

Hitergent

Version
1.10

Revision Date:
30.06.2015

Date of last issue: 13.02.2015
Date of first issue: 29.06.2012

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Commercial Product Name : Hitergent
Mat.-No./ Genisys-No. : 11555448216

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

Recommended restrictions : For professional users only.
on use

1.3 Details of the supplier of the safety data sheet

Company : Roche Diagnostics Deutschland GmbH
-
Sandhoferstrasse 116
68305 Mannheim
E-mail address : mannheim.umweltschutz@roche.com
Telephone : +496217590
Telefax : +496217592890
Responsible Department : +49(0)621-759-2012+49(0)621-759-4848+49(0)8856-60-2629

1.4 Emergency telephone number

In case of emergencies: : Central Works Security +49(0)621-759-2203
Roche Diagnostics GmbH

Centre for detoxification: : Mainz +49(0)6131-19240
Munich +49(0)89-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section Label elements contains the resulting labelling for the kit.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms : 

Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ va-

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P273 pours/ spray.
Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/
eye protection/ face protection.

Response:

P303 + P361 + P533 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

See SECTION 3

SECTION 3: Composition/information on ingredients

R1 (B/C)

Classification (REGULATION (EC) No 1272/2008)

Skin corrosion, Category 1A H314: Causes severe skin burns and eye damage.

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

Specific target organ toxicity - single exposure, Category 3, Respiratory system H335: May cause respiratory irritation.

Chronic aquatic toxicity, Category 2 H411: Toxic to aquatic life with long lasting effects.

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

Corrosive R35: Causes severe burns.

Sensitising R43: May cause sensitisation by skin contact.

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4 225-208-0	Xn; R22 R43	Acute Tox. 4; H302 Skin Sens. 1; H317	>= 10 - < 20
2-aminoethanol	141-43-5 205-483-3 01- 2119899245-24	C; R34 Xn; R20/21/22	Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Corr. 1B; H314 STOT SE 3; H335	>= 5 - < 10

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			Aquatic Chronic 3; H412	
Nonidet P-40	9016-45-9 500-024-6	Xi; Xi; R41 Xn; Xn; R22 N; R50	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 5 - < 10
sodium hydroxide	1310-73-2 215-185-5	C; R35	Met. Corr. 1; H290 Skin Corr. 1A; H314	>= 1 - < 2

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : 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 : Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
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 induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.
Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.

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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 media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material 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".

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling : Avoid formation of aerosol.
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.
Provide sufficient air exchange and/or exhaust in work rooms.
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.
To prevent leaks or spillages from spreading, provide a suitable liquid retention system.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Hygiene measures : When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage conditions : See label, package insert or internal guidelines
- Storage class (TRGS 510) : 8B, Non-combustible, corrosive hazardous materials
- 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

8.1 Control parameters

R1 (B/C)

Occupational Exposure Limits

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Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
2-aminoethanol	141-43-5	TWA	1 ppm 2,5 mg/m ³	2006/15/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	3 ppm 7,6 mg/m ³	2006/15/EC
Further information	Identifies the possibility of significant uptake through the skin, Indicative			
		AGW (Vapour and aerosols)	2 ppm 5,1 mg/m ³	DE TRGS 900
Peak-limit: excursion factor (category)	2;(I)			
Further information	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission)., European Union (The EU has established a limit value: deviations in value and peak limit are possible), Sum of vapor and aerosols., Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child, Substance sensitizing through the skin			

8.2 Exposure controls

Engineering measures

No data available

Personal protective equipment

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

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.

Skin and body protection : impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In the case of vapour formation use a respirator with an approved filter.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

R1 (B/C)

Appearance	: liquid
Colour	: colourless
Odour	: No data available
Odour Threshold	: No data available
pH	: 13,0 - 13,5
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: does not flash
Evaporation rate	: No data available
Flammability (solid, gas)	: The product is not flammable., Does not sustain combustion.
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: No data available
Solubility(ies)	
Water solubility	: completely miscible
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

9.2 Other information

R1 (B/C)

No data available

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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 : No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

R1 (B/C)

Acute toxicity

Not classified based on available information.

Components:

2-aminoethanol:

Acute oral toxicity : LD50 Oral (Rat): 1.720 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 1.010 mg/kg

Nonidet P-40:

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

Skin corrosion/irritation

Causes severe burns.

Components:

2-aminoethanol:

Species: Rabbit

Remarks: Extremely corrosive and destructive to tissue.

Nonidet P-40:

Remarks: rabbit skin
slight irritation

sodium hydroxide:

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Remarks: Extremely corrosive and destructive to tissue.

Serious eye damage/eye irritation

Causes serious eye damage.

Components:

2-aminoethanol:

Species: Rabbit

Remarks: May cause irreversible eye damage.

Nonidet P-40:

Result: Risk of serious damage to eyes.

sodium hydroxide:

Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Components:

2-aminoethanol:

Genotoxicity in vitro : Test Type: Ames test
Remarks: In vitro tests did not show mutagenic effects

Germ cell mutagenicity- Assessment : In vivo tests did not show mutagenic effects

sodium hydroxide:

Genotoxicity in vitro : Test Type: Ames test
Result: negative

Carcinogenicity

Not classified based on available information.

Components:

Nonidet P-40:

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

Not classified based on available information.

Components:

Nonidet P-40:

Effects on fertility :
Remarks: No data available

sodium hydroxide:

Effects on fertility :
Remarks: No data available

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STOT - single exposure

May cause respiratory irritation.

Components:

2-aminoethanol:

Exposure routes: Inhalation

Assessment: May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Components:

2-aminoethanol:

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

Aspiration toxicity

Not classified based on available information.

Components:

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

No data available

2-aminoethanol:

No data available

SECTION 12: Ecological information

12.1 Toxicity

R1 (B/C)

Components:

2-aminoethanol:

- Toxicity to fish : LC50 (Carassius auratus (goldfish)): 170 mg/l
Exposure time: 96 h
- Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 2,5 mg/l
Exposure time: 72 h
- 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

Nonidet P-40:

- Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 1,0 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 12,2 - 17,0 mg/l

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aquatic invertebrates Exposure time: 48 h

Ecotoxicology Assessment
Acute aquatic toxicity : Very toxic to aquatic life.

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 (Oncorhynchus mykiss (rainbow trout)): 45,4 mg/l
Exposure time: 96 h

LC50 (Leuciscus idus (Golden orfe)): ca. 7 mg/l

Toxicity to daphnia and other
aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 40,38 mg/l
Exposure time: 48 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

12.2 Persistence and degradability

R1 (B/C)

Components:

2-aminoethanol:

Biodegradability : Biodegradation: 90 - 100 %
Exposure time: 28 d
Method: OECD Test Guideline 301
Remarks: Readily biodegradable, according to appropriate
OECD test.

Biochemical Oxygen De-
mand (BOD) : 800 mg/g
Incubation time: 5 d

ThOD : 1.310 mg/g

Nonidet P-40:

Biodegradability : Biodegradation: 86 %
Method: Modified Sturm Test

Remarks: Expected to be biodegradable

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12.3 Bioaccumulative potential

R1 (B/C)

Components:

2-aminoethanol:

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <= 4).

Partition coefficient: n-octanol/water : log Pow: -1,91
Method: OECD Test Guideline 107

Nonidet P-40:

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: 3,7 (25 °C)

12.4 Mobility in soil

R1 (B/C)

No data available

12.5 Results of PBT and vPvB assessment

R1 (B/C)

Not relevant

12.6 Other adverse effects

R1 (B/C)

Components:

Nonidet P-40:

Additional ecological information : Remarks: Very toxic to aquatic organisms.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.
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.

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SECTION 14: Transport information

14.1 UN number

ADR : UN 2491
IMDG : UN 2491
IATA : UN 2491

14.2 UN proper shipping name

ADR : Ethanolamine solution
IMDG : Ethanolamine solution
IATA : Ethanolamine solution

14.3 Transport hazard class(es)

ADR : 8
IMDG : 8
IATA : 8

14.4 Packing group

ADR
Packing group : III
Classification Code : C7
Labels : 8
Tunnel restriction code : E

IMDG
Packing group : III
Labels : 8
EmS Code : F-A, S-B

IATA
Packing instruction (cargo aircraft) : 856
Packing instruction (passenger aircraft) : 852
Packing instruction (LQ) : Y841
Packing group : III
Labels : Corrosives

14.5 Environmental hazards

ADR
Environmentally hazardous : no

IMDG
Marine pollutant : no

14.6 Special precautions for user

Remarks : No data available

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

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Remarks : Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances
Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E2	ENVIRONMENTAL HAZARDS	Quantity 1 200 t	Quantity 2 500 t
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Water contaminating class (Germany) : WGK 2 water endangering

R1 (B/C)

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms : 

Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



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Hazardous components which must be listed on the label:

4719-04-4	2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol
141-43-5	2-aminoethanol

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

SECTION 16: Other information

Full text of R-Phrases

R20/21/22	: Harmful by inhalation, in contact with skin and if swallowed.
R22	: Harmful if swallowed.
R34	: Causes burns.
R35	: Causes severe burns.
R41	: Risk of serious damage to eyes.
R43	: May cause sensitisation by skin contact.
R50	: Very toxic to aquatic organisms.

Full text of H-Statements

H290	: May be corrosive to metals.
H302	: Harmful if swallowed.
H312	: Harmful in contact with skin.
H314	: Causes severe skin burns and eye damage.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H332	: Harmful if inhaled.
H335	: May cause respiratory irritation.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
H412	: Harmful 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
Eye Dam.	: Serious eye damage
Met. Corr.	: Corrosive to metals
Skin Corr.	: Skin corrosion
Skin Sens.	: Skin sensitisation
STOT SE	: Specific target organ toxicity - single exposure

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.

DE / EN

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according to Regulation (EC) No. 1907/2006



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