

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

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Revision Number 2

EGHS / English

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name AddiCool
Product Code(s) 109006
(M)SDS Number 1344195_E
Chemical name

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

Recommended Use Laboratory Use Only.
Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

Manufacturer ITW Test & Measurement GmbH
Manufacturer Address Boschstraße 10
73734 Esslingen am Neckar / GERMANY
www.buehler-met.de www.buehler.fr www.buehler.co.uk
Phone number +49 (0) 711 4904690-0
E-mail Address lab.eu@buehler.com

1.4. Emergency telephone number

Global Access Code: 334545
Americas: +1 760 476 3962
Middle East/Africa: +1 760 476 3959
UK: +44 8 08 189 0979
Europe: +1 760 476 3961
Asia Pacific: +1 760 476 3960

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

| | |
|-----------------------------------|---------------------|
| Serious eye damage/eye irritation | Category 2 - (H319) |
| Chronic aquatic toxicity | Category 3 - (H412) |

2.2. Label elements**Signal word****Warning****Hazard Statements**

H319 - Causes serious eye irritation

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear eye protection/ face protection

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

P273 - Avoid release to the environment

P391 - Collect spillage

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

Not applicable.

3.2 Mixtures

| Chemical name | EC No | CAS No | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | REACH registration number |
|-----------------|-----------|-----------|----------|---|---------------------------|
| Water | - | 7732-18-5 | 50 - 70% | No data available | |
| Triethanolamine | 203-049-8 | 102-71-6 | 15 - 25% | No data available | |
| Benzotriazole | - | 95-14-7 | 15 - 25% | No data available | |

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

| Chemical name | CAS No | SVHC candidates |
|---------------|--------|-----------------|
|---------------|--------|-----------------|

| | | |
|-----------------|-----------|---|
| Water | 7732-18-5 | - |
| Benzotriazole | 95-14-7 | - |
| Triethanolamine | 102-71-6 | - |

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

| | |
|---------------------|--|
| Inhalation | Remove to fresh air. |
| Skin contact | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. |

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

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Should not be released into the environment. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Material Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

| Chemical name | EU | United Kingdom | France | Spain | Germany |
|-----------------------------|---|--|-------------|--|--|
| Triethanolamine 102-71-6 | - | - | - | TWA: 5 mg/m ³ | - |
| Chemical name | Italy | Portugal | Netherlands | Finland | Denmark |
| Triethanolamine 102-71-6 | - | TWA: 5 mg/m ³ | - | TWA: 5 mg/m ³ | TWA: 0.5 ppm TWA: 3.1 mg/m ³ |
| Chemical name | Austria | Switzerland | Poland | Norway | Ireland |
| Triethanolamine 102-71-6 | STEL 1.6 ppm STEL 10 mg/m ³ TWA: 0.8 ppm TWA: 5 mg/m ³ | STEL: 20 mg/m ³ TWA: 5 mg/m ³ | - | TWA: 5 mg/m ³ STEL: 10 mg/m ³ | TWA: 5 mg/m ³ STEL: 15 mg/m ³ |

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2. Exposure controls

Personal protective equipment

| | |
|---------------------------------|------------------------------------|
| Eye/face protection | Tight sealing safety goggles. |
| Skin and body protection | Wear suitable protective clothing. |

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

| | |
|-----------------------|--------------------------|
| Physical state | Liquid |
| Appearance | Tan |
| Odor | Characteristic |
| Color | No information available |
| Odor Threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks</u> | <u>Method</u> |
|--|-------------------|----------------|---------------|
| pH | No data available | | |
| Melting / freezing point | No data available | None known | |
| Boiling point / boiling range | No data available | None known | |
| Flash Point | No data available | None known | |
| Evaporation Rate | No data available | None known | |
| Flammability (solid, gas) | No data available | None known | |
| Flammability Limit in Air | | None known | |
| Upper flammability limit | No data available | | |
| Lower flammability limit | No data available | | |
| Vapor pressure | No data available | None known | |
| Vapor density | No data available | None known | |
| Relative density | 1.142 | | |
| Water Solubility | Miscible | | |
| Solubility(ies) | No data available | None known | |
| Partition coefficient: n-octanol/water | No data available | None known | |
| Autoignition temperature | No data available | None known | |
| Decomposition temperature | No data available | None known | |
| Kinematic viscosity | No data available | None known | |
| Viscosity | No data available | None known | |

9.2. Other information

| | |
|-----------------------------------|--------------------------|
| Softening Point | No information available |
| Molecular Weight | No information available |
| VOC Content (%) | No information available |
| Liquid Density | No information available |
| Bulk Density | No information available |
| Particle Size | No information available |
| Particle Size Distribution | No information available |

Section 10: STABILITY AND REACTIVITY**10.1. Reactivity**

No data available.

10.2. Chemical stability

50 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
 35 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-----------------|----------------------|--|--------------------------------------|
| Water | > 90 mL/kg (Rat) | - | - |
| Triethanolamine | = 4190 mg/kg (Rat) | > 16 mL/kg (Rat) > 20 mL/kg (Rabbit) | - |
| Benzotriazole | = 560 mg/kg (Rat) | > 1 g/kg (Rat) | = 1910 mg/m ³ (Rat) 3 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---------------------------|
| Skin corrosion/irritation | No information available. |
| Serious eye damage/eye irritation | No information available. |
| Respiratory or skin sensitization | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |
| Reproductive Toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

| Chemical name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|-----------------|---|--|----------------------------|----------------------------|
| Triethanolamine | 96h EC50: = 169 mg/L (Desmodesmus subspicatus) 72h EC50: = 216 mg/L (Desmodesmus subspicatus) | 96h LC50: 10600 - 13000 mg/L (Pimephales promelas) 96h LC50: > 1000 mg/L (Pimephales promelas) 96h LC50: 450 - 1000 mg/L (Lepomis macrochirus) | - | 24h EC50: = 1386 mg/L |
| Benzotriazole | 96h EC50: = 15.4 mg/L | 96h LC50: = 39 mg/L (Oncorhynchus) | - | 48h EC50: = 141.6 mg/L |

| | | | | |
|--|--------------------|--------|--|--|
| | (freshwater algae) | mykiss | | |
|--|--------------------|--------|--|--|

12.2. Persistence and degradability

Persistence and Degradability No information available.

12.3. Bioaccumulative potential**Bioaccumulation**

| Chemical name | Log Pow |
|-----------------|---------|
| Triethanolamine | -2.53 |

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

| Chemical name | PBT and vPvB assessment |
|-----------------|-------------------------|
| Triethanolamine | Not applicable |
| Benzotriazole | Not applicable |

12.6. Other adverse effects

Other adverse effects No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging No information available.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

| | |
|--|--------------------------|
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NOT REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Marine Pollutant | Not applicable |
| 14.6 Special Provisions | None |
| 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code | No information available |

RID NOT REGULATED

| | |
|----------------------------------|----------------|
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NOT REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions | None |

| | |
|----------------------------------|----------------|
| <u>ADR</u> | NOT REGULATED |
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NOT REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions | None |

| | |
|----------------------------------|----------------|
| <u>IATA</u> | NOT REGULATED |
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NON REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions | None |

Section 14: TRANSPORT INFORMATION

| | |
|--|--------------------------|
| <u>IMDG/IMO</u> | NOT REGULATED |
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NOT REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Marine Pollutant | Not applicable |
| 14.6 Special Provisions | None |
| 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code | No information available |

| | |
|----------------------------------|----------------|
| <u>RID</u> | NOT REGULATED |
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NOT REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions | None |

| | |
|----------------------------------|----------------|
| <u>ADR</u> | NOT REGULATED |
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NOT REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions | None |

| | |
|----------------------------------|----------------|
| IATA | NOT REGULATED |
| 14.1 UN-No. | NOT REGULATED |
| 14.2 Proper Shipping Name | NON REGULATED |
| 14.3 Hazard Class | NOT REGULATED |
| 14.4 Packing Group | NOT REGULATED |
| 14.5 Environmental hazard | Not applicable |
| 14.6 Special Provisions | None |

Section 15: REGULATORY INFORMATION

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

National regulations

France

Occupational Illnesses (R-463-3, France)

| Chemical name | French RG number | Title |
|-----------------------------|-----------------------|-------|
| Triethanolamine 102-71-6 | RG 49 RG 49, RG 49bis | - |

Water hazard class (WGK) Hazardous to water/Class 1

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Persistent Organic Pollutants

Not applicable.

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable.

International Inventories

| | |
|----------------------|---|
| TSCA | Contact supplier for inventory compliance status. |
| DSL/NDSL | Contact supplier for inventory compliance status. |
| EINECS/ELINCS | Contact supplier for inventory compliance status. |
| ENCS | Contact supplier for inventory compliance status. |
| IECSC | Contact supplier for inventory compliance status. |
| KECL | Contact supplier for inventory compliance status. |
| PICCS | Contact supplier for inventory compliance status. |
| AICS | Contact supplier for inventory compliance status. |

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical

Substances

ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

No information available.

Section 16: OTHER INFORMATION**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

SVHC: Substances of Very High Concern for Authorization:

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | - | Skin designation |

Key literature references and sources for data

www.ChemADVISOR.com/

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This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006.

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End of Safety Data Sheet