

| SECTION 1. PRODUCT AND COMPANY IDENTIFICATION | | | |
|---|---|---|--|
| Product Name | : | Artificial Red Food Color | |
| Product Number | : | C-3001 | |
| Recommended Use | : | Food Ingredient | |
| Company | : | Jogue Inc. 100 Rural Hill Road Northville, MI 48167 | |
| Manufacture Telephone | : | 248-349-1501 | |
| Chemtrec Telephone | | (800) 424-9300 | |
| Information Department | : | Product Development/Quality Assurance Mima@Jogue.com | |

| SECTION 2. HAZAR | RD IDENTIFICAT | ION | |
|--------------------|----------------|-----|--|
| GHS Classification | | : | Eye Irritation (category 2a) Specific Organ Toxicity (category 3) Central Nervous System |
| GHS Label Element | | : | Pictograms on labels shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible. This substance is classified and labeled according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200 |
| Signal Word | | : | N/A |
| Symbol | | : | N/A |
| Precautionary | P305+351+338 | : | If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | P337+P338 | : | If eye irritation persists: Get medical advice/attention. |
| Other Hazards | | : | Does not contain any PBT or vPvB substances. |

| SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS | | | | | |
|---|-----|------|---------------------|------------|--|
| Substance | | : | Proprietary Formula | | |
| Common Name | | : | None Known | | |
| CAS Number | | : | Not Applicable | | |
| Hazardous Ingredient Name | Per | cent | | CAS Number | |
| No hazards identified | % | | | N/A | |
| N/A | % | | | N/A | |
| EC Number | | : | Not Applicable | | |



| SECTION 4. FIRST AID MEASURES | | |
|-------------------------------|---|---|
| In Case of Eye Contact | : | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| In Case of Skin Contact | : | No specific measures identified. |
| If Swallowed | : | No specific measures identified. Seek medical attention if symptoms occur. |
| If Inhaled | : | Seek medical attention if symptoms occur. |
| Notes to Physician | : | No specific measures identified. |

| SECTION 5. FIRE-FIGHTING MEASURES | | | |
|---|---|--|--|
| Suitable Extinguishing Media | : | CO ₂ , Powder or Alcohol resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. | |
| Special Hazards arising from the substance or mixture | : | No further relevant information available | |
| Special Protective Equipment for Fire- Fighters | : | Use personal protective equipment. No Specific measures required. | |
| Specific Extinguishing Methods | : | Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes. | |

| SECTION 6. ACCIDENTAL RELEASE MEASURE | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Not required. Refer to protective measures listed in section 7 and 8. |
| Environmental Precautions | : | No specific measures required. |
| Methods and materials for containment and cleaning up | : | Pick up mechanically |
| See section 13 | : | For disposal information |

| SECTION 7. HANDLING AND STORAGE | | | |
|---------------------------------|---|--|--|
| Precautions for safe handling | : | No specific precautions are necessary if used correctly. | |
| Conditions for safe storage | : | Store in tightly closed container away from excess heat and light. Store in suitably labeled containers. | |
| Storage Temperature | : | At ambient temperature. | |
| Specific end use(s) | : | No further relevant information available. | |



| SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION | | | | | | |
|--|---------------------|-----|--|---|-------|--|
| Additional information about design of technical systems | | : | No further data. See se | No further data. See section 7. | | |
| Control Parameters | | : | Not Applicable | Not Applicable | | |
| Components with limit | values that require | mon | itoring at the workplace | : Not Applicable | | |
| Ingredient | Ingredient CAS-No. | | Form of Exposure | Permissible Concentration | Basis | |
| N/A | N/A | | N/A | N/A | N/A | |
| Engineering Measures | | : | Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards. | | | |
| Personal Protective Equipment | | : | The lists that were valid during the creation were used as a basis | | | |
| Eye protection | | : | No special protective | No special protective equipment required. | | |
| Hand protection | | : | No special protective | No special protective equipment required. | | |
| Respirator protection | | : | No special protective equipment required. | | | |
| Hygiene measures | | : | Handle in accordance with good manufacturing hygiene and safety practice. | | | |

| earance | : | A deep red liquid |
|--------------------------|---|--|
| n | : | |
| | | Liquid |
| r | : | No apparent odor |
| r Threshold | : | No data available |
| | : | No data available |
| ing Point | : | No data available |
| zing Point | : | No data available |
| ng Point | : | Above 220°F |
| hpoint | : | Above 200°F (open cup) |
| nmability (solid, gas) | : | No data available |
| ger of explosion | : | Product does not present an explosion hazard |
| er explosion limit | : | No data available |
| er explosion limit | : | No data available |
| er pressure | : | No data available |
| tive density | : | 1.009 +/- 0.01 @ 20°C |
| or density | : | Not Applicable |
| poration rate | : | No data available |
| er solubility | : | Soluble |
| bility in other solvents | : | No data available |



| Viscosity, kinematics | : | No data available |
|--|---|-------------------|
| Partition coefficient: n-octanol/water | : | No data available |

| SECTION 10. STABILITY AND REACTIVITY | | | |
|--------------------------------------|---|--|--|
| Reactivity | : | Stable | |
| Chemical Stability | : | Will not polymerize | |
| Thermal decomposition | : | No decomposition if used according to specifications | |
| Possibility of hazardous reactions | : | No dangerous reactions known | |
| Conditions to avoid | : | Keep away from heat, sparks, flame | |
| Incompatible materials | : | Strong oxidizers or organic acids | |
| Hazardous decomposition products | : | No dangerous decomposition products known | |

| SECTION 11. TOXICOLOGICAL INFORMATION | | | |
|---|---|---|--|
| Information on likely routs of exposure | : | Inhalation, eye contact, skin contact | |
| Potential Health Effects | | | |
| Eyes | : | Health injuries are not known or expected to occur under normal use | |
| Skin | : | Health injuries are not known or expected to occur under normal use | |
| Ingestion | : | Health injuries are not known or expected to occur under normal use | |
| Inhalation | : | Health injuries are not known or expected to occur under normal use | |
| Chronic Exposure | : | Health injuries are not known or expected to occur under normal use | |
| Experience With Human Exposure | | | |
| Eye contact | : | Irritating to the eyes | |
| Skin contact | : | May be irritating with direct skin contact | |
| Ingestion | : | No symptoms known or expected | |
| Inhalation | : | Difficulty breathing | |
| Toxicology | | | |
| Acute oral toxicology | : | No data available | |
| Acute inhalation toxicology | : | No data available | |
| Acute dermal toxicology | : | No data available | |
| Skin corrosion/irritation | : | No data available | |
| Serious eye damage/eye irritation | : | No data available | |
| Respiratory or skin sensitization | : | No data available | |
| Carcinogenicity | : | No data available | |



| Reproductive effects | : | No data available |
|--|---|----------------------|
| Germ cell mutagenicity | : | No data available |
| Teratogenicity | : | No data available |
| STOT-single exposure | : | No data available |
| STOT-repeated exposure | : | No data available |
| Aspiration toxicity | : | No data available |
| IARC (International Agency of Research on Cancer | : | Substance not listed |
| NTP (National Toxicology Program) | : | Substance not listed |
| OSHA-Ca (Occupational Safety & Health Administration) | : | Substance not listed |

| SECTION 12. ECOLOGICAL INFORMATION | | |
|------------------------------------|---|--|
| Ecotoxicity | | |
| Environmental effects | : | No further information available |
| Aquatic Toxicity | : | No further information available |
| Persistence and degradability | : | No further information available |
| Behavior in environmental systems | : | No further information available |
| Bioaccumulation potential | : | No further information available |
| Mobility in soil | : | No further information available |
| General Notes | : | Not known to be hazardous to marine environments |
| PBT | : | Not Applicable |
| vPvB | : | Not Applicable |
| Other adverse effects | : | No further information available |

| SECTION 13. DISPOSAL CONSIDERATIONS | | |
|-------------------------------------|---|--|
| Water treatment methods | : | Smaller quantities can be disposed of with household waste |
| Uncleaned packaging | : | Disposal must be made in accordance with local regulations |

| SECTION 14. TRANSPORT INFORMATION | | |
|-----------------------------------|---|---------------|
| UN-Number | | |
| DOT, ADR, AND, IMGD, IATA | : | Not Regulated |
| UN Proper shipping name | | |
| DOT, ADR, AND, IMGD, IATA | : | Not Regulated |
| Transport hazard class(es) | | |



| Class | : | Not Regulated |
|------------------------|---|--------------------|
| Packing Group | : | Not Applicable |
| Marine Pollutant | : | No |
| Special precautions | : | Not Applicable |
| IBC Code | : | Not Applicable |
| Additional Information | : | Non-Dangerous Good |
| UN "Model Regulation: | : | Not Applicable |

| SECTION 15. REGULATORY INFORMATION | | |
|---|---|--|
| Section 355 (Extremely Hazardous Substances) | : | Substance Not Listed |
| Section 313 (Specific Toxic Chemical Listings) | : | Substance Not Listed |
| TSCA (Toxic Substance Control Act) | : | Substance Not Listed |
| Proposition 65 | : | Substance Not Listed |
| EPA | : | Substance Not Listed |
| TLV | : | Substance Not Listed |
| NIOSH-Ca | : | Substance Not Listed |
| GHS Label Elements | : | The substance is classified and labeled according to GHS |

| SECTION 16. OTHER INFORMATION | | |
|--|---|--|
| This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. | | |
| Department Issuing SDS | : | Quality Assurance – Public Health |
| Date of preparation/ Last revision | : | 01/10/2019 |
| Abbreviations and Acronyms | | |
| ACGIH | : | American Conference of Governmental |
| ADA | : | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| CAS | : | Chemical Abstracts Service (division of American Chemical Society) |
| DOT | : | US Department of Transportation |
| EINECS | : | European Inventory of Existing Commercial Chemical Substances |
| EPA | : | Environmental Protection Agency |
| GHS | : | Globally Harmonized System |
| HMIS | : | Hazardous Materials Identification System (USA) |
| IATA | : | International Air Transport Association |



| IMDG | : | International Marine Code for Dangerous Goods |
|-------------|---|---|
| LC50 | : | Lethal Concentration, 50 percent |
| NFPA | : | National Fire Protection Association (USA) |
| NIOSH-Ca | : | National Institute for Occupational Safety and Health |
| Section 313 | : | Specific Toxic Chemical Listings |
| Section 355 | : | Extremely Hazardous Substances |
| TLV | : | Threshold Limit Value established by ACGIA |