

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

**Issuing Date** 04-Nov-2016

**Revision Date** 02-Feb-2018

**Revision Number** 4

EGHS / English

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

### 1.1. Product identifier

**Product Name** MetaDi Fluid  
**Product Code(s)** 40-6016, 40-6032, 40-6064-085  
**(M)SDS Number** 1352984\_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**

Reproductive Toxicity

Category 1B - (H360)

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

H360 - May damage fertility or the unborn child if swallowed

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

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P264 - Wash hands thoroughly after handling

**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	Percent	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Water	-	7732-18-5	60 - 80%	No data available	
Dipropylene glycol	-	25265-71-8	20 - 40%	No data available	
Sodium borate decahydrate	-	1303-96-4	< 0.5%	Repr. 1B (H360FD)	

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

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS-No	SVHC candidates
Water	7732-18-5	-
Dipropylene glycol	25265-71-8	-
Sodium borate decahydrate	1303-96-4	X

**Section 4: FIRST AID MEASURES****4.1. Description of first aid measures**

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<b>Inhalation</b>	Remove to fresh air.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water.
<b>Self-protection of the first aider</b>	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8).

#### **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** Dry chemical, Carbon dioxide (CO<sub>2</sub>), Water spray, Alcohol resistant foam.

**Unsuitable extinguishing media** No information available.

#### **5.2. Special hazards arising from the substance or mixture**

##### **Specific hazards arising from the chemical**

Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray.

#### **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** Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material.

**For emergency responders** Use personal protection recommended in Section 8.

#### **6.2. Environmental precautions**

**Environmental precautions** Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so.

### **6.3. Methods and material for containment and cleaning up**

**Methods for containment** Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.

**Methods for cleaning up** Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

### **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** Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation.

**General Hygiene Considerations** Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

### **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
Dipropylene glycol 25265-71-8	-	-	-	-	TWA: 100mg/m <sup>3</sup> S*
Sodium borate decahydrate 1303-96-4	-	STEL: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	STEL: 6 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>	-
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Sodium borate	-	STEL: 6	-	-	TWA: 2 mg/m <sup>3</sup> H*

decahydrate 1303-96-4		mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>			
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Dipropylene glycol 25265-71-8	-	STEL: 280 mg/m <sup>3</sup> TWA: 140 mg/m <sup>3</sup>	-	-	-
Sodium borate decahydrate 1303-96-4	-	STEL: 5 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	STEL: 2 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> STEL: 15 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** 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** Yellow  
**Odor** Woody  
**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	100°C °C		
Flash Point	93°C C		
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		
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	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

Stable under normal conditions.

#### Explosion Data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.

### 10.3. Possibility of hazardous reactions

<b>Possibility of Hazardous Reactions</b>	None under normal processing.
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### 10.4. Conditions to avoid

Heat, flames and sparks.

### 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.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

#### Information on toxicological effects

**Symptoms** No information available.

**Numerical measures of toxicity**

**Acute Toxicity**

**Unknown acute toxicity**

- 0 % of the mixture consists of ingredient(s) of unknown toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0 % 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 )	-	-
Dipropylene glycol	= 14850 mg/kg (Rat)	> 20mL/kg (Rabbit)	-
Sodium borate decahydrate	= 2660 mg/kg ( Rat ) = 3493mg/kg ( Rat )	> 10000 mg/kg ( Rabbit )	> 2.03 mg/L ( Rat ) 4 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.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	EU - Annex VI Reproductive
Sodium borate decahydrate	Repr. 1B

**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**

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Dipropylene glycol	-	24h LC50: > 5000mg/L (Carassius auratus)	EC50 = 10000 mg/L16 h	-

**12.2. Persistence and degradability**

**Persistence and Degradability** No information available.

**12.3. Bioaccumulative potential**

**Bioaccumulation** No information available.

**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
Dipropylene glycol	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**

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



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

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

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

## Section 14: TRANSPORT INFORMATION

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

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

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

<b>IATA</b>	NOT REGULATED
<b>14.1 UN-No.</b>	NOT REGULATED
<b>14.2 Proper Shipping Name</b>	NON REGULATED
<b>14.3 Hazard Class</b>	NOT REGULATED
<b>14.4 Packing Group</b>	NOT REGULATED
<b>14.5 Environmental hazard</b>	Not applicable
<b>14.6 Special Provisions</b>	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
Dipropylene glycol 25265-71-8	RG 84	-
Sodium borate decahydrate 1303-96-4	RG 5, RG 14, RG 15, RG 15bis, RG 20bis RG 14, RG 20bis, RG 65 RG20, RG 20bis, RG 26, RG 34, RG 65	-

**Water hazard class (WGK)** slightly hazardous to water (WGK 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 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
Sodium borate decahydrate - 1303-96-4	Use restricted. See item 30.	

#### 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.

**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****Full text of H-Statements referred to under sections 2 and 3**

H360FD - May damage fertility. May damage the unborn child

**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** 02-Feb-2018

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

**Disclaimer**

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End of Safety Data Sheet