CD22 (SP104) PAB

Version 1 . 1 Revision Date 09-02-2013 Print Date 09-06-2013

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Commercial Product Name	:	CD22 (SP104) PAB
Mat.-No./ Genisys-No.	:	06391117001
	:	

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended restrictions on use	:	For professional users only.

1.3 Details of the supplier of the safety data sheet

Company	:	Roche Diagnostics Limited Charles Avenue Burgess Hill RH15 9RY West Sussex	
E-mail address	:	-	
Telephone	:	+44 1444 256000	
Telefax	:	+44 1444 256239	
Responsible Department	:		
In case of emergencies: (Roche Diagnostics Ltd.)	:	Health, Safety & Environment - Product Safety / Vigilance -	+44 1444 256500 or +44 7802 260498 +44 1444 256561 or +44 7710 391653
Toxicology 24Hr help-line: Health Advice 24Hr help-line:	:	NPIS: NHS Direct: NHS 24:	+44 844 892 0111 +44 845 4647 +44 8454 242424

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.

Classification (67/548/EEC, 1999/45/EC)

Sensitising	R43: May cause sensitisation by skin contact.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

Precautionary statements : **Prevention:**

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves.

Response:

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

P363 Wash contaminated clothing before reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

55965-84-9 mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1), 55965-84-9

2.3 Other hazards

3. Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1), 55965-84-9	55965-84-9	T; R23/24/25 C; R34 R43 N; R50-R53	Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 Skin Corr. 1B; H314 Skin Sens. 1; H317 Aquatic Acute 1;	>= 0.0015 - < 0.06

			H400 Aquatic Chronic 1; H410	

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Move to fresh air.

: Move to fresh air.
If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing : High volume water jet

media

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	No information available.

5.3 Advice for firefighters

Special protective equipment for firefighters	:	Wear self contained breathing apparatus for fire fighting if necessary.
Further information	:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Use personal protective equipment. Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Treat recovered material as described in the section "Disposal considerations".

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling	:	Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national

regulations.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place.
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : See label, package insert or internal guidelines

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Laboratory chemicals

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Contains no substances with occupational exposure limit values.

Personal protective equipment

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Hand protection :
Protective gloves

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us.
Please observe the instructions regarding permeability and

breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
The suitability for a specific workplace should be discussed with the producers of the protective gloves.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us.Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection	:	impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	yellow
Odour	:	none
pH	:	7.3
Flash point	:	does not flash
Flammability (solid, gas)	:	The product is not flammable.
Density	:	1.021 - 1.025 g/cm3
Water solubility	:	completely miscible
Thermal decomposition	:	Hazardous decomposition products formed under fire conditions.
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

9.2 Other information

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	Reacts with the following substances: Oxidizing agents
	:	Further information: No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid	:	Exposure to light.

10.5 Incompatible materials

Materials to avoid	:	Oxidizing agents

10.6 Hazardous decomposition products

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product

Acute oral toxicity	:	Acute toxicity estimate: > 5,000 mg/kg, Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: 30.36 mg/l, 4 h, vapour, Calculation method
Skin corrosion/irritation	:	May cause skin irritation and/or dermatitis.
Serious eye damage/eye irritation	:	Vapours may cause irritation to the eyes, respiratory system and the skin.
Respiratory or skin sensitisation	:	Causes sensitisation.

Components:

water:

Acute oral toxicity	:	LD50 Oral: > 90,000 mg/kg, rat
Acute inhalation toxicity	:	Acute toxicity estimate: > 30 mg/l, Expert judgement
Acute dermal toxicity	:	Acute toxicity estimate: > 5,001 mg/kg, Expert judgement
STOT - single exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	:	No aspiration toxicity classification

Caseins:

Acute oral toxicity	:	Acute toxicity estimate: > 5,001 mg/kg, Expert judgement
Acute inhalation toxicity	:	Acute toxicity estimate: > 30 mg/l, Expert judgement
Acute dermal toxicity	:	Acute toxicity estimate: > 5,001 mg/kg, Expert judgement
Acute toxicity (other routes of administration)	:	no data available
Skin corrosion/irritation	:	This information is not available.
Serious eye damage/eye irritation	:	This information is not available.
Respiratory or skin sensitisation	:	Result: no data available
STOT - single exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	:	no data available
Further information	:	no data available

Dipotassium hydrogen phosphate 3 hydrate:

Acute oral toxicity	:	Acute toxicity estimate: > 5,001 mg/kg, Expert judgement
Acute inhalation toxicity	:	Acute toxicity estimate: > 30 mg/l, Expert judgement

Acute dermal toxicity	:	Acute toxicity estimate: > 5,001 mg/kg, Expert judgement
Acute toxicity (other routes of administration)	:	no data available
Skin corrosion/irritation	:	This information is not available.
Serious eye damage/eye irritation	:	This information is not available.
Respiratory or skin sensitisation	:	Result: no data available
Germ cell mutagenicity		
Genotoxicity in vitro	:	Ames test, Result: negative
STOT - single exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	:	no data available
Further information	:	no data available

edetic acid:

Acute oral toxicity	:	LD50 Oral: > 2,000 mg/kg, rat
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	no data available
Acute toxicity (other routes of administration)	:	no data available
Skin corrosion/irritation	:	May cause skin irritation in susceptible persons.
Serious eye damage/eye irritation	:	Result: Irritating to eyes., May cause irreversible eye damage.
Respiratory or skin sensitisation	:	Result: no data available
STOT - single exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	:	no data available
Further information	:	no data available

Globulins, blood plasma:

Acute oral toxicity	:	no data available
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	no data available
Acute toxicity (other routes of administration)	:	no data available
Skin corrosion/irritation	:	This information is not available.
Serious eye damage/eye irritation	:	This information is not available.
Respiratory or skin sensitisation	:	Result: no data available
STOT - single exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	:	no data available
Further information	:	no data available

sodium dihydrogenorthophosphate:

Acute oral toxicity	:	LD50: 8,290 mg/kg, rat
Acute inhalation toxicity	:	Acute toxicity estimate: > 30 mg/l, Expert judgement
Acute dermal toxicity	:	LD50: > 7,940 mg/kg, rabbit
Acute toxicity (other routes of administration)	:	no data available

Skin corrosion/irritation	:	This information is not available.
Serious eye damage/eye irritation	:	This information is not available.
Respiratory or skin sensitisation	:	Result: no data available
STOT - single exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	:	no data available
Further information	:	no data available

sodium chloride:

Acute oral toxicity	:	LD50 Oral: 3,000 mg/kg, rat
	:	LD50 Oral: 4,000 mg/kg, mouse
Acute inhalation toxicity	:	Acute toxicity estimate: > 30 mg/l, dust/mist, Expert judgement
Acute dermal toxicity	:	LD50 Dermal: > 10,000 mg/kg, rabbit
Acute toxicity (other routes of administration)	:	no data available
Skin corrosion/irritation	:	This information is not available.
Serious eye damage/eye irritation	:	This information is not available.

sodium azide:

Acute oral toxicity	:	LD50 Oral: 27 mg/kg, rat
	:	LD50 Oral: 27 mg/kg, mouse
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	no data available
Acute toxicity (other routes of administration)	:	no data available
Respiratory or skin sensitisation	:	Result: no data available

STOT - single exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	:	no data available
Further information	:	no data available

sodium hydroxide:

Acute oral toxicity	:	no data available
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	no data available
Acute toxicity (other routes of administration)	:	no data available
Germ cell mutagenicity		
Genotoxicity in vitro	:	Ames test, Result: negative
Reproductive toxicity	:	no data available
STOT - single exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	:	no data available

Brij 35:

Acute oral toxicity	:	LD50 Oral: 1,000 mg/kg, rat
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	no data available
Acute toxicity (other routes of administration)	:	no data available
Skin corrosion/irritation	:	Result: Irritating to skin.

	:	May cause skin irritation in susceptible persons.
Serious eye damage/eye irritation	:	Result: Risk of serious damage to eyes.
	:	May cause irreversible eye damage.
Respiratory or skin sensitisation	:	Result: no data available
STOT - single exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	:	no data available
Further information	:	no data available

Glycols:

Acute oral toxicity	:	no data available
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	no data available
Acute toxicity (other routes of administration)	:	no data available
Skin corrosion/irritation	:	This information is not available.
Serious eye damage/eye irritation	:	This information is not available.
Respiratory or skin sensitisation	:	Result: no data available
STOT - single exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	:	no data available
Further information	:	no data available

Modified alkyl carboxylate:

Acute oral toxicity	:	no data available
Acute inhalation toxicity	:	no data available
Acute dermal toxicity	:	no data available
Acute toxicity (other routes of administration)	:	no data available
Skin corrosion/irritation	:	This information is not available.
Serious eye damage/eye irritation	:	This information is not available.
Respiratory or skin sensitisation	:	Result: no data available
STOT - single exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	:	Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Aspiration toxicity	:	no data available
Further information	:	no data available

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Acute oral toxicity	:	LD50 Oral: 53 mg/kg, rat
Acute inhalation toxicity	:	Acute toxicity estimate: 3 mg/l, vapour, Expert judgement
Acute dermal toxicity	:	Acute toxicity estimate: 300 mg/kg, Expert judgement
Acute toxicity (other routes of administration)	:	no data available
Skin corrosion/irritation	:	Result: Causes burns.
Serious eye damage/eye irritation	:	May cause irreversible eye damage.
Respiratory or skin sensitisation	:	Classification: May cause sensitisation by skin contact. May cause an allergic skin reaction.

Acute effects (Assessment)	:	Toxic if swallowed, in contact with skin or if inhaled
Further information	:	no data available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

water:

Toxicity to fish	:	LC50: > 100 mg/l, 96 h

Ecotoxicology Assessment

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	no data available

Caseins:

Toxicity to fish	:	LC50: > 100 mg/l, 96 h
Toxicity to bacteria	:	no data available

Ecotoxicology Assessment

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	no data available

Dipotassium hydrogen phosphate 3 hydrate:

Toxicity to fish	:	LC0: ca. 900 mg/l, 48 h, Leuciscus idus (Golden orfe)
Toxicity to daphnia and other aquatic invertebrates	:	EC50: > 100 mg/l, 48 h, Daphnia magna (Water flea)
Toxicity to bacteria	:	no data available

Ecotoxicology Assessment

Toxicity Data on Soil	:	Not expected to adsorb on soil.

Other organisms relevant to the environment	:	no data available
edetic acid:		
Toxicity to fish	:	LC50: 41 mg/l, 96 h, Lepomis macrochirus (Bluegill sunfish)
	:	LC50: 59.8 mg/l, 96 h, Cyprinodon sp. (minnow)
Toxicity to algae	:	EC50: 113 mg/l, 48 h, Daphnia magna (Water flea)
Toxicity to bacteria	:	EC50: 28 mg/l, 16 h, Pseudomonas putida
Ecotoxicology Assessment		
Chronic aquatic toxicity	:	Harmful to aquatic life with long lasting effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	no data available
Globulins, blood plasma:		
Toxicity to bacteria	:	no data available
Ecotoxicology Assessment		
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	no data available
sodium dihydrogenorthophosphate:		
Toxicity to fish	:	LC50: > 100 mg/l, 96 h
Toxicity to bacteria	:	no data available
Toxicity to fish (Chronic toxicity)	:	> 1 mg/l
Ecotoxicology Assessment		
Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
sodium chloride:		
Toxicity to fish	:	LC50: 7,650 mg/l, 96 h, Pimephales promelas (fathead minnow)
Toxicity to daphnia and other	:	EC50: 1,000 mg/l, 48 h, Daphnia magna (Water flea)

aquatic invertebrates

Toxicity to bacteria	:	no data available

Ecotoxicology Assessment

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	no data available

sodium azide:

Toxicity to fish	:	LC50: > 1 mg/l, 96 h, Lepomis macrochirus (Bluegill sunfish)
	:	LC50: < 8 mg/l, 96 h, Lepomis macrochirus (Bluegill sunfish)
	:	LC50: 0.7 mg/l, Fish
Toxicity to daphnia and other aquatic invertebrates	:	EC50: 4.2 mg/l, 96 h, Daphnia pulex (Water flea)
Toxicity to algae	:	IC50: 272 mg/l, Scenedesmus quadricauda (Green algae)
Toxicity to bacteria	:	EC50: > 43 mg/l, Photobacterium phosphoreum
	:	EC50: < 66 mg/l, Photobacterium phosphoreum

Ecotoxicology Assessment

Acute aquatic toxicity	:	Very toxic to aquatic life.
Chronic aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	no data available

sodium hydroxide:

Toxicity to fish	:	LC50: 45.4 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout)
	:	LC50: ca. 7 mg/l, Leuciscus idus (Golden orfe)
Toxicity to daphnia and other aquatic invertebrates	:	EC50: 40.38 mg/l, 48 h, Daphnia magna (Water flea)
Toxicity to bacteria	:	no data available

Ecotoxicology Assessment

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.

Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	no data available

Brij 35:

Toxicity to daphnia and other aquatic invertebrates	:	LC50: 6.46 mg/l, 48 h, Daphnia magna (Water flea)
Toxicity to bacteria	:	no data available

Ecotoxicology Assessment

Acute aquatic toxicity	:	Toxic to aquatic life.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	no data available

Glycols:

Toxicity to bacteria	:	no data available

Ecotoxicology Assessment

Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	no data available

Modified alkyl carboxylate:

Toxicity to bacteria	:	no data available

Ecotoxicology Assessment

Chronic aquatic toxicity	:	May cause long lasting harmful effects to aquatic life.
Toxicity Data on Soil	:	Not expected to adsorb on soil.

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Toxicity to fish	:	LC50: 0.36 mg/l, 96 h, Fish
Toxicity to bacteria	:	no data available

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to the environment : no data available

12.2 Persistence and degradability

Components:

water:

Caseins:

Dipotassium hydrogen phosphate 3 hydrate:

edetic acid:

Biodegradability : 10 %, Exposure time: 28 d, OECD Test Guideline 301
: < 20 %, Exposure time: 28 d, OECD Test Guideline 302

Globulins, blood plasma:

sodium dihydrogenorthophosphate:

sodium chloride:

Biodegradability : The methods for determining biodegradability are not applicable to inorganic substances.

sodium azide:

sodium hydroxide:

Brij 35:

Glycols:

Modified alkyl carboxylate:

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

12.3 Bioaccumulative potential

water:

Caseins:

Dipotassium hydrogen phosphate 3 hydrate:

Bioaccumulation : The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.

edetic acid:

Globulins, blood plasma:

sodium dihydrogenorthophosphate:

sodium chloride:

sodium azide:

sodium hydroxide:

Brij 35:

Bioaccumulation : Cyprinus carpio (Carp), Exposure time: 72 h, Bioconcentration factor (BCF): 220

Glycols:

Modified alkyl carboxylate:

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

12.4 Mobility in soil

water:

Caseins:

Dipotassium hydrogen phosphate 3 hydrate:

edetic acid:

Globulins, blood plasma:

sodium dihydrogenorthophosphate:

sodium chloride:

sodium azide:

sodium hydroxide:

Brij 35:

Glycols:

Modified alkyl carboxylate:

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

12.5 Results of PBT and vPvB assessment

water:

Caseins:

Dipotassium hydrogen phosphate 3 hydrate:

edetic acid:

Globulins, blood plasma:

sodium dihydrogenorthophosphate:

sodium chloride:

sodium azide:

sodium hydroxide:

Brij 35:

Glycols:

Modified alkyl carboxylate:

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

12.6 Other adverse effects

water:

Caseins:

Dipotassium hydrogen phosphate 3 hydrate:

edetic acid:

Globulins, blood plasma:

sodium dihydrogenorthophosphate:

sodium chloride:

Additional ecological information : no data available

sodium azide:

sodium hydroxide:

Brij 35:

Additional ecological information : no data available

Glycols:

Modified alkyl carboxylate:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., May cause long lasting harmful effects to aquatic life.

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
Can be disposed as waste water, when in compliance with local regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

DOT

Not dangerous goods

IATA
Not dangerous goods

IMDG
Not dangerous goods

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : No OSHA Hazards

WHMIS Classification : Not Rated

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

CERCLA Reportable Quantity

Components : sodium azide 1000 lbs

SARA 302 Reportable Quantity
Product : Calculated RQ exceeds reasonably attainable upper limit.

Components : sodium azide

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 304 : Calculated RQ exceeds reasonably attainable upper limit.
Components : sodium azide

Clean Air Act

Ozone-Depletion Potential : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

water	90 - 100 %
edetic acid	0.1 - 1 %
sodium azide	0 - 0.1 %
sodium hydroxide	0 - 0.1 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

sodium azide	0 - 0.1 %

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

water	90 - 100 %
Caseins	1 - 5 %
Dipotassium hydrogen phosphate 3 hydrate	1 - 5 %

Clean Water Act
The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

edetic acid
sodium hydroxide
The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:
edetic acid
sodium hydroxide
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

California Prop 65 Components	:	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. Other information

Full text of R-Phrases

R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R34	Causes burns.
R43	May cause sensitisation by skin contact.
R50	Very toxic to aquatic organisms.
R53	May cause long-term adverse effects in the aquatic environment.

Full text of H-Statements

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	Acute toxicity
Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
Skin Corr.	Skin corrosion
Skin Sens.	Skin sensitisation

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.