| Evaporation rate | : | Not available. |
| Flammability (solid, gas) | : | Not available. |
| | | |
| Lower and upper explosive | : | Lower: Not available. |
| | : | Lower: Not available. Upper: Not available. |
| Lower and upper explosive | : | |
| Lower and upper explosive (flammable) limits | | Upper: Not available. |
| Lower and upper explosive (flammable) limits Vapor pressure | : | Upper: Not available. Not available. |
| Lower and upper explosive (flammable) limits Vapor pressure Vapor density | : | Upper: Not available. Not available. Not available. |
| Lower and upper explosive (flammable) limits Vapor pressure Vapor density Relative density | : | Upper: Not available. Not available. Not available. Not available. |
| Lower and upper explosive (flammable) limits Vapor pressure Vapor density Relative density Solubility | : | Upper: Not available. Not available. Not available. Not available. Not available. |
| Lower and upper explosive (flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water | : | Upper: Not available. Not available. Not available. Not available. Not available. Not available. |
| Lower and upper explosive (flammable) limits Vapor pressure Vapor density Relative density Solubility Solubility in water Partition coefficient: n- | : | Upper: Not available. Not available. Not available. Not available. Not available. Not available. |

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| 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

| <u>Acute toxicity</u> | |
|---|---|
| Conclusion/Summary | : Mixture.Not fully tested. |
| Irritation/Corrosion | |
| 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 | |

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| Conclusion/Summary | : | Mixture.Not fully tested. |
|--|-------------|--|
| Carcinogenicity | | |
| Conclusion/Summary | : | Mixture.Not fully tested. |
| <u>Reproductive toxicity</u> | | |
| Conclusion/Summary | : | Mixture.Not fully tested. |
| Teratogenicity | | |
| Conclusion/Summary | : | Mixture.Not fully tested. |
| Specific target organ toxicity (sin Not available. | gle exp | oosure) |
| <u>Specific target organ toxicity (rep</u> Not available. | peated | exposure) |
| <u>Aspiration hazard</u> Not available. | | |
| Information on 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. |
| Symptoms related to the physical, | , chemi | cal and toxicological characteristics |
| Eye contact Inhalation Skin contact Ingestion | : : : | No specific data. No specific data. No specific data. No specific data. |
| Delayed and immediate effects as | well as | s chronic effects from short and long-term exposure |
| Short term exposure | | |
| Potential immediate effects | : | Not available. |

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| Potential delayed effects | : | 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

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------------|-------------------------------------|---------------------------------|-------------------------|
| T652.0 ECTFE HALAR500L0 | C FOAM CONCENTRATE | | |
| Remarks - Acute - Aquatic | Chemicals are not readily av | vailable as they are bound wit | hin the polymer matrix. |
| invertebrates.: | | | |
| Conclusion/Summary | : Chemicals are r polymer matrix | not readily available as they a | re bound within the |
| Persistence and degradability | <u>v</u> | | |
| Conclusion/Summary | : Chemicals are r polymer matrix | not readily available as they a | re bound within the |
| Conclusion/Summary | : Chemicals are r polymer matrix | not readily available as they a | re bound within the |

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| Bioaccumulative potential <u>Mobility in soil</u> | | |
|--|---|---|
| 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 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: None of the components are listed. |
|--------------------------|---|
| | United States - TSCA 4(a) - Final Test Rules: Not listed |
| | United States - TSCA 4(a) - ITC Priority list: Not listed |
| | United States - TSCA 4(a) - Proposed test rules: Not listed |
| | United States - TSCA 4(f) - Priority risk review: Not listed |
| | |

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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 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 | : | Not listed |
| Substances | | Net Perel |
| DEA List I Chemicals (Precursor | : | Not listed |
| Chemicals) | | Nat listad |
| 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

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:

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No products were found. <u>SARA 313</u> Not applicable.

State regulations Massachusetts New York New Jersey Pennsylvania

None of the components are listed.None of the components are listed.None of the components are listed.

None of the components are listed.

California Prop. 65

This PolyOne product does not contain any chemical known to the State of California to cause cancer, or birth defects or other reproductive harm, in concentrations that require a warning notice under California's Proposition 65. This statement relies in part on information provided by the buyer of this PolyOne product. PolyOne does not control or have complete knowledge of the end uses to which that buyer or any other entity in the chain of distribution and marketing may put this PolyOne product. Therefore, the buyer of this PolyOne product, each entity that uses this PolyOne product in formulating another product, and each entity in the chain of distribution and marketing of any product that includes the material in this PolyOne product must make its own decision as to giving a Proposition 65 warning.

| United States inventory (TSCA 8b) | : | All components are listed or exempted. |
|--|---|--|
| Canada inventory | : | All components are listed or exempted. |
| International regulations | | |
| International lists | : | Australia inventory (AICS): All components are listed or exempted. Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined. EINECS: All components are listed or exempted. Japan inventory: All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Korea inventory: All components are listed or exempted. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted. Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted. |
| 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

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.

History Date of printing 04/10/2018 Date of issue/Date of revision 02/21/2017 : Date of previous issue 11/30/2015 : 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

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