

Safety Data Sheet (SDS) for Accellix RTF Assays

Section I - Product Identification

| | | |
|---|---|--------------------------------|
| List of Product Number/Identifier: | A1000-1L T Cell Assay (L) | A1002-4L TBNK Assay (L) |
| | A1000-1NL T Cell Assay (NL) | A1002-4NL TBNK Assay (NL) |
| | A1001-1L T Cell N-1 AF488 Test Kit (L) | A1003-1L TBNK-16 Assay (L) |
| | A1001-1NL T Cell N-1 AF488 Test Kit (NL) | A1003-1NL TBNK-16 Assay (NL) |
| | A1001-2L T Cell N-1 PE Test Kit (L) | A1004-1L Stem Cell Assay (L) |
| | A1001-2NL T Cell N-1 PE Test Kit (NL) | A1004-1NL Stem Cell Assay (NL) |
| | A1001-3L T Cell N-2 AF488 PE Test Kit (L) | A1005-1L Stem Cell-3 Assay (L) |
| | A1001-3NL T Cell N-2 AF488 PE Test Kit (NL) | A1005-1NL Stem Cell-3 (NL) |
| | Q1001-1L Accellix RTF QC kit | |

| | |
|---|--|
| Other means of identification: | Not available |
| Product Type: | Assay Kit |
| Product Use: | Biological Use/Biological Test |
| Area of application: | Industrial applications |
| Supplier/Manufacturer: | Accellix, Inc. 2385 Bering Drive San Jose, CA 95131 Tel: +1-650-396-3035 |
| Email address of person responsible for this SDS: | support@accellix.com |
| Emergency telephone number (with hours of operation) | +1-650-396-3035 |

Section II - Hazards Identification**OSHA/HCS Status:**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of substance or mixture:

H332 ACUTE TOXICITY (inhalation) - Category 4

H317 SKIN SENSITIZATION - Category 1

H341 GERM CELL MUTAGENICITY - Category 2

H350 CARCINOGENICITY - Category 1A

GHS Label Elements**Hazard Pictograms:****Signal Word:**

Danger

Hazard Statement:

H332 - Harmful if inhaled.

H317 - May cause an allergic skin reaction.

H350 - May cause cancer.

H341 - Suspected of causing genetic defects.

Precautionary Statements**Prevention:**

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.

P261 - Avoid breathing vapor.

P272 (OSHA) - Contaminated work clothing must not be allowed out of the workplace.

Response:

P308 + P313 – IF EXPOSED: Get medical attention.

P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

P302 + P352 + P363 - IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.

P333 + P313 - If skin irritation or rash occurs: Get medical attention.

Storage:

No special conditions specified

Disposal:

P501 - Dispose of contents and container in accordance with all local, regional, national, and international regulations.

Hazards no otherwise classified:

None known

Section III - Composition/Information on Components

| | |
|-------------------------------|----------------|
| Substance/Mixture | Mixture |
| Other means of identification | Not available |

| Ingredient name | Other names | % | CAS Number |
|------------------------|--------------------|----------|-------------------|
| Formaldehyde, Solution | - | 0.28% | 50-00-0 |

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

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

Section IV - 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. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed**Potential Acute Health Effects**

| | |
|----------------------|--|
| Eye Contact: | No known significant effects or critical hazards |
| Inhalation: | Harmful if inhaled |
| Skin Contact: | May cause an allergic skin reaction |
| Ingestion: | No known significant effects or critical hazards |

Over-exposure signs/symptoms

| | |
|----------------------|--|
| Eye Contact: | No specific data |
| Inhalation: | No specific data |
| Skin Contact: | Adverse symptoms may include the following: irritation, redness |
| 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |

See toxicological information (Section 11)

Section V - Fire Fighting Measures

Extinguishing Media

| | |
|--|---|
| Suitable extinguishing media: | Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media: | Do not use water jet. |
| Specific hazards arising from the chemical: | In a fire or if heated, a pressure increase will occur, and container may burst. |
| Hazardous thermal decomposition products: | Decomposition products may include the following materials: carbon dioxide & carbon monoxide. |
| 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 VI - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

| | |
|-------------------------------------|--|
| For non-emergency personnel: | <p>No action shall be taken involving any personal risk or without suitable training.</p> <p>Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk-through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.</p> |
| For emergency responders: | <p>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 nonemergency personnel".</p> |
| Environmental precautions: | <p>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).</p> |

Methods and materials for containment and cleaning up

| | |
|---------------------|---|
| Small spill: | <p>Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.</p> |
| Large spill: | <p>Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.</p> |

Section VII - Handling and Storage**Precautions for safe handling****Protective measures**

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

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. Store locked up. 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. See Section 10 for incompatible materials before handling or use.

Section VIII - Exposure Control/Personal Protection

Control Parameters

Occupational exposure limits

| Ingredient Name | Exposure Limits |
|------------------------|--|
| Formaldehyde, solution | <p>ACGIH TLV (United States, 3/2016). Skin sensitizer. Inhalation sensitizer. C: 0.3 ppm C: 0.37 mg/m³</p> <p>OSHA PEL 1989 (United States, 3/1989) TWA: 0.75 ppm 8 hours STEL: 2 ppm 15 minutes</p> <p>OSHA PEL Z2 (United States, 2/2013) TWA: 0.75 ppm 8 hours STEL: 2 ppm 15 minutes</p> <p>NIOSH REL (United States, 10/2013) TWA: 0.016 ppm 10 hours CEIL: 0.1 ppm 15 minutes</p> <p>OSHA PEL (United States, 6/2016) TWA: 0.75 ppm 8 hours STEL: 2 ppm 15 minutes</p> |

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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**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. Contaminated work clothing should not be allowed out of the workplace. 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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 IX - Physical and Chemical Properties**Appearance**

| | |
|---|----------------|
| Physical State: | Liquid (clear) |
| Color: | Colorless |
| Odor: | Not available. |
| Odor threshold: | Not available |
| pH: | 7.2 |
| Melting point: | Not available |
| Boiling point: | Not available |
| Flash Point Evaporation point: | Not available |
| Flammability (solid, gas): | Not available |
| Lower and upper explosive limit (flammable) limit: | Not available |
| Vapor pressure: | Not available |
| Vapor density: | Not available |
| Relative density: | Not available |
| Density: | Not available |
| Solubility: | Not available |
| Solubility in water: | Not available |
| Partition coefficient: n-octanol/water: | Not available |
| Auto-ignition temperature: | Not available |
| Decomposition temperature: | Not available |
| SADT: | Not available |
| Viscosity: | Not available |
| Flow time (ISO 2431): | Not available |

Section X - Stability and Reactivity

| | |
|--|---|
| Reactivity: | No specific test data to reactivity available for this product or its ingredients. |
| Chemical stability: | The product is stable. |
| Possibility of hazardous reactions: | Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur. |
| Conditions to avoid: | No specific data |
| Incompatible materials: | No specific data |
| Hazardous decomposition products: | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section XI - Toxicological Information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-----------------------|---------|-----------------------|----------|
| Formaldehyde, Solution | LC50 Inhalation Vapor | Rat | 578 mg/m ³ | 4 hours |
| | LD50 Dermal | Rabbit | 270 mg/kg | - |
| | LD50 Oral | Rat | 100 mg/kg | - |

Irritation and Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|------------------------|---------|-------|-------------------------|-------------|
| Formaldehyde, Solution | Eyes – Severe irritant | Rabbit | - | 24 hours 750 micrograms | - |
| | Eyes – Severe irritant | Rabbit | - | 750 micrograms | - |
| | Skin – Severe irritant | Rabbit | - | 24 hours 2 milligrams | - |

Sensitization

Not available.

Mutagenicity

Conclusion/Summary: Not available

Carcinogenicity

Conclusion/Summary: Not available

Classification

| Product/Ingredient | OSHA | IARC | NTP |
|------------------------|------|------|--------------------------------|
| Formaldehyde, solution | + | 1 | Known to be a human carcinogen |

Reproductive toxicity

Conclusion/Summary: Not available

Teratogenicity

Conclusion/Summary: Not available

Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target Organ |
|------------------------|------------|-------------------|------------------------------|
| Formaldehyde, solution | Category 3 | Not applicable | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

Not available

Aspiration Hazard

Not available

Information on the likely route of exposure: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact: No known significant effects or critical hazards

Inhalation: Harmful if inhaled

Skin contact: May cause an allergic skin reaction

Ingestion: No known significant effects or critical hazards

Symptoms related to the physical effects and also chronic effects from short- and long-term exposure

Short term exposure

Potential Immediate effects: Not available

Potential delayed effects: Not available

Long term exposure

Potential immediate effects: Not available

Potential delayed effects: Not available

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

Short term exposure

Potential immediate effects: Not available

Potential delayed effects: Not available

Long term exposure

Potential immediate effects: Not available

Potential delayed effects: Not available

Possible chronic health effects

General: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels

Carcinogenicity: May cause cancer. Risk of cancer depends on duration and level of exposure

Mutagenicity: Suspected of causing genetic defects

Teratogenicity: No known effects or critical hazards
 Development effects: No known effects or critical hazards
 Fertility effects: No known effects or critical hazards

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|---------------------|--------------|
| Oral | 2598 mg/kg |
| Dermal | 7014.6 mg/kg |
| Inhalation (vapors) | 15.02 mg/l |

Section XII - Ecological Information

Toxicity

| Product/ingredient | Result | Species | Exposure |
|------------------------|--------------------------------------|---|----------|
| Formaldehyde, solution | Acute EC50 3.48 mg/l Fresh water | Algae – Desmodesmus subspicatus | 72 hours |
| | Acute EC50 0.788 mg/l Marine water | Algae - Ulva pertusa | 96 hours |
| | Acute EC50 12.98 mg/l Fresh water | Crustaceans – Ceriodaphnia dubia – Neonate | 48 hours |
| | Acute EC50 5800 µg/l Fresh water | Daphnia - Daphnia pulex – neonate | 48 hours |
| | Acute LC50 1.41 ppm Fresh water | Fish - Oncorhynchus mykiss | 96 hours |
| | Chronic NOEC 0.005 mg/l Marine water | Algae - Isochrysis galbana - Exponential growth phase | 96 hours |
| | Chronic NOEC 953.9 ppm Fresh water | Fish - Oncorhynchus tshawytscha - Egg | 43 days |

Persistence and degradability

| Product/ingredient | Test | Result | Dose | Inoculum |
|------------------------|---|-------------------------|------|----------|
| Formaldehyde, solution | OECD 301A Ready Biodegradability – DOC Die-Away Test | 99% - Readily – 28 days | - | - |

| Product/ingredient | Aquatic half-life | Photolysis | Biodegradability |
|------------------------|-------------------|------------|------------------|
| Formaldehyde, solution | - | - | Readily |

Bioaccumulative potential

| Product/ingredient | LogP _{ow} | BCF | Potential |
|------------------------|--------------------|-----|-----------|
| Formaldehyde, Solution | 0.35 | - | Low |

Mobility in Soil

| | |
|--|--|
| <i>Soil/water partition (K_{oc})</i> | Not available |
| <i>Other adverse effects</i> | No known significant effects or critical hazards |

Section XIII - 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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 Toxic hazardous waste “U” List

| Ingredient | CAS# | Status | Reference number |
|--------------|---------|--------|------------------|
| Formaldehyde | 50-00-0 | Listed | U122 |

Section XIV Transportation Information

| | DOT Classification | IMDG | IATA |
|--------------------------------|--------------------|---|--|
| UN number | Not regulated | UN3082 | UN3082 |
| UN proper shipping name | - | Environmentally hazardous substance liquid, N.O.S. (Formaldehyde, solution) | Environmentally hazardous substance, liquid, N.O.S. (formaldehyde, solution) |

| | | | |
|------------------------------------|-----|---|--|
| Transport hazard class (es) | - | 9  | 9  |
| Packing group | - | III | III |
| Environmental Hazards | No. | Yes. | Yes. |

| | | | |
|--------------------------------------|----------|---|--|
| <p>Additional information</p> | <p>-</p> | <p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4. 1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1. 1.8. Emergency schedules F-A, SF Special provisions 274, 335, 969</p> | <p>This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5. 0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8. Quantity limitation Passenger and Cargo Aircraft: 450 L. Packaging instructions: 964. Cargo Aircraft Only: 450 L. Packaging instructions: 964. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y964. Special provisions A97, A158, A197</p> |
|--------------------------------------|----------|---|--|

Special Precautions for users:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL and the IBC Code:

Not available

Section XV - Regulatory Information

U.S. Federal regulations:

United States inventory (TSCA 8b):
Listed

Clean Water Act (CWA) 311:
Formaldehyde, solution

Clean Air Act (CAA) 112 regulated
toxic substance: Formaldehyde,
solution

Clean Air Act Section 112 (b) Hazardous Air pollutants (HAPS):

Listed

Clean Air Act Section 602 Class I Substances:

Not Listed

DEA List I Chemicals (Precursor Chemicals):

Not Listed

DEA List II Chemicals (Essential Chemicals):

Not Listed

SARA 302/302

Composition information on ingredients

| Name | % | EHS | SARA 302 TPQ | | SARA 304 RQ | |
|------------------------|----|-----|--------------|-----------|-------------|-----------|
| | | | (lbs) | (gallons) | (lbs) | (gallons) |
| Formaldehyde, solution | <5 | Yes | 500 | 73.9 | 100 | 14.8 |

SARA 304 RQ

2500 lbs. / 1135 kg

SARA 311/312

Classification:

Immediate (acute) health hazard

Delayed (chronic) health hazard

Composition/information on ingredients

| Name | % | Fire Hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|------------------------|----|-------------|----------------------------|----------|---------------------------------|---------------------------------|
| Formaldehyde, solution | <5 | Yes | No | No | Yes | Yes |

SARA 313

| | Product Name | CAS number | % |
|---------------------------------|------------------------|------------|----|
| Form R – Reporting requirements | Formaldehyde, Solution | 50-00-0 | <5 |
| Supplier notification | Formaldehyde, Solution | 50-00-0 | <5 |

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.

State regulations

Massachusetts

The following components are listed: FORMALDEHYDE; FORMALIN

New York

The following components are listed: Formaldehyde

New Jersey

The following components are listed: FORMALDEHYDE; FORMALIN

Pennsylvania

The following components are listed: FORMALDEHYDE

California Prop. 65

Warning: This product contains a chemical known to the State of California to cause cancer

| Ingredient name | Cancer | Reproductive | No significant risk level | Maximum acceptable dosage level |
|------------------------|--------|--------------|---------------------------|---------------------------------|
| Formaldehyde, solution | Yes | No | Yes | - |

International Regulations

| | |
|--|------------|
| Chemical Weapon Convention List Schedules I, II, & III chemicals: | Not Listed |
| Montreal Protocol (Annexes A, B, C, E): | Not Listed |
| Stockholm Convention on Persistent Organic Pollutants: | Not Listed |
| Rotterdam Convention on Prior Informed Consent (PIC): | Not Listed |
| UNECE Aarhus Protocol on POPs and Heavy Metals: | Not Listed |
| Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended | Not Listed |
| Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended | Not Listed |
| Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended | Not Listed |
| Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended | Not Listed |
| Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended | Not Listed |
| Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended | Not Listed |
| Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended | Not Listed |
| Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA | Not Listed |
| Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended | Not Listed |
| Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended | Not Listed |
| Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended | Not Listed |
| Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended | Not Listed |

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

Section XVI - Other Information

Hazardous Material Information System (U.S.A.)

| | | |
|------------------|---|---|
| Health | * | 2 |
| 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 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. 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.

Procedure used to derive the classification.

| Classification | Justification |
|--------------------|--------------------|
| Acute Tox. 4, H332 | Calculation method |
| Skin Sens. 1, H317 | Calculation method |
| Muta. 2, H341 | Calculation method |
| Carc. 1A, H350 | Calculation method |

- 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
 - LogP_{ow} = 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:**
- HCS (U.S.A.)- Hazard Communication Standard
 - International transport regulations

This information is believed to be correct but is not warranted as such, nor does it purport to be all inclusive.