Cell Conditioning Solution (CC2),1 Liter

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Cell Conditioning Solution (CC2),1 Liter

Mat.-No./ Genisys-No. : 05279798001

Manufacturer or supplier's details

Company	:	Roche Diagnostics Limited Charles Avenue
Address	:	Burgess Hill RH15 9RY West Sussex
Telephone	:	+44 1444 256000
Telefax	:	+44 1444 256239
Emergency telephone number	:	+49(0)621-759-2012 oder +49(0)621-759-4848 oder +49(0)8856-60-2629

Emergency telephone number:

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

Recommended use of the chemical and restrictions on use

Restrictions on use : For professional users only.

SECTION 2. HAZARDS IDENTIFICATION

Physical state	liquid

GHS Classification

Eye irritation : Category 2A

GHS Label element

Hazard pictograms :

Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P280 Wear eye protection/ face protection.

Response:
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

Potential Health Effects

Carcinogenicity:

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Preparation

Hazardous components

Chemical Name	CAS-No.	Concentration [%]
ethane-1,2-diol	107-21-1	>= 5 - < 10
sodium dodecyl sulphate	151-21-3	>= 1 - < 5
Citric acid monohydrate	5949-29-1	>= 1 - < 5
disodium disulphite	7681-57-4	>= 1 - < 5

SECTION 4. 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 skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water.

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.

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

SECTION 5. FIREFIGHTING MEASURES

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

Unsuitable extinguishing media : High volume water jet

Specific hazards during firefighting : No information available.

Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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

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.

Methods and materials for containment and 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.

SECTION 7. HANDLING AND STORAGE

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.

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

Materials to avoid :

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ethane-1,2-diol	107-21-1	C	50 ppm 125 mg/m3	OSHA P0
disodium disulphite	7681-57-4	STEL	5 mg/m3	ACGIH
		TWA	5 mg/m3	NIOSH REL
		TWA	5 mg/m3	OSHA P0

Personal protective equipment

Hand protection
Material : Protective gloves

Remarks : 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.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

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 : When using do not eat or drink.

When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
pH	:	6
Melting point/range	:	no data available
Boiling point/boiling range	:	no data available
Flash point	:	does not flash
Flammability (solid, gas)	:	The product is not flammable.
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Auto-ignition temperature	:	no data available
Thermal decomposition	:	no data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.
Conditions to avoid	:	no data available
Incompatible materials	:	no data available
Hazardous decomposition products	:	no data available

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity	:	Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate : 33.71 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 5,000 mg/kg
Method: Calculation method

Components:

sodium dodecyl sulphate:
Acute oral toxicity : LD50 Oral rat: 1,288 mg/kg

Acute inhalation toxicity : LC50 rat: >3900 mg/m3
Exposure time: 1 h

Acute dermal toxicity : LD50 Dermal rabbit: 580 mg/kg

Citric acid monohydrate:
Acute oral toxicity : LD50 mouse: 5,400 mg/kg

LD50 rat: > 6,730 mg/kg

LD50 rabbit: > 7,000 mg/kg

disodium disulphite:
Acute oral toxicity : LD50 Oral rat: 1,131 mg/kg

Acute dermal toxicity : LD50 Dermal rat: > 2,000 mg/kg

Skin corrosion/irritation

Product:

Remarks: May cause skin irritation and/or dermatitis.

Components:

sodium dodecyl sulphate:
Result: Irritating to skin.

Citric acid monohydrate:
Remarks: Extremely corrosive and destructive to tissue.

disodium disulphite:
Remarks: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Product:

Remarks: May cause irreversible eye damage.

Components:

sodium dodecyl sulphate:
Result: Irritating to eyes.

Citric acid monohydrate:

Result: Irritating to eyes.
Remarks: May cause irreversible eye damage.

disodium disulphite:
Result: Risk of serious damage to eyes.
Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Product:

Remarks: Causes sensitisation.

Components:

Citric acid monohydrate:
Classification: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

no data available

Carcinogenicity

Components:

sodium dodecyl sulphate:

Remarks: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

no data available

STOT - single exposure

Components:

sodium dodecyl sulphate:
Assessment: May cause respiratory irritation.

Citric acid monohydrate:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

disodium disulphite:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Components:

Citric acid monohydrate:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

disodium disulphite:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration toxicity

Components:
Citric acid monohydrate:
no data available

disodium disulphite:
no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

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

Components:
ethane-1,2-diol :

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): > 100 mg/l Exposure time: 96 h LC50 (Carassius auratus (goldfish)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae	:	EC0 (Scenedesmus quadricauda (Green algae)): > 10,000 mg/l Exposure time: 7 d
Toxicity to bacteria	:	EC0 (Pseudomonas putida): > 10,000 mg/l Exposure time: 16 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 **sodium dodecyl sulphate :**	:	no data available
Toxicity to fish	:	LC0 (Leuciscus idus (Golden orfe)): 26 mg/l LC50 (Lepomis macrochirus (Bluegill sunfish)): 4.5 mg/l Exposure time: 96 h LC50 (Oncorhynchus mykiss (rainbow trout)): 3.6 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 6 mg/l Exposure time: 48 h
Toxicity to bacteria	:	EC50 (Photobacterium phosphoreum): 0.46 mg/l Exposure time: 0.5 h
Ecotoxicology Assessment		
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment **Citric acid monohydrate :**	:	no data available
Toxicity to fish	:	LC0 (Carassius auratus (goldfish)): 625 mg/l
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 120 mg/l Exposure time: 72 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 **disodium disulphite :**	:	no data available
Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 150 mg/l Exposure time: 96 h LC50 (Oncorhynchus mykiss (rainbow trout)): < 220 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 89 mg/l Exposure time: 24 h
Toxicity to algae	:	IC50 (Desmodesmus subspicatus (green algae)): 48 mg/l Exposure time: 72 h
Toxicity to bacteria	:	EC50 (Pseudomonas putida): 56 mg/l Exposure time: 17 h
Ecotoxicology Assessment		
Toxicity Data on Soil	:	Not expected to adsorb on soil.

Other organisms relevant to the environment : no data available

Persistence and degradability

Components:
ethane-1,2-diol :

Biodegradability : Biodegradation: 100 %
Exposure time: 28 d
Method: OECD Test Guideline 302

sodium dodecyl sulphate :

Biodegradability : Biodegradation: 90 %
Exposure time: 28 d
Method: OECD Test Guideline 301
Remarks: Readily biodegradable, according to appropriate OECD test.

Citric acid monohydrate :

Biodegradability : Remarks: Expected to be ultimately biodegradable

Bioaccumulative potential

Components:
ethane-1,2-diol :
Partition coefficient: n-octanol/water : log Pow: -1.36
sodium dodecyl sulphate :
Bioaccumulation : Species: Cyprinus carpio (Carp)
Exposure time: 3 d
Bioconcentration factor (BCF): 3.9 - 5.3

Partition coefficient: n-octanol/water : log Pow: 1.6
Citric acid monohydrate :
Partition coefficient: n-octanol/water : log Pow: 1.72
disodium disulphite :
Partition coefficient: n-octanol/water : log Pow: -3.7 (25 °C)

Mobility in soil

no data available

Other adverse effects

no data available

Product:

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks 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).

Components:
sodium dodecyl sulphate :

Additional ecological information : no data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

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

International regulation

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR
Not regulated as a dangerous good

Special precautions for user

Remarks : Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : Harmful by ingestion., Toxic by skin absorption, Moderate skin irritant, Severe eye irritant, Moderate respiratory irritant

WHMIS Classification : D1B: Toxic Material Causing Immediate and Serious Toxic Effects
Toxic Material Causing Other Toxic Effects

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

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ethylene Glykol	107-21-1	5000	

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

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:
ethane-1,2-diol 107-21-1 7 %

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):
ethane-1,2-diol 107-21-1 7 %
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).
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):
ethane-1,2-diol 107-21-1 7 %

Clean Water Act
This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know

ethane-1,2-diol	107-21-1	5 - 10 %
disodium disulphite	7681-57-4	1 - 5 %

Pennsylvania Right To Know

water	7732-18-5	70 - 90 %
ethane-1,2-diol	107-21-1	5 - 10 %
disodium disulphite	7681-57-4	1 - 5 %

New Jersey Right To Know

water	7732-18-5	70 - 90 %
ethane-1,2-diol	107-21-1	5 - 10 %
sodium dodecyl sulphate	151-21-3	1 - 5 %
Citric acid monohydrate	5949-29-1	1 - 5 %
disodium disulphite	7681-57-4	1 - 5 %

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

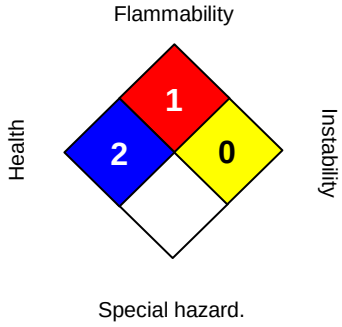
Inventories

AICS (Australia), DSL (Canada), IECSC (China), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

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.