

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY
1.1. PRODUCT IDENTIFIER

Product form: Mixture

Trade name: C-361 family, including C-361, C-361 C, C-361 XRR, C-361 UPS, and C-361 PSMBC

Other means of identification: Cation Exchange Resin, Strong Acid Cation in Sodium Form

1.2. RELEVANT IDENTIFIED USES OF THE MIXTURE AND USES ADVISED AGAINST

Industrial resin for ion exchange process recommended. No known restrictions.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Evoqua Water Technologies, LLC

210 6th Ave STE 3300

Pittsburgh, PA 15222-2603

United States

www.evoqua.com

724.772.0044

1.4. EMERGENCY TELEPHONE NUMBER


800.704.9215 (SAFETEC) or +1-360-256-7365 for callers outside US territories and Canada

SECTION 2: HAZARD(S) IDENTIFICATION
2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

CLASSIFICATION ACCORDING TO REGULATION (EC) No. 1272/2008 [CLP] Eye Irrit. 2; Skin Irrit. 2; STOT SE. 3

2.2. LABEL ELEMENTS

LABELLING ACCORDING TO REGULATION (EC) No. 1272/2008 [CLP/GHS]

| HAZARD PICTOGRAM | SIGNAL WORD | HAZARD STATEMENT |
|--|-------------|---|
|  GHS07 | WARNING | H319 – Causes serious eye irritation (Category 2) H315 – Causes skin irritation (Category 2) H335 – May cause respiratory irritation (Category 3) |

PRECAUTIONARY STATEMENT(S)

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|-------------------|------------------|---|
| PREVENTION | P210 | Keep away from heat/sparks/open flames/hot surfaces. |
| | P280 | Wear protective gloves/eye protection. |
| RESPONSE | P305+P351 | IF IN EYES: Rinse cautiously with water for several minutes. |
| STORAGE | P411 | Store at temperatures not exceeding 50°C/ 122°F |
| DISPOSAL | P501 | Dispose of container to a licensed waste disposal contractor. |

UNKNOWN ACUTE TOXICITY

65% of the mixture consists of ingredient(s) of unknown acute oral/dermal/inhalation (dust/mist) toxicity

UNKNOWN HAZARDS TO THE AQUATIC ENVIRONMENT

Contains 65% of components with unknown hazards to the aquatic environment.

2.3. OTHER HAZARDS

Based on available data, no adverse physicochemical, human health, or environmental effects.

Mixture has not been assessed for PBT or vPvB criteria according to Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
3.1. SUBSTANCE(S): Not applicable.

3.2. MIXTURE(S):

| COMMON NAME (Ingredient / Component) | PRODUCT IDENTIFIER (CAS-No./ EC-No.) | PERCENT BY WEIGHT | CLASSIFICATION ACCORDING TO (EC) No. 1272/2008 [CLP] |
|---|---|-------------------|---|
| Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, sulfonated, sodium salts | CAS No. 69011-22-9 EC No. 614-896-1 | 35-65% | EYE IRRIT. 2, H319 SKIN IRRIT. 2, H315 STOT SE. 3, H335 |
| Water | CAS No. 7732-18-5 EC No. 231-791-2 | Balance | NONE |

SECTION 4: FIRST-AID MEASURES
4.1 DESCRIPTION OF FIRST AID MEASURES

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| FOLLOWING INHALATION | Remove victim to fresh air. If breathing is difficult, provide oxygen. If not breathing, provide artificial respiration. <u>In case of inhalation of decomposition products in a fire</u> , symptoms may be delayed. |
| FOLLOWING SKIN CONTACT | Wash all exposed skin area with mild soap and water while removing contaminated clothing and shoes. |
| FOLLOWING EYE CONTACT | Immediately flush eyes with plenty of water for several minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists. |
| FOLLOWING INGESTION | If conscious and alert, rinse mouth and drink small quantities of water. Do not induce vomiting unless directed to do so by medical personnel. |


4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Causes serious eye irritation, skin irritation, and may cause respiratory irritation.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

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| NFPA 704 | HEALTH = 1 | FLAMMABILITY = 1 | INSTABILITY = 0 | SPECIAL HAZARDS = N/A |  |
| 5.1. EXTINGUISHING MEDIA | | | | | |
| Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide. | | | | | |
| Unsuitable extinguishing media: None known. | | | | | |
| 5.2. SPECIAL HAZARDS ARISING FROM THE MIXTURE | | | | | |
| Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. Combustion products may include and are not limited to: Organic amine. Nitrogen oxides. Hydrogen chloride. Hydrocarbons. Carbon monoxide. Carbon dioxide. Benzene compounds. Water runoff from firefighting may be corrosive. | | | | | |
| 5.3. ADVICE FOR FIREFIGHTERS | | | | | |
| Fire-fighters should wear proper protective equipment, including respiratory protection. | | | | | |
| Wear a Self-Contained Breathing Apparatus (SCBA). Wear fire/flame resistant/retardant clothing (EN469). | | | | | |

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

For non-emergency personnel: Evacuate surrounding areas. Keep unnecessary/unprotected personnel from entering.

For emergency responders: Do not touch or walk through spilled material— resin beads are a **SLIPPING HAZARD**.

Provide adequate ventilation. Wear appropriate respirator and personal protective equipment.

6.2. ENVIRONMENTAL PRECAUTIONS

Avoid dispersal of spilled material to sewers, waterways, soil or air.

6.3. METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Contain any spills with dikes or absorbents to prevent migration and entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material, avoiding dust generation. Place in a designated, labeled waste container.

6.4. REFERENCE TO OTHER SECTIONS

Section 13: DISPOSAL CONSIDERATIONS. Section 7: HANDLING AND STORAGE. Section 8: PERSONAL PROTECTION.

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking, and when leaving work.

Provide good ventilation in process area. Avoid all eye and skin contact.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep in the original container, tightly closed and upright to prevent leakage. Store in a cool and dry space, away from incompatible material (Section 10). It is recommended to store ion exchange resins at temperatures above the freezing point of water. If the resin should become frozen, the resin should not be mechanically handled and should be left to thaw out gradually at ambient temperature. Resin must be completely thawed before handling or use. No attempt should be made to accelerate the thawing process.

7.3. SPECIFIC END USE(S)

An ion exchange resin is an insoluble matrix normally in the form of microbeads. These beads are typically porous; ions are trapped as other ions are released. The end use is called 'ion exchange'.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS: OCCUPATIONAL EXPOSURE LIMITS (OELs)

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|---------------------------------------|----------------|
| OSHA PERMISSIBLE EXPOSURE LIMIT (PEL) | Not available. |
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| AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH) | Not available. |
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| THRESHOLD LIMIT VALUE (TLV) | Not applicable. |
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| DERIVED NO-EFFECT LEVEL (DNEL) | Not applicable. |
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| PREDICTED NO EFFECT CONCENTRATION (PNEC) | Not applicable. |
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8.2. EXPOSURE CONTROLS

8.2.1. APPROPRIATE ENGINEERING CONTROLS

Avoid splashing and dust generation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide local exhaust or general room ventilation.

8.2.2. PERSONAL PROTECTIVE EQUIPMENT

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| RESPIRATORY PROTECTION | 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. In case of inadequate ventilation wear respiratory protection. Approved respirator (EN136/140). |
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| SKIN PROTECTION | Wear suitable protective gloves resistant to chemical penetration (EN374). Suitable protective footwear. |
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| EYE/FACE PROTECTION | Safety glasses with side-shields or goggles (EN166). |
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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---------------------------|------------------|---|-----------------|
| APPEARANCE | Spherical beads. | ODOR | Odorless. |
| pH VALUE | Not applicable. | ODOR THRESHOLD | Not available. |
| MELTING/FREEZING POINT | Not applicable. | VAPOR PRESSURE | Not applicable. |
| INITIAL BOILING POINT | Not applicable. | VAPOR DENSITY | Not applicable. |
| BOILING RANGE | Not applicable. | RELATIVE DENSITY | Not available. |
| FLASH POINT | Not applicable. | SOLUBILITY (water) | Insoluble. |
| EVAPORATION RATE | Not applicable. | PARTITION COEFFICIENT: n-octanol/water | Not applicable. |
| FLAMMABILITY (solid, gas) | Not flammable. | AUTO-IGNITION TEMP. | >500°C |
| UPPER EXPLOSIVE LIMIT | Not applicable. | DECOMPOSITION TEMP. | >230°C |
| LOWER EXPLOSIVE LIMIT | Not applicable. | VISCOSITY | Not applicable. |

9.2. PHYSICAL HAZARDS

| | | | |
|----------------------|-----------------|---|-----------------|
| EXPLOSIVES | Not applicable. | FLAMMABLE GASES | Not applicable. |
| FLAMMABLE AEROSOLS | Not applicable. | OXIDIZING GASES | Not applicable. |
| GASES UNDER PRESSURE | Not applicable. | FLAMMABLE LIQUIDS | Not applicable. |
| FLAMMABLE SOLIDS | Not applicable. | SELF-REACTIVE MIXTURE | Not applicable. |
| PYROPHORIC LIQUIDS | Not applicable. | PYROPHORIC SOLIDS | Not applicable. |
| SELF-HEATING MIXTURE | Not applicable. | OXIDIZING LIQUIDS | Not applicable. |
| OXIDIZING SOLIDS | Not applicable. | MIXTURE WHICH, IN CONTACT WITH WATER EMIT FLAMMABLE GASES | Not applicable. |
| METAL CORROSION | Not applicable. | | |
| ORGANIC PEROXIDES | Not applicable. | | |

9.3. OTHER INFORMATION

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| BULK DENSITY | 650 - 750 kg/m ³ |
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SECTION 10: STABILITY AND REACTIVITY

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| 10.1. REACTIVITY | Non-reactive under normal storage and handling conditions. |
| 10.2. CHEMICAL STABILITY | Stable under normal storage and handling conditions. |
| 10.3. POSSIBILITY OF HAZARDOUS REACTIONS | Hazardous polymerization does not occur. |
| 10.4. CONDITIONS TO AVOID | High heat and sunlight can cause product to decompose. |
| 10.5. INCOMPATIBLE MATERIALS | Strong acids. Strong bases. Strong oxidizers. (e.g. nitric acid, chromic acid, hydrogen peroxide). |
| 10.6. HAZARDOUS DECOMPOSITION PRODUCTS | Thermal decomposition can generate hazardous gases: Aromatic compounds. Hydrocarbons. Organic sulfonates. Sulfur oxides. |

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

| HEALTH HAZARDS | | CLASSIFIED (YES/NO) | ADDITIONAL INFORMATION |
|----------------|------------|------------------------|---|
| ACUTE TOXICITY | Oral | NO | 65% of the mixture consists of ingredient(s) of unknown acute oral toxicity. LD50 oral rat > 5000 mg/kg |
| | Dermal | NO | 65% of the mixture consists of ingredient(s) of unknown acute dermal toxicity. |
| | Inhalation | NO | 65% of the mixture consists of ingredient(s) of unknown acute inhalation (dust/mist) toxicity. |

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| SKIN CORROSION/IRRITATION | YES | Causes skin irritation. |
| SERIOUS EYE DAMAGE/IRRITATION | YES | Causes serious eye irritation. |
| RESPIRATORY OR SKIN SENSITIZATION | NO | Based on available data, the classification criteria are not met. |
| GERM CELL MUTAGENICITY | NO | Based on available data, the classification criteria are not met. |
| CARCINOGENICITY | NO | Mixture is not listed in the National Toxicology Program (NTP) Annual Report on Carcinogens. (29 CFR 1910.1001-1050) |
| REPRODUCTIVE TOXICITY | NO | Based on available data, the classification criteria are not met. |
| STOT – SINGLE EXPOSURE | YES | May cause respiratory irritation. |
| STOT – REPEATED EXPOSURE | NO | Based on available data, the classification criteria are not met. |
| ASPIRATION HAZARD | NO | Based on available data, the classification criteria are not met. |

SECTION 12: ECOLOGICAL INFORMATION

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|---|--|---|
| 12.1. TOXICITY | Acute Hazard to Aquatic Environment | Contains 65% of components with unknown acute hazards to the aquatic environment. |
| | Chronic Hazard to Aquatic Environment | Not available. |
| | Hazardous to Ozone Layer | Not available. |
| 12.2. PERSISTENCE AND DEGRADABILITY | | Not available. |
| 12.3. BIOACCUMULATIVE POTENTIAL | | Not available. |
| 12.4. MOBILITY IN SOIL | | Not available. |
| 12.5. RESULTS OF PBT and vPvB ASSESSMENT | | Not available. |
| 12.6 OTHER ADVERSE EFFECTS | | Avoid release into environment. |

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. WASTE TREATMENT METHODS

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24). Empty containers retain product residues. Waste disposal should be in accordance with existing federal state, provincial and or local environmental control laws. For disposal within the EC, refer to the European Waste Catalogue (EWC).

SECTION 14: TRANSPORT INFORMATION

| | LAND (ADR-RID-DOT) | INLAND WATERWAY (ADN) | AIR (IATA-ICAO) | SEA (IMDG-IMO) |
|---|-------------------------------|----------------------------------|----------------------------|---------------------------|
| 14.1. UN NUMBER | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2. UN PROPER SHIPPING NAME | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.3. TRANSPORT HAZARD CLASS(ES) | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.4. PACKING GROUP | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.5. ENVIRONMENTAL HAZARDS | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.6. SPECIAL PRECAUTIONS FOR USER | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | | | | Not applicable. |

SECTION 15: REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE MIXTURE

15.1.1. EU REGULATIONS

Contains no Substances of Very High concern (SVHC) on REACH Annex XIV ("authorization list").
Contains no substances on the REACH Annex XVII restricted list.
Contains no substances on the REACH candidate list.

15.1.2. NATIONAL REGULATIONS

US FEDERAL

| | |
|--|----------------------------------|
| SARA 302 EXTREMELY HAZARDOUS SUBSTANCE | Not listed. |
| SARA 304 EMERGENCY RELEASE NOTIFICATION | Not regulated. |
| SARA 311/312 HAZARDOUS CHEMICAL | Immediate (acute) health hazard. |
| SARA 313 (TRI reporting) | Not regulated. |
| CERCLA HAZARDOUS SUBSTANCE LIST (40 CFR 302.4) | Not listed. |
| OSHA SPECIFICALLY REGULATED SUBSTANCES (29 CFR 1910.1001-1050) | Not regulated. |
| CLEAN AIR ACT (CAA) SECTION 112 HAZARDOUS AIR POLLUTANTS (HAPs) | Not regulated. |
| CLEAN AIR ACT (CAA) SECTION 112(r) ACCIDENTAL RELEASE PREVENTION | Not regulated. |
| SAFE DRINKING WATER ACT (SDWA) | Not regulated. |

CANADA

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|---|----------------|
| TRANSPORTATION OF DANGEROUS GOODS (TDG) | Not regulated. |
| WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEMS (WHMIS) | Not regulated. |

GERMANY

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| VwVwS Wassergefährdungsklasse, (WGK) Annex 4 | (WGK) 3, precautionary |
| Störfallverordnung (12.BImSchV) (HAZARDOUS INCIDENT ORDINANCE) | Not regulated. |

NETHERLANDS

| | |
|---|-------------|
| SZW-lijst van kankerverwekkende stoffen | Not listed. |
| SZW-lijst van mutagene stoffen | Not listed. |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding | Not listed. |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid | Not listed. |
| NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling | Not listed. |

15.1.3 INTERNATIONAL INVENTORIES

| COUNTRY | INVENTORY | LISTED (YES/NO) |
|-----------------------------|--|-----------------|
| AUSTRALIA | AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) | YES |
| CANADA | DOMESTIC SUBSTANCES LIST (DSL) | YES |
| | NON-DOMESTIC SUBSTANCES LIST (NDSL) | NO |
| CHINA | INVENTORY OF EXISTING CHEMICAL SUBSTANCES IN CHINA (IECSC) | YES |
| EUROPE | EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS) | NO |
| | EUROPEAN LIST OF NOTIFIED CHEMICAL SUBSTANCES (ELINCS) | NO |
| JAPAN | INVENTORY OF EXISTING AND NEW CHEMICAL SUBSTANCES (ENCs) | YES |
| KOREA | EXISTING CHEMICALS LIST (ECL) | YES |
| NEW ZEALAND | NEW ZEALAND INVENTORY | YES |
| THE PHILIPPINES | PHILIPPINE INVENTORY OF CHEMICALS AND CHEMICAL SUBSTANCES (PICCS) | YES |
| UNITED STATES & PUERTO RICO | TOXIC SUBSTANCES CONTROL ACT (TSCA) INVENTORY | EXEMPT |

15.2. CHEMICAL SAFETY ASSESSMENT

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

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|---|---|--------------------------|
| DISCLAIMER | This information is based upon our current knowledge for the sole intended purpose of this product. However, no warranty is expressed or implied regarding the specific properties of the product. It is the buyer's responsibility to ensure that its activities comply with federal, state, and local laws. | |
| REVISION INDICATOR | Revision 2: December 30, 2021. Updated Emergency contact phone number. Revision 1: December 17, 2018. This SDS replaces the former MSDS for this product pursuant to OSHA Hazard Communication Standard (HCS) 29 CFR 1910.1200(g) Appendix D. The MSDS for this product should be considered obsolete. This SDS complies with the fifth revision of the UN GHS, Regulation (EC) No 1272/2008 [CLP], and (EC) No 1907/2006 [REACH], as amended by (EU) 2015/830. | |
| ABBREVIATIONS AND ACRONYMS | ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways CERCLA: Comprehensive Environmental Response, Compensation and Liability Act. DOT: Department of Transportation HMIS: Hazardous Materials Identification System IATA: International Air Transportation Association IBC CODE: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code). ICAO: International Civil Aviation Organization IMDG: International Maritime Dangerous Goods IMO: International Maritime Organization LD50: Lethal Dose for 50% of the test population MARPOL 73/78: International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended. NFPA: National Fire Protection Association PBT: Persistent, Bioaccumulative, Toxic vPvB: Very Persistent and very Bioaccumulative RCRA: Resources Conservation and Recovery Act RID: Regulation concerning the International Carriage of Dangerous Goods by Rail SARA: Superfund Amendments and Reauthorization Act STOT: Specific Target Organ Toxicity VwVwS: Administrative Regulation on the Classification of Substances Hazardous to Waters | |
| REFERENCES | APCIS – Asia-Pacific Chemical Inventory Search System, website: http://apciss.cirs-group.com/ ECHA – European Chemicals Agency, website: https://echa.europa.eu/ EUR-Lex – Access to European Union Laws: (EU) 2015/830, EC No. 1907/2006 (REACH) and EC No. 1272/2008 (CLP), website: https://eur-lex.europa.eu/ GHS – Globally Harmonized System of Classification and Labelling of Chemicals (Rev.7) (2017), website: http://www.unece.org/trans/danger/publi/ghs/ghs_rev07/07files_e0.html NITE – National Institute of Technology and Evaluation, website: https://www.nite.go.jp/ OSHA – Occupational Safety and Health Administration (HazCom Standard 29 CFR 1910.1200), website: https://www.law.cornell.edu/cfr/text/29/1910.1200 PubChem – U.S. National Library of Medicine, National Center for Biotechnology Information, website: https://pubchem.ncbi.nlm.nih.gov/search/ TSCA Inventory Listing – https://iaspub.epa.gov/sor_internet/registry/substreg/searchandretrieve/searchbylist/search.do | |
| CLASSIFICATION AND PROCEDURE USED TO DERIVE THE CLASSIFICATION FOR MIXTURES | | |
| CLASSIFICATION ACCORDING TO REGULATION (EC) No. 1272/2008 [CLP] | | CLASSIFICATION PROCEDURE |
| Eye Irrit. 2, H319; Skin Irrit. 2, H315; STOT SE. 3, H335 | | Calculation method |