

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2461-42 StablCal Formazin Turbidity Standard, 4000 NTU

Revision date: 17.04.2018

Product code: 246142

Page 1 of 9

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

1.1. Product identifier

2461-42 StablCal Formazin Turbidity Standard, 4000 NTU

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

Use of the substance/mixture

Water analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.
5, Pacific Way
Salford Manchester M50 1DL - United Kingdom
Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324
e-Mail: info-uk@hach.com

HACH LANGE Ltd.
Unit 1, Chestnut Road Western Industrial Estate
IRL-Dublin 12
Tel. +353 (0)1 4602522
e-Mail: info-ie@hach.com

1.4. Emergency telephone number:

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Respiratory or skin sensitisation: Resp. Sens. 1

Respiratory or skin sensitisation: Skin Sens. 1

Hazard Statements:

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

methenamine; hexamethylenetetramine

Signal word: Danger

Pictograms:



Hazard statements

H317

May cause an allergic skin reaction.

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2461-42 StablCal Formazin Turbidity Standard, 4000 NTU

Revision date: 17.04.2018

Product code: 246142

Page 2 of 9

Precautionary statements

| | |
|-----------|--|
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P342+P311 | If experiencing respiratory symptoms: Call a POISON CENTER/doctor. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |

Additional advice on labelling

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | | | Quantity |
|-----------|--|--------------|----------|----------|
| | EC No | Index No | REACH No | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | | | |
| 7732-18-5 | Water | | | > 95 % |
| | 231-791-2 | | | |
| 100-97-0 | methenamine; hexamethylenetetramine | | | 1-5 % |
| | 202-905-8 | 612-101-00-2 | | |
| | Flam. Sol. 2, Resp. Sens. 1, Skin Sens. 1; H228 H334 H317 | | | |
| | Formazine polymer | | | < 0,5 % |
| 50-00-0 | formaldehyde ... % | | | < 0,1 % |
| | 200-001-8 | 605-001-00-5 | | |
| | Carc. 1B, Muta. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1B, Skin Sens. 1; H350 H341 H301 H311 H331 H314 H317 | | | |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off all contaminated clothing immediately.

After inhalation

Move to fresh air.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Consult a physician.

Show this safety data sheet to the doctor in attendance.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2461-42 StablCal Formazin Turbidity Standard, 4000 NTU

Revision date: 17.04.2018

Product code: 246142

Page 3 of 9

4.2. Most important symptoms and effects, both acute and delayed

sensitising effects

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

Unsuitable extinguishing media

None known.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours. Ammonia, Carbon monoxide, Formaldehyde, Nitrogen dioxide

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Additional information

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

Use personal protective equipment.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste.

6.4. Reference to other sections

See also section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas. Do not breathe vapours/dust.

Avoid contact with skin and eyes.

General industrial hygiene practice.

Advice on protection against fire and explosion

None known.

Further information on handling

Avoid contact with skin, eyes and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep tightly closed in a dry, cool and well-ventilated place. Storage temperature: 5-25 °C. Protect against light.

Hints on joint storage

None known.

Further information on storage conditions

Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat, ignition and direct

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2461-42 StablCal Formazin Turbidity Standard, 4000 NTU

Revision date: 17.04.2018

Product code: 246142

Page 4 of 9

sunlight.

7.3. Specific end use(s)

Standard solution

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|---------|--------------|-----|-------------------|-----------|---------------|--------|
| 50-00-0 | Formaldehyde | 2 | 2.5 | | TWA (8 h) | WEL |
| | | 2 | 2.5 | | STEL (15 min) | WEL |

Additional advice on limit values

None known.

8.2. Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Protective and hygiene measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and after work.

Eye/face protection

Safety glasses with side-shields

Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact:

Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

Consult your supplier if the material is to be used for special applications such as in the food industry or for hygiene, medical or surgical end-use.

Skin protection

Remove and wash contaminated clothing before re-use.

Respiratory protection

Ensure adequate ventilation, especially in confined areas.

In case of insufficient ventilation, wear suitable respiratory equipment.

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

Respirator with a gas filter (gas filter type A or B or K)

Environmental exposure controls

no data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: suspension

Colour: off-white

Odour: odourless

pH-Value (at 20 °C): 6,4

Changes in the physical state

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2461-42 StablCal Formazin Turbidity Standard, 4000 NTU

Revision date: 17.04.2018

Product code: 246142

Page 5 of 9

| | |
|--|-------------------|
| Melting point: | not applicable |
| Initial boiling point and boiling range: | 100 °C |
| Sublimation point: | not applicable |
| Softening point: | not applicable |
| Pour point: | no data available |
| Flash point: | not applicable |
| Sustaining combustion: | No data available |

Flammability

| | |
|--------|----------------|
| Solid: | not applicable |
| Gas: | not applicable |

Explosive properties

no data available

| | |
|-------------------------|-------------------|
| Lower explosion limits: | not applicable |
| Upper explosion limits: | not applicable |
| Ignition temperature: | no data available |

Auto-ignition temperature

| | |
|--------|----------------|
| Solid: | not applicable |
| Gas: | not applicable |

Decomposition temperature: no data available

Oxidizing properties

no data available

| | |
|---------------------------------|-------------------------|
| Vapour pressure: | no data available |
| Vapour pressure: | no data available |
| Density (at 20 °C): | 1,002 g/cm ³ |
| Bulk density: | no data available |
| Water solubility: (at 20 °C) | completely soluble |

Solubility in other solvents

no data available

| | |
|---------------------------------|-------------------|
| Partition coefficient: | no data available |
| Viscosity / dynamic: | no data available |
| Viscosity / kinematic: | no data available |
| Flow time: | no data available |
| Vapour density: | no data available |
| Evaporation rate: (at 20 °C) | 0,63 |
| Solvent separation test: | no data available |
| Solvent content: | no data available |

9.2. Other information

| | |
|-------------------|-------------------|
| Solid content: | no data available |
| no data available | |

SECTION 10: Stability and reactivity

10.1. Reactivity

None known.

2461-42 StablCal Formazin Turbidity Standard, 4000 NTU

Revision date: 17.04.2018

Product code: 246142

Page 6 of 9

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions: Oxidizing agents

10.4. Conditions to avoid

Keep away from heat.

10.5. Incompatible materials

Oxidizing agents

10.6. Hazardous decomposition products

To avoid thermal decomposition, do not overheat. Decomposition products: Ammonia, Carbon monoxide, Formaldehyde, Nitrogen dioxide

Further information

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

None known.

Acute toxicity

LD50/oral/rat = > 5000 mg/kg

| CAS No | Chemical name | | | | |
|----------|-------------------------------------|--------------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 100-97-0 | methenamine; hexamethylenetetramine | | | | |
| | oral | LD50 mg/kg 9200 | Ratte | | |
| 50-00-0 | formaldehyde ... % | | | | |
| | oral | ATE mg/kg 100 | | | |
| | dermal | ATE mg/kg 300 | | | |
| | inhalation (4 h) vapour | LC50 250 mg/l | rat | | |
| | inhalation aerosol | ATE 0,5 mg/l | | | |

Irritation and corrosivity

No known effect.

Sensitising effects

May cause sensitisation by skin contact.

May cause sensitisation by inhalation. (List of references: Asthma in the workplace, I. Leonard Bernstein)

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

No data is available on the product itself.

Additional information on tests

None known.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2461-42 StablCal Formazin Turbidity Standard, 4000 NTU

Revision date: 17.04.2018

Product code: 246142

Page 7 of 9

Practical experience**Observations relevant to classification**

May cause allergic skin reaction. May cause allergic respiratory reaction.

Other observations

None known.

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information**12.1. Toxicity**

No data is available on the product itself. Do not flush into surface water or sanitary sewer system.

| CAS No | Chemical name | | | | | |
|----------|-------------------------------------|--------------|-----------|---------|--------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 100-97-0 | methenamine; hexamethylenetetramine | | | | | |
| | Acute fish toxicity | LC50 mg/l | 49800 | 96 h | Fisch | |

12.2. Persistence and degradability

None known.

12.3. Bioaccumulative potential

None known.

12.4. Mobility in soil

None known.

12.5. Results of PBT and vPvB assessment

None known.

12.6. Other adverse effects

None known.

Further information

None known.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

SECTION 14: Transport information**Land transport (ADR/RID)****Other applicable information (land transport)**

Not subject to transport regulations.

2461-42 StablCal Formazin Turbidity Standard, 4000 NTU

Revision date: 17.04.2018

Product code: 246142

Page 8 of 9

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

Other applicable information (marine transport)

Not subject to transport regulations.

Air transport (ICAO-TI/IATA-DGR)

Other applicable information (air transport)

Not subject to transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 28: formaldehyde ... %

National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D):

3 - highly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Revision: 17.04.2018

Safety datasheet sections which have been updated: 3, 7, 8, 9, 10, 11, 12, 15, 16

Revision: 22.06.2016

Safety datasheet sections which have been updated: 2, 3, 11

Revision: 20.04.2016

Safety datasheet sections which have been updated: 2, 11

Safety datasheet sections which have been updated: 2, 3, 11

Revision: 21.03.2014

Safety datasheet sections which have been updated: 2

Revision: 26.02.2014

Safety datasheet sections which have been updated: 8

Revision Date: 04.09.2013

Safety datasheet sections which have been updated: 4-12,15,16

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

| Classification | Classification procedure |
|---------------------|--------------------------|
| Resp. Sens. 1; H334 | Calculation method |
| Skin Sens. 1; H317 | Calculation method |

Safety Data Sheet

according to Regulation (EC) No 1907/2006

2461-42 StablCal Formazin Turbidity Standard, 4000 NTU

Revision date: 17.04.2018

Product code: 246142

Page 9 of 9

Relevant H and EUH statements (number and full text)

| | |
|------|--|
| H228 | Flammable solid. |
| 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. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)