

Section 1 Identification of the Substance/mixture and of the Company/undertaking

1.1 Product Identifier

Product Name DxH 500 Series Lyse

Part Number B36846

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

Product Use For In Vitro Diagnostic Use. See product literature for details.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Beckman Coulter Ireland Inc.
Lismeehan
O'Callaghan's Mills
Co. Clare
Ireland
Tel: 353 (0)65 6831100

e-mail address

SDSNT@beckman.com

Further information Contact:

Customer support Unit, Beckman Coulter Ireland Inc.

Technical Service Department Tel. +001-800-854-3633 (PST)

E-mail CC_Support.ie@beckman.com

1.4 Emergency telephone number

Telephone number (24H) Chemtrec Emergency Tel No. U.S.A. 800-424-9300, International (001) 703-527-3887

Tel +353 (0)65 683 1170; 08:00 - 16:30 hrs Mon-Thur, 08:00 - 15:30 hrs Fri (GMT) Tel +001-800-223-0130 (PST)

Distributor and Emergency Phone No.

Refer to attached list, Document ID: [472050](#), for local distributor and emergency phone numbers.

Section 2 Hazards Identification

2.1 Classification of substance or mixture

Product Description Mixture

Light yellow; Clear; Liquid; Slight odor

Classification according to EC 1272/2008 (CLP/GHS)

Not classified as hazardous per EC 1272/2008 (CLP/GHS)

Classification according to EC Directives 1999/45/EC and 67/548/EEC

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)

Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS

Not classified as hazardous per US-OSHA HCS 2012 and UN GHS

Section 2 Hazards Identification (Continued)

2.2 Label Elements

According to EC 1272/2008 CLP/GHS

Hazardous Ingredients

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC# 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC# 220-239-6](3:1)

Glutaraldehyde

Pictogram

None

Signal Word

None

Hazard Statements

EUH208 May produce an allergic reaction.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

See Section 11 Toxicological Information for more detailed health information.

Section 3 Composition and Information on Ingredients

3.2 Mixtures

Hazardous Ingredients:		Hazard Classification of Pure Ingredients			
Chemical Name	% by wt.	EU-67/548/EEC	EU 1272/2008 CLP/GHS	GHS	
Glutaraldehyde CAS # 111-30-8 EINECS # 203-856-5 Index # 605-022-00-X	< 0.1	T;R23/25-34-42/43 N;R50	Acute Tox. Inhal. 2 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 2 M-Factor=1 Resp. Sens. 1 STOT SE 3 Skin Corr. 1B Skin Sens. 1A H301; H314; H317; H330; H334; H335; H400; H411	Acute Tox. Inhal. 2 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 2 Resp. Sens. 1 STOT SE 3 Skin Corr. 1B Skin Sens. 1A H301; H314; H317; H330; H334; H335; H400; H411	15, 8
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC# 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC# 220-239-6](3:1) CAS # 55965-84-9 EINECS # Not available Index # Not available	< 0.0015	T;R23/24/25-34-43 N;R50/53	Acute Tox. Dermal 3 Acute Tox. Inhal. 3 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 1 Skin Corr. 1B Skin Sens. 1 H301; H311; H314; H317; H331; H400; H410	Acute Tox. Dermal 3 Acute Tox. Inhal. 3 Acute Tox. Oral 3 Aquatic Acute 1 Aquatic Longterm 1 Skin Corr. 1B Skin Sens. 1 H301; H311; H314; H317; H331; H400; H410	15, 8

Section 3 Composition and Information on Ingredients (Continued)

- 15 - May produce an allergic reaction.
8 - Present at concentration below the cut-off limits.

See section 8 for available Occupational exposure limits
See Section 15 for additional regulatory information
See Section 16 for hazard class, hazard statements and risk phrase description

Section 4 First Aid Measures

4.1 Description of first aid measures

- Inhalation** If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration by trained personnel and obtain medical attention immediately.
- Eye Contact** If product enters eyes, rinse eyes gently with water as a precaution.
- Skin Contact** In case of skin contact, rinse with water as a precaution.
- Ingestion** If product is ingested, rinse mouth with water. If irritation or discomfort occurs, obtain medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

This product contains a sensitizing substance below concentration limit, may produce an allergic reaction in some people. Refer Section 3.

4.3 Indication of any immediate medical attention and special treatment needed

No specific medical attention or treatment required.

Section 5 Fire Fighting Measures

- 5.1 Extinguishing Media** In case of fire use carbon dioxide (CO₂), dry chemical, water spray or foam. For large fires use extinguishing media suitable for surrounding fire.

5.2 Special hazards arising from the substance or mixture Special Fire and Explosion Hazards

No special hazards determined.

Hazardous Combustion Products

No combustion products posing significant hazards are expected from this product (an aqueous solution).

5.3 Advice for fire fighters

Protective Equipment

Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

5.4 Additional information

No further relevant information available.

Section 6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions No special precautions are necessary. Use good laboratory procedures.
Wear protective gloves, protective clothing and eye/face protection.

6.2 Environmental Precautions Contain spill to prevent migration.
Do not allow the undiluted product to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up

Spill and Leak Procedures Absorb spilled material with an appropriate inert, non-flammable absorbent and dispose according to local regulations.

6.4 Reference to other sections Refer sections 8 and 13.

Section 7 Handling and Storage

7.1 Precautions for safe handling No special precautions are necessary; use good laboratory procedures.

7.2 Conditions for safe storage, including any incompatibilities

To maintain product quality, store according to the instructions in the product labeling.
Store away from strong acids, strong bases, strong oxidizers and incompatible materials (section 10).

7.3 Specific end uses No further relevant information available.

Section 8 Exposure Controls and Personal Protection

8.1 Control parameters

Exposure Limits

US OSHA None established

ACGIH

Glutaraldehyde
CAS # 111-30-8 0.05 ppm Ceiling (activated and inactivated)

DFG MAK

Glutaraldehyde
CAS # 111-30-8 0.1 ppm Peak; 0.42 mg/m³ Peak; 0.05 ppm TWA MAK (can occur as vapor and aerosol at the same time); 0.21 mg/m³ TWA MAK (can occur as vapor and aerosol at the same time)

Ireland

Glutaraldehyde
CAS # 111-30-8 0.05 ppm STEL; 0.2 mg/m³ STEL

IOELVs None established

NIOSH None established

Japan None established

Section 8 Exposure Controls and Personal Protection (Continued)

8.2 Exposure controls

Engineering Controls

No special engineering controls are required. Use with good general ventilation.

Eye Protection

Safety glasses or chemical goggles should be worn to prevent eye contact.

Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.

Skin Protection

Wear protective clothing and impervious gloves, as appropriate.

Respiratory Protection

Under normal conditions, the use of this product should not require respiratory protection.

Section 9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid	Specific Gravity (Water=1.0)	1.03
Color	Light yellow	Solubility	
Transparency	Clear	Water	Miscible
Odor	Slight odor	Organic	Not determined
pH	6.5	Partition coefficient: n-octanol/water	Not determined
Freezing Point	Not determined	Auto-ignition Temp.	Not applicable
Boiling Point	Not determined	Decomposition Temperature	Not determined
Flash Point	Not applicable	Percent Volatiles	Not applicable
Evaporation Rate	Not determined	Vapor Pressure	Not determined
Flammability (Solid, Gas)	Not applicable	Viscosity	Not determined
Flammability Limits	Not applicable	Explosive Properties	Not applicable
Vapor Density	Not determined	Oxidizing Properties	Not applicable
Odor Threshold	Glutaraldehyde 0.00037 ppm odor threshold value (detectable)		

9.2 Other Information

No further relevant information available.

Section 10 Stability and Reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical Stability

The product is stable in accordance with recommended storage conditions.

10.3 Possibility of hazardous reactions

No further relevant information available.

Section 10 Stability and Reactivity (Continued)

- 10.4 Conditions to Avoid** To maintain product performance keep away from strong acids, strong bases, strong oxidizers.
Avoid exposure to heat and direct sunlight.
- 10.5 Incompatible materials** No further relevant information available.
- 10.6 Hazardous Decomposition Products**
No decomposition products posing significant hazards would be expected from this product (an aqueous solution).

Section 11 Toxicological Information

11.1 Information on toxicological effects

Toxicity Data for Hazardous Ingredients

Glutaraldehyde
CAS # 111-30-8
Inhalation LC50 Rat 24 - 5000 ppm 4 h; Dermal LD50 Rabbit 560 µL/kg; Oral LD50 Rat 252 mg/kg

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC# 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC# 220-239-6](3:1)
CAS # 55965-84-9
Oral LD50 Rat 53 mg/kg

- Primary Routes of Exposure** Eye contact, ingestion, inhalation, and skin contact.
- Skin Corrosion/Irritation** Not classified based on available data.
- Serious eye damage/eye irritation** Not classified based on available data.
- Respiratory/skin sensitization** This product contains a sensitizing substance below concentration limit, may produce an allergic reaction in some people. Refer Section 3.
- Carcinogenicity** This product does not contain a reportable concentration ($\geq 0.1\%$) of any ingredient listed as carcinogen by ACGIH, IARC, NTP, OSHA or 1272/2008 EC regulation.
- Germ cell mutagenicity** Not classified based on available data.
- Reproductive Toxicity** Not classified based on available data.
- Specific target organ toxicity – single exposure**
Not classified based on available data.
- Specific target organ toxicity – repeated exposure**
Not classified based on available data.
- Aspiration hazard** Not classified based on available data.
- Other Information** No further relevant information available.

Section 12 Ecological Information

12.1 Ecotoxicity

Fresh Water Species

Glutaraldehyde
CAS # 111-30-8

96 h LC50 *Lepomis macrochirus*: 7.8 - 22 mg/L [static]; 96 h LC50 *Oncorhynchus mykiss*: 2.6 - 4.8 mg/L [flow-through]; 96 h LC50 *Oncorhynchus mykiss*: 7.8 - 13 mg/L [static]; 96 h LC50 *Pimephales promelas*: 5.4 mg/L [static]

Microtox

No information available.

Water Flea

Glutaraldehyde
CAS # 111-30-8

48 h EC50 *Daphnia magna*: 14 mg/L; 48 h EC50 *Daphnia magna*: 0.56 - 1.0 mg/L [Static]

Fresh Water Algae

Glutaraldehyde
CAS # 111-30-8

72 h EC50 *Desmodesmus subspicatus*: 0.61 mg/L; 96 h EC50 *Desmodesmus subspicatus*: 0.84 mg/L

12.2 Persistence and degradability Not determined for the product.

12.3 Bioaccumulation Not determined for the product.

12.4 Mobility in soil Not determined for the product.

12.5 Results of PBT and vPvB assessment

Not determined for the product. PBT: Not applicable, vPvB: Not applicable.

12.6 Other Adverse Effects

This product contains environmentally hazardous substance below the cutoff level. Refer section 3 for ingredient information. Do not allow undiluted product to enter sewer/surface or ground water.

Section 13 Disposal Considerations

13.1 Waste treatment methods

Product Waste Disposal

Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.

13.2 Additional information

Suggested European waste catalogue 18 01 07 - chemicals other than those mentioned in 18 01 06. Dispose in accordance with national, state and local waste regulations.

Section 14 Transport Information

Transportation of this product is not regulated under ICAO, IATA DGR, IMDG, US DOT, European ADR and RID or Canadian TDG.

14.1 UN/ID Number: Not regulated for transportation

14.2 Shipping Name: Not regulated for transportation

14.3 Hazard Class: Not regulated for transportation

14.4 Packing Group: Not regulated for transportation

14.5 Environmental Hazards: Not regulated for transportation

14.6 Special Precautions for user: None

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

Section 15 Regulatory Information

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

US Federal and State Regulations

SARA 313

1,4-Dioxane is subject to reporting requirements of Section 313, Title III of SARA. 0.1 % de minimis concentration

Methanol is subject to reporting requirements of Section 313, Title III of SARA. 1.0 % de minimis concentration

Ethylene Oxide is subject to reporting requirements of Section 313, Title III of SARA. 0.1 % de minimis concentration

Acetaldehyde is subject to reporting requirements of Section 313, Title III of SARA. 0.1 % de minimis concentration

CERCLA RG's, 40 CFR 302.4

1,4-Dioxane is listed.

Methanol is listed.

Ethylene Oxide is listed.

Sodium Phosphate, Dibasic Decahydrate is listed.

Acetaldehyde is listed.

California Proposition 65

1,4-Dioxane has been identified by the State of California to cause cancer. The State of California has adopted a regulation which requires a warning be given to individual who may be exposed to chemicals identified by the State to cause cancer or reproductive harm.

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

Methanol has been identified by the State of California to cause reproductive harm. The State of California has adopted a regulation which requires a warning be given to individual who may be exposed to chemicals identified by the State to cause cancer or reproductive harm.

WARNING: This product contains a chemical known to the State of California to cause reproductive harm.

Ethylene Oxide has been identified by the State of California to cause cancer and reproductive harm. The State of California has adopted a regulation which requires a warning be given to individual who may be exposed to chemicals identified by the State to cause cancer or reproductive harm.

WARNING: This product contains a chemical known to the State of California to cause cancer and reproductive harm.

Acetaldehyde has been identified by the State of California to cause cancer. The State of California has adopted a regulation which requires a warning be given to individual who may be exposed to chemicals identified by the State to cause cancer or reproductive harm.

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

Section 15 Regulatory Information (Continued)

Massachusetts MSL

1,4-Dioxane is listed.
Magnesium Nitrate is listed.
Methanol is listed.
Ethylene Oxide is listed.
Glutaraldehyde is listed.
Acetaldehyde is listed.

New Jersey Dept. of Health RTK List

1,4-Dioxane is listed.
Magnesium Nitrate is listed.
Methanol is listed.
Ethylene Oxide is listed.
Glutaraldehyde is listed.
Acetaldehyde is listed.

Pennsylvania RTK

1,4-Dioxane is listed.
Magnesium Nitrate is listed.
Methanol is listed.
Ethylene Oxide is listed.
Glutaraldehyde is listed.
Sodium Phosphate, Dibasic Decahydrate is listed.
Acetaldehyde is listed.

EU Regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

Water Hazard Class (Germany) WGK 1, low water endangering

REACH 1907/2006 EC - Annex XIV - list of substances subject to authorization.

No ingredients listed.

According to EC Directives (1999/45/EC and 67/548 EEC)

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)

Canada

This product is exempt from WHMIS label and SDS requirements.

PIN Not applicable

Ingredients on Ingredient Disclosure List

1,4-Dioxane
Methanol
Ethylene Oxide
Glutaraldehyde
Acetaldehyde

Ingredients with unknown toxicological properties

Product is exempt

15.2 Chemical Safety Assessment A Chemical Safety Assessment has not been carried out.

Some hazardous ingredients listed in Section 15 are below OSHA's and WHMIS' 1.0% w/w (0.1% for carcinogens) or EU's ingredient specific concentrations required for reporting in Section 3.

Section 16 Other Information

Beckman Coulter Safety Rating	Flammability: 0 Health: 1 Reactivity with Water: 0 Physical Contact: 1	Code 0=None 1=Slight 2=Caution 3=Severe
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Revision Changes

Changed manufacturer address.

Hazard Class, hazard statements and risk phrase description from section 3

N - Dangerous for the environment
T - Toxic
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R34 Causes burns.
R43 May cause sensitization by skin contact.
R23/25 Toxic by inhalation and if swallowed.
R42/43 May cause sensitization by inhalation and skin contact.
R50 Very toxic to aquatic organisms.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Aquatic Acute 1 - Aquatic Hazard Acute, Category 1
Acute Tox. Dermal 3 - Acute Toxicity Dermal, Category 3
Acute Tox. Inhal. 2 - Acute Toxicity Inhalation, Category 2
Acute Tox. Inhal. 3 - Acute Toxicity Inhalation, Category 3
Acute Tox. Oral 3 - Acute Toxicity Oral, Category 3
Aquatic Longterm 1 - Aquatic Hazard Long term, Category 1
Aquatic Longterm 2 - Aquatic Hazard Long term, Category 2
Resp. Sens. 1 - Respiratory Sensitization Category 1
Skin Corr. 1B - Skin Corrosion Category 1B
Skin Sens. 1 - Skin Sensitization Category 1
Skin Sens. 1A - Skin Sensitization Category 1A
STOT SE 3 - Specific Target Organ Toxicity Single Exposure Category 3
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.
H330 - Fatal if inhaled.
H331 - Toxic if inhaled.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 - May cause respiratory irritation.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.
H411 - Toxic to aquatic life with long lasting effects.

Section 16 Other Information (Continued)

Abbreviations and Acronyms

ACGIH - American Conference of Governmental Industrial Hygienists
ADR and RID - European Agreement Concerning The International Carriage Of Dangerous Goods By Road and Rail
CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act
CLP - Classification, Labeling and Packaging
DFGMAK - Republic Germany's maximum exposure limit
GHS - Globally Harmonized System
HCS - Hazard Communication Standard
IARC - International Agency for Research on Cancer
IATA DGR - International Air Transport Association Dangerous Goods Regulation
ICAO - International Civil Aviation Organization
IMDG - International Maritime Dangerous Goods
IOELVs - European Unions' Indicative Occupational Exposure Limit Values
NIOSH - National Institute for Occupational Safety and Health
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration
PBT - Persistent bioaccumulative and toxic substances
SARA - Superfund Amendments and Reauthorization Act
TDG - Canadian Transportation Of Dangerous Goods Regulations.
UN GHS - United Nations Globally Harmonized System
US DOT - United States Department of Transportation
WHMIS - Workplace Hazardous Material Information System
vPvB - Very persistent and very bioaccumulative substances

For further information, please contact your local Beckman Coulter, Inc. representative.

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