

Safety Data Sheet (SDS) for Accellix RTF Assays

Section I - Product Identification

A1000-1L T Cell RTF Assay (L) A1003-1NL TBNK-16 RTF Assay (NL)

A1000-1NL T Cell RTF Assay (NL)

A1004-1L Stem Cell RTF Assay (L)

A1001-1L T Cell N-1 AF488 RTF Test Kit (L)

A1004-1NL Stem Cell RTF Assay (NL)

A1001-1NL T Cell N-1 AF488 RTF Test Kit (NL)

A1004-2L Stem Cell N-1 AF488 RTF Test Kit (L)

A1001-2L T Cell N-1 PE RTF Test Kit (L) A1004-2NL Stem Cell N-1 AF488 RTF Test Kit (NL)

List of Product
Number/Identifier:

A1001-2NL T Cell N-1 PE RTF Test Kit (NL)

A1005-1L Stem Cell-3 RTF Assay (L)

A1001-3L T Cell N-2 AF488 PE RTF Test Kit (L) A1005-1NL Stem Cell-3 RTF Assay (NL)

A1001-3NL T Cell N-2 AF488 PE RTF Test Kit (NL)

A1005-2L Stem Cell-3 N-1 AF488 RTF Test Kit (L)

A1002-4L TBNK RTF Assay (L) A1005-2NL Stem Cell-3 N-1 AF488 RTF Test Kit (NL)

A1002-4NL TBNK RTF Assay (NL) Q1001-1L QC RTF Assay Kit

A1003-1L TBNK-16 RTF Assay (L)

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

Hazards no otherwise classified:

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: **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. P308 + P313 - IF EXPOSED: Get medical attention. Response: 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.

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 No known significant effects or critical hazards Eye Contact: 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 Adverse symptoms may include the following: **Skin Contact:** irritation, redness Ingestion: No specific data Indication of Immediate Medical Attention and Special Treatment Meeded, 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:

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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear

appropriate respirator when ventilation is inadequate. Put on appropriate

personal protective equipment.

For Emergency Responders: 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".

Environmental Precautions: 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).

Methods and Materials for Containment and Cleaning Up

Small Spill: 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.

Large Spill: 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.



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	ACGIH TLV (United States, 3/2016). Skin sensitizer. Inhalation sensitizer. C: 0.3 ppm C: 0.37 mg/m³
	OSHA PEL 1989 (United States, 3/1989) TWA: 0.75 ppm 8 hours STEL: 2 ppm 15 minutes
	OSHA PEL Z2 (United States, 2/2013) TWA: 0.75 ppm 8 hours STEL: 2 ppm 15 minutes
	NIOSH REL (United States, 10/2013) TWA: 0.016 ppm 10 hours CEIL: 0.1 ppm 15 minutes
	OSHA PEL (United States, 6/2016) TWA: 0.75 ppm 8 hours STEL: 2 ppm 15 minutes

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

<u>Appearance</u>	
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,	LC50 Inhalation Vapor	Rat	578 mg/m ³	4 hours
Solution	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 Skin – Severe irritant	Rabbit Rabbit	-	750 micrograms 24 hours 2 milligrams	-

_		• • •				
Se	nc	11	77	•••	^	n
36	ш	ıu	La	L	u	•

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** No known significant effects or critical hazards **Eye Contact:** 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 May cause cancer. Risk of cancer depends on Carcinogenicity: duration and level of exposure

Suspected of causing genetic defects

Mutagenicity:



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,	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	99% - Readily – 28 days	-	-
	Biodegradability – DOC Die-Away Test			



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

Soil/water partition (K_{oc})

Not available

Other adverse effects

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.



<u>United States – RCRA Toxic Hazardous Waste "U" List</u>

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



Additional Information	-	This product is not regulated as	This product is not regulated as
		a dangerous good when	a dangerous good when
		transported in sizes of ≤5 L or≤5 kg, provided the packagingsmeet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.	transported in sizes of ≤5 L or≤5 kg, provided the packagingsmeet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
		Emergency schedules F-A, SF	Quantity limitation Passenger
		Special provisions 274, 335,	and Cargo Aircraft: 450 L.
		969	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



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 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

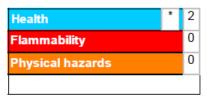


The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

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.)



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.