

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 3

EGHS / English

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

### 1.1. Product identifier

**Product Name** Cool 3  
**Product Code(s)** 10-6001, 10-6004, 10-6010  
**(M)SDS Number** 1340891\_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 Europe: +1 760 476 3961  
Middle East/Africa: +1 760 476 3959 Asia Pacific: +1 760 476 3960  
UK: +44 8 08 189 0979

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**Regulation (EC) No 1272/2008**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

**2.2. Label elements**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

EUH210 - Safety data sheet available on request

**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	60 - 90%	No data available	
Methyldiethanolamine	203-312-7	105-59-9	1 - 5%	Eye Irrit. 2 (H319)	
Glycerol poly(oxyethylene) poly(oxypropylene) ether	-	9082-00-2	1 - 5%	No data available	
Butoxydiglycol	203-961-6	112-34-5	1 - 5%	Eye Irrit. 2 (H319)	

**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	-
Glycerol poly(oxyethylene) poly(oxypropylene) ether	9082-00-2	-
Methyldiethanolamine	105-59-9	-
Butoxydiglycol	112-34-5	-

### Section 4: FIRST AID MEASURES

**4.1. Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance.

**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.

<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

**Symptoms** Burning sensation.

#### **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** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

**Other Information** Refer to protective measures listed in Sections 7 and 8.

**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** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

**General Hygiene Considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool 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
Butoxydiglycol 112-34-5	TWA: 10 ppm TWA: 67.5 mg/m <sup>3</sup>	STEL: 15 ppm STEL: 101.2 mg/m <sup>3</sup> TWA: 10 ppm TWA: 67.5 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 67.5 mg/m <sup>3</sup> STEL: 15 ppm STEL: 101.2 mg/m <sup>3</sup>	STEL: 15 ppm STEL: 101.2 mg/m <sup>3</sup> TWA: 10 ppm TWA: 67.5 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 67 mg/m <sup>3</sup>
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Butoxydiglycol 112-34-5	TWA: 10 ppm TWA: 67.5 mg/m <sup>3</sup> STEL: 15 ppm STEL: 101.2 mg/m <sup>3</sup>	-	H* STEL: 100 mg/m <sup>3</sup> TWA: 50 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 68 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 68 mg/m <sup>3</sup>
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Butoxydiglycol 112-34-5	STEL 15 ppm STEL 101.2 mg/m <sup>3</sup> TWA: 10 ppm TWA: 67.5 mg/m <sup>3</sup>	STEL: 15 ppm STEL: 101 mg/m <sup>3</sup> TWA: 10 ppm TWA: 67 mg/m <sup>3</sup>	STEL: 100 mg/m <sup>3</sup> TWA: 67 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 68 mg/m <sup>3</sup> STEL: 20 ppm STEL: 102 mg/m <sup>3</sup>	TWA: 10 ppm TWA: 67.5 mg/m <sup>3</sup> STEL: 15 ppm STEL: 101.2 mg/m <sup>3</sup>

**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** If splashes are likely to occur, wear safety glasses with side-shields. None required for consumer use.

**Hand Protection** Wear suitable gloves.

**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

<b>Physical state</b>	Liquid
<b>Appearance</b>	Light yellow
<b>Odor</b>	Mild
<b>Color</b>	No information available
<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks Method</u>
pH	9.6	
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	1.05	
Water Solubility	Soluble in water	
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	6	

### 9.2. Other information

<b>Softening Point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk Density</b>	No information available
<b>Particle Size</b>	No information available
<b>Particle Size Distribution</b>	No information available

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

Stable under normal conditions.

#### Explosion Data

Sensitivity to Mechanical Impact

None.

Sensitivity to Static Discharge

None.

### 10.3. Possibility of hazardous reactions

**Possibility of Hazardous Reactions**                      None under normal processing.

### 10.4. Conditions to avoid

None known.

### 10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

None under normal use conditions.

## Section 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Information on likely routes of exposure

##### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

#### Information on toxicological effects

**Symptoms**    May cause redness and tearing of the eyes.

#### Numerical measures of toxicity

**Acute Toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	24,727.00 mg/kg
<b>ATEmix (dermal)</b>	26,055.00 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	87.38 mg/L

**Unknown acute toxicity**

- 40 % of the mixture consists of ingredient(s) of unknown toxicity
- 34 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 30 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 40 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 40 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 39 % 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 )	-	-
Methyldiethanolamine	= 1900 mg/kg ( Rat ) = 1945 mg/kg ( Rat )	= 5990 mg/kg ( Rabbit )	-
Glycerol poly(oxyethylene) poly(oxypropylene) ether	> 10 g/kg ( Rat )	> 5 g/kg ( Rabbit )	-
Butoxydiglycol	= 5660 mg/kg ( Rat )	= 2700 mg/kg ( Rabbit )	-

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

<b>Skin corrosion/irritation</b>	May cause skin irritation.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Irritating to eyes.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive Toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

## Section 12: ECOLOGICAL INFORMATION

**12.1. Toxicity**

**Ecotoxicity** No information available.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Methyldiethanolamine	72h EC50: = 37 mg/L (Desmodesmus subspicatus) 96h EC50: = 20 mg/L (Desmodesmus subspicatus)	96h LC50: > 1000 mg/L (Pimephales promelas) 96h LC50: 1000 - 2200 mg/L (Leuciscus idus)	EC50 = 410 mg/L 17 h	48h EC50: = 230 mg/L
Butoxydiglycol	96h EC50: > 100 mg/L (Desmodesmus subspicatus)	96h LC50: = 1300 mg/L (Lepomis macrochirus)	-	24h EC50: = 2850 mg/L 48h EC50: > 100 mg/L

### 12.2. Persistence and degradability

**Persistence and Degradability** No information available.

### 12.3. Bioaccumulative potential

#### **Bioaccumulation**

Chemical name	Log Pow
Methyldiethanolamine	-1.08

### 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
Methyldiethanolamine	Not applicable
Butoxydiglycol	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



<b>IMDG/IMO</b>	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

<b>RID</b>	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

<b>ADR</b>	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

<b>IATA</b>	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

<b>IMDG/IMO</b>	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

<b>RID</b>	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

**ADR** 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
Methyldiethanolamine 105-59-9	RG 49, RG 49bis	-
Butoxydiglycol 112-34-5	RG 84	-

**Water hazard class (WGK)** Not dangerous

#### 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 contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Butoxydiglycol - 112-34-5	Use restricted. See item 55.	

#### Persistent Organic Pollutants

Not applicable.

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

Not applicable.

**International Inventories**

<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDSL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AICS</b>	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/](http://www.ChemADVISOR.com/)**Issuing Date** 01-Mar-2017**Revision Date** 13-Apr-2017**This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006.****Disclaimer**

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**End of Safety Data Sheet**