

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

1.1 Product identifier

Trade name: Hitergent / Hitergent H917
As part of the kits 1 8670 XX XX XXX
(The positions X code different packages.)

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

General use: Laboratory chemicals, Cleaning agent
For professional use only.

1.3 Details of the supplier of the safety data sheet

Company name: DiaSys Diagnostic Systems GmbH
Street/POB-No.: Alte Strasse 9
Postal Code, city: DE-65558 Holzheim
WWW: <http://www.diasys.de>
E-mail: mail@diasys.de
Telephone: +49 (0) 6432-9146-0
Telefax: +49 (0) 6432-9146-32
Department responsible for information:
Corporate headquarters, Telephone: +49 (0) 6432-9146-0, Email: mail@diasys.de

1.4 Emergency telephone number

Infraserv, Telephone: +49 (0) 69-305-6418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Met. Corr. 1; H290 May be corrosive to metals.
Skin Corr. 1B; H314 Causes severe skin burns and eye damage.
STOT SE 3; H335 May cause respiratory irritation.

2.2 Label elements

Labelling (CLP)



Signal word: **Danger**

| | | |
|---------------------------|----------------|--|
| Hazard statements: | H290 | May be corrosive to metals. |
| | H314 | Causes severe skin burns and eye damage. |
| | H335 | May cause respiratory irritation. |
| Precautionary statements: | P260 | Do not breathe mist/vapours/spray. |
| | P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| | P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. |
| | P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | P310 | Immediately call a POISON CENTER/doctor. |
| | P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |

Special labelling

Text for labelling: Contains: Ethanolamine, Sodium hydroxide.

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

| CAS No. | Designation | PBT/vPvB | ED Human | ED Environment |
|-----------|---------------------------------|----------|----------|----------------|
| 9016-45-9 | Nonylphenol, ethoxylated (SVHC) | | | List I |

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Aqueous solution

Hazardous ingredients:

| Identifiers | Designation Classification | Content |
|--|---|---------|
| EC No. 205-483-3 CAS 141-43-5 | Ethanolamine Acute Tox. 4; H302. Acute Tox. 4; H312. Acute Tox. 4; H332. Skin Corr. 1B; H314. STOT SE 3; H335. Aquatic Chronic 3; H412. Specific concentration limits (SCL): STOT SE 3; H335: C ≥ 5 % | < 6 % |
| REACH 01-2119457892-27-xxxx EC No. 215-185-5 CAS 1310-73-2 | Sodium hydroxide Met. Corr. 1; H290. Skin Corr. 1A; H314. Specific concentration limits (SCL): Skin Corr. 1A; H314: C ≥ 5 % / Skin Corr. 1B; H314: 2 % ≤ C < 5 % / Skin Irrit. 2; H315: 0,5 % ≤ C < 2 % / Eye Irrit. 2; H319: 0,5 % ≤ C < 2 % | < 5 % |
| EC No. 500-024-6 CAS 9016-45-9 | Nonylphenol, ethoxylated (SVHC) Acute Tox. 4; H302. Eye Dam. 1; H318. Aquatic Acute 1; H400. | < 2 % |

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

| | |
|-------------------------|---|
| General information: | First aider: Pay attention to self-protection! If medical advice is needed, have product container or label at hand. Take off immediately all contaminated clothing and wash it before reuse. |
| In case of inhalation: | Move victim to fresh air. In case of breathing difficulties administer oxygen. If breathing has stopped, give artificial respiration immediately. Seek medical attention. |
| Following skin contact: | Wash with plenty of water/soap. In case of skin reactions, consult a physician. |
| After eye contact: | Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Seek the attention of an ophthalmologist immediately. |
| After swallowing: | Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Immediately get medical attention. |

4.2 Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. May cause respiratory irritation.
Burns of mucous membranes, cough and shortage of breath, collapse, death.
Danger of loss of sight!

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

5.2 Special hazards arising from the substance or mixture

Fires in the immediate vicinity may cause the development of dangerous vapours.
In case of fire may be liberated: nitrogen oxides (NO_x), Chlorine compounds, carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Use a breathing apparatus independent of the ambient air (isolated apparatus) and a full protection outfit (suit) against chemicals.

Additional information:

Use fine water spray to cool endangered containers.
Do not allow fire water to penetrate into surface or ground water.
Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe mist/vapours/spray. Avoid contact with skin, eyes, and clothing.
Wear appropriate protective equipment. Take off immediately all contaminated clothing and wash it before reuse.
Keep unprotected people away. If possible, eliminate leakage.

6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains.
If necessary notify appropriate authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Final cleaning.
Never return spills in original containers for re-use.

Additional information:

Special danger of slipping by leaking/spilling product.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Avoid breathing mist/vapours.
Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Take off immediately all contaminated clothing and wash it before reuse.
Work place should be equipped with a shower and an eye rinsing apparatus.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep containers tightly closed and at a temperature between 15 °C and 25 °C.
Keep container in a well-ventilated place.
Store containers in upright position. If possible, eliminate leakage.
Protect from heat and direct sunlight.
Unsuitable materials: Aluminium, zinc, tin.

Hints on joint storage: Do not store together with acids, ammonia, metals or oxidizing agents.
Keep away from food, drink and animal feedingstuffs.

Storage class: 8B = Non-combustible corrosive substances

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

| CAS No. | Designation | Type | Limit value |
|----------|--------------|----------------------------|---|
| 141-43-5 | Ethanolamine | Europe: IOELV: STEL | 7,6 mg/m ³ ; 3 ppm (may be absorbed through the skin) |
| | | Europe: IOELV: TWA | 2,5 mg/m ³ ; 1 ppm (may be absorbed through the skin) |
| | | Germany: TRGS 900 Kurzzeit | 0,5 mg/m ³ ; 0,2 ppm (Aerosol and vapour, may be absorbed through the skin) |
| | | Germany: TRGS 900 Langzeit | 0,5 mg/m ³ ; 0,2 ppm (Aerosol and vapour, may be absorbed through the skin) |

8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

Personal protection equipment

Occupational exposure controls

Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded.
Use filter type A (= against vapours of organic substances) according to EN 14387.

Hand protection: Protective gloves according to EN 374.
Glove material: Nitrile rubber-Layer thickness: 0,11 mm.
Breakthrough time: >480 min.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN 166.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:

Avoid breathing mist/vapours. Do not get in eyes, on skin, or on clothing.
Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Work place should be equipped with a shower and an eye rinsing apparatus.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|---|-------------------------------|
| Physical state at 20 °C and 101.3 kPa | liquid |
| Colour: | clear, colourless |
| Odour: | chlorine odour |
| Odour threshold: | No data available |
| Melting point/freezing point: | 0 °C |
| Initial boiling point and boiling range: | approx. 100 °C |
| Flammability: | No data available |
| Upper/lower flammability or explosive limits: | No data available |
| Flash point/flash point range: | approx. 100 °C |
| Decomposition temperature: | No data available |
| pH: | at 25 °C: approx. 12,5 |
| Viscosity, kinematic: | No data available |
| Water solubility: | at 20 °C: completely miscible |
| Partition coefficient: n-octanol/water: | No data available |
| Vapour pressure: | No data available |
| Density: | at 20 °C: 1,03 g/mL |
| Vapour density: | No data available |
| Particle characteristics: | Not applicable |

9.2 Other information

| | |
|----------------------------|-------------------|
| Explosive properties: | No data available |
| Oxidizing characteristics: | No data available |
| Auto-ignition temperature: | No data available |
| Evaporation rate: | No data available |
| Additional information: | No data available |

SECTION 10: Stability and reactivity

10.1 Reactivity

May be corrosive to metals.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Reacts with metals and light metals: Formation of hydrogen (Danger of explosion!)

10.4 Conditions to avoid

Avoid heat and light.

10.5 Incompatible materials

Acids, ammonia, metals, oxidizing agents.

10.6 Hazardous decomposition products

| | |
|------------------------|---|
| | Chloric acid, chlorine, hydrochloric acid, oxygen |
| Thermal decomposition: | No data available |

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological effects:

The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.

ATEmix (calculated): ATE > 5000 mg/kg.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

ATEmix (calculated): ATE > 5000 mg/kg.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

ATEmix (calculated): ATE > 20 mg/L.

Skin corrosion/irritation: Skin Corr. 1B; H314 = Causes severe skin burns and eye damage.

Serious eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): STOT SE 3; H335 = May cause respiratory irritation.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

11.2 Information on other hazards

Endocrine disrupting properties: No data available

Symptoms

In case of inhalation:

Burns of mucous membranes, cough and shortage of breath, damage of respiratory tract.

In case of ingestion: Burns in the mouth, pharynx, oesophagus, and gastrointestinal tract.

Risk of perforation in the oesophagus and stomach.

After contact with skin: Burns, necrosis.

After eye contact: Burns, necrosis. Danger of loss of sight!

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

Harmful effects on water organisms by modification of pH-value.

Information about Ethanolamine: Harmful to aquatic life with long lasting effects.

Algae toxicity:

EC50 desmodesmus subspicatus: 2,8 mg/L/72 h

Bacterial toxicity:

EC50 activated sludge: 110 mg/L/17 h

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): 65 mg/L/48 h

Fish toxicity:

LC50 Cyprinus carpio (Common Carp) 150 mg/L/96 h

Information about Nonylphenol, ethoxylated: Very toxic to aquatic life.

Algae toxicity:

NOEC algae: 8 mg/L/96 h

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): 12,2 - 17,0 mg/L/48h

Fish toxicity:

LC50 Lepomis macrochirus (Bluegill): 1,0 mg/L/96h

Water Hazard Class:

2 = obviously hazardous to water

12.2 Persistence and degradability

Further details:

Information about Ethanolamine:

Biodegradation: > 70 %/ 28 d (OECD 301 F). Product is readily biodegradable.

Information about Nonylphenol, ethoxylated:

Biodegradation: 86 % (method: Modified Sturm Test). Product is readily biodegradable.

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Endocrine disrupting properties

This product contains a substance that has endocrine disrupting properties with respect to non-target organisms.

12.7 Other adverse effects

General information:

Do not allow to enter undiluted resp. in large quantities into surface water or into drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number:

16 05 06* = Laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals
* = Evidence for disposal must be provided.

Recommendation:

Special waste. Dispose of waste according to applicable legislation.

Package

Waste key number:

15 01 02 = Plastic packaging

Recommendation: Dispose of waste according to applicable legislation.
Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID, ADN, IMDG, IATA-DGR:

UN 1719

14.2 UN proper shipping name

ADR/RID, ADN, IMDG, IATA-DGR:

UN 1719, CAUSTIC ALKALI LIQUID, N.O.S. (Ethanolamine, Sodium hydroxide)

14.3 Transport hazard class(es)

ADR/RID, ADN:

Class 8, Code: C5

IMDG:

Class 8, Subrisk -

IATA-DGR:

Class 8



14.4 Packing group

ADR/RID:

II

14.5 Environmental hazards

Dangerous for the environment: Substance/mixture is not environmentally hazardous
according to the criteria of the UN model regulations.

Marine pollutant - IMDG:

no

14.6 Special precautions for user

Land transport (ADR/RID)

Warning board:

ADR/RID: Kemmler-number 80, UN number UN 1719

Hazard label:

8

Special Provisions:

274

Limited quantities:

1 L

EQ:

E2

Package - Instructions:

P001 IBC02

Special provisions for packing together:

MP15

Portable tanks - Instructions:

T11

Portable tanks - Special Provisions:

TP2 TP27

Tank coding:

L4BN

Tunnel restriction code:

E

Inland waterway craft (ADN)

Hazard label:

8

Special Provisions:

274

Limited quantities:

1 L

EQ:

E2

Transport permitted:

T

Equipment necessary:

PP - EP

Sea transport (IMDG)

| | |
|---------------------------------|---|
| EmS: | F-A, S-B |
| Special Provisions: | 274 |
| Limited quantities: | 1 L |
| Excepted quantities: | E2 |
| Package - Instructions: | P001 |
| Package - Provisions: | - |
| IBC - Instructions: | IBC02 |
| IBC - Provisions: | - |
| Tank instructions - IMO: | - |
| Tank instructions - UN: | T11 |
| Tank instructions - Provisions: | TP2, TP27 |
| Stowage and handling: | Category A. |
| Segregation: | SG22 SG35 |
| Properties and observations: | Corrosive to aluminium, zinc and tin. Reacts violently with acids. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. |
| Segregation group: | 18 |

Air transport (IATA)

| | |
|--|--|
| Hazard label: | Corrosive |
| Excepted Quantity Code: | E2 |
| Passenger and Cargo Aircraft: Ltd. Qty.: | Pack.Instr. Y840 - Max. Net Qty/Pkg. 0.5 L |
| Passenger and Cargo Aircraft: | Pack.Instr. 851 - Max. Net Qty/Pkg. 1 L |
| Cargo Aircraft only: | Pack.Instr. 855 - Max. Net Qty/Pkg. 30 L |
| Special Provisions: | A3 A803 |
| Emergency Response Guide-Code (ERG): | 8L |

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

National regulations - Germany

| | |
|--|--|
| Storage class: | 8B = Non-combustible corrosive substances |
| Water Hazard Class: | 2 = obviously hazardous to water |
| Information on working limitations: | Observe employment restrictions for young people. Observe employment restrictions for expectant or nursing mothers. |
| Further regulations, limitations and legal requirements: | No data available |

National regulations - EC member states

| | |
|--|---|
| Further regulations, limitations and legal requirements: | Use restriction according to REACH annex XVII, no.: 3, 46 |
|--|---|

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Wording of the H-phrases under paragraph 2 and 3:

H290 = May be corrosive to metals.
H302 = Harmful if swallowed.
H312 = Harmful in contact with skin.
H314 = Causes severe skin burns and eye damage.
H318 = Causes serious eye damage.
H332 = Harmful if inhaled.
H335 = May cause respiratory irritation.
H400 = Very toxic to aquatic life.
H412 = Harmful to aquatic life with long lasting effects.

Reason of change: General revision

Date of first version: 3.11.2016

Department issuing data sheet: see section 1: Department responsible for information

Abbreviations and acronyms:

- Acute Tox.: Acute toxicity
- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- Aquatic Acute: Hazardous to the aquatic environment - acute
- Aquatic Chronic: Hazardous to the aquatic environment - chronic
- AS/NZS: Australian Standards/New Zealand Standards
- CAS: Chemical Abstracts Service
- CFR: Code of Federal Regulations
- CLP: Classification, Labelling and Packaging
- DMEL: Derived minimal effect level
- DNEL: Derived no-effect level
- EC: European Community
- EC50: Effective Concentration 50%
- EN: European Standard
- EQ: Excepted quantities
- EU: European Union
- Eye Dam.: Eye damage
- IATA: International Air Transport Association
- IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
- IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
- IMDG Code: International Maritime Dangerous Goods Code
- LC50: Median lethal concentration
- MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
- Met. Corr.: Corrosive to metals
- NOEC: No Observed Effect Concentration
- OEL: Occupational Exposure Limit Value
- OSHA: Occupational Safety and Health Administration
- PBT: Persistent, bioaccumulative and toxic
- PNEC: Predicted no-effect concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
- Skin Corr.: Skin corrosion
- STOT SE: Specific target organ toxicity - single exposure
- SVHC: Substance of very high concern
- TLV: Threshold Limit Value
- TRGS: Technical Rules for Hazardous Substances
- UN: United Nations
- vPvB: Very persistent and very bioaccumulative
- WEL: Workplace Exposure Limit

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.