

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : MetaDi Fluid
Product code : 40-6016, 40-6032, 40-6064-085

1.2. Recommended use and restrictions on use

Recommended use : Laboratory chemicals
Restrictions on use : None known

1.3. Supplier

Buehler
41 Waukegan Rd
Lake Bluff, IL 60044
T 1-847-295-6500
custserv@buehler.com

1.4. Emergency telephone number

Emergency number : Global Access Code: 334545; Americas" +1 760 476 3962; Middle East/Africa: +1 760 476 3959;
Asia Pacific +1 760 476 3960; Europe +1 760 476 3961

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Reproductive toxicity, Category 1B H360 May damage fertility or the unborn child.
Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labelling

Hazard pictograms (GHS CA) :



Signal word (GHS CA) : Danger

Hazard statements (GHS CA) : H360 - May damage fertility or the unborn child.

Precautionary statements (GHS CA) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

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2.4. Unknown acute toxicity (GHS CA)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	wt%	Classification (GHS CA)
Borax (B ₄ Na ₂ O ₇ ·10H ₂ O)	Borax / Borax (Na ₂ (B ₄ O ₇)·10H ₂ O) / Sodium tetraborate decahydrate / Disodium tetraborate, decahydrate / Sodium tetraborate, decahydrate / Disodium tetraborate decahydrate / Sodium borate decahydrate / Sodium borate, decahydrate / SODIUM BORATE DECAHYDRATE / Sodium borate / Borax decahydrate / Disodium tetraborate, anhydrous / SODIUM BORATE	CAS-No.: 1303-96-4	0 – 0.5	Eye Irrit. 2, H319 Repr. 1B, H360 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
First-aid measures general	: IF exposed or concerned: Get medical advice/attention.

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4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.
Chronic symptoms : Suspected of damaging fertility.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Not determined.

5.3. Specific hazards arising from the hazardous product

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Exercise caution when fighting any chemical fire.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Do not handle until all safety precautions have been read and understood.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment.
Hygiene measures : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Borax (B ₄ Na ₂ O ₇ ·10H ₂ O) (1303-96-4)	
Canada (Alberta) - Occupational Exposure Limits	
OEL TWA	1 mg/m ³ (Borates, tetra, sodium salts)
OEL STEL [ppm]	3 ppm (Borates, tetra, sodium salts)
Canada (Quebec) - Occupational Exposure Limits	
VEMP (OEL TWA) [ppm]	1 ppm (Benzyl chloride)
Canada (British Columbia) - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (inhalable (Borate compounds, inorganic))
OEL STEL	6 mg/m ³ (inhalable (Borate compounds, inorganic))
Canada (Manitoba) - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
OEL STEL	6 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
Canada (New Brunswick) - Occupational Exposure Limits	
OEL TWA	5 mg/m ³
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
OEL STEL	6 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
Canada (Nova Scotia) - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
OEL STEL	6 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
Canada (Nunavut) - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (inhalable fraction (Borate compounds, inorganic))
OEL STEL	6 mg/m ³ (inhalable fraction (Borate compounds, inorganic))
Canada (Northwest Territories) - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (inhalable fraction (Borate compounds, inorganic))
OEL STEL	6 mg/m ³ (inhalable fraction (Borate compounds, inorganic))
Canada (Ontario) - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
OEL STEL	6 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
Canada (Prince Edward Island) - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
OEL STEL	6 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
Canada (Saskatchewan) - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (inhalable fraction (Borate compounds, inorganic))
OEL STEL	6 mg/m ³ (inhalable fraction (Borate compounds, inorganic))

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Borax (B₄Na₂O₇·10H₂O) (1303-96-4)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA	2 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
ACGIH OEL STEL	6 mg/m ³ (inhalable particulate matter (Borate compounds, inorganic))
ACGIH chemical category	Not Classifiable as a Human Carcinogen

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: watery liquid.
Colour	: Yellow
Odour	: Characteristic
Odour threshold	: No data available
pH	: 10 – 10.3
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: Not applicable
Freezing point	: 0 °C
Boiling point	: 100 °C
Flash point	: > 93.3 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable

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Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).
Incompatible materials	: Strong bases. Strong acids. Strong oxidizing agents.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced. On combustion, forms: carbon oxides (CO and CO ₂).
Hardening time:	: No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

Borax (B ₄ Na ₂ O ₇ ·10H ₂ O) (1303-96-4)	
LD50 oral rat	3493 mg/kg
LD50 dermal rabbit	> 10000 mg/kg
ATE CA (oral)	3493 mg/kg bodyweight

Skin corrosion/irritation	: Not classified. pH: 10 – 10.3
Serious eye damage/irritation	: Not classified. pH: 10 – 10.3
Respiratory or skin sensitization	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: Not classified.

Borax (B ₄ Na ₂ O ₇ ·10H ₂ O) (1303-96-4)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	: Not classified.
Aspiration hazard	: Not classified.
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
Chronic symptoms	: Suspected of damaging fertility.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified.
Hazardous to the aquatic environment, long-term (chronic)	: Not classified.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone	: Not classified.
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SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
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SECTION 14: Transport information

In accordance with TDG / DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (DOT)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable

14.3. Transport hazard class(es)

TDG

Transport hazard class(es) (TDG)	: Not applicable
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DOT

Transport hazard class(es) (DOT)	: Not applicable
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IMDG

Transport hazard class(es) (IMDG)	: Not applicable
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IATA

Transport hazard class(es) (IATA)	: Not applicable
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14.4. Packing group

Packing group (TDG)	: Not applicable
Packing group (DOT)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable

14.5. Environmental hazards

Other information	: No supplementary information available.
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14.6. Special precautions for user

TDG

No data available

DOT

No data available

IMDG

No data available

IATA

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Borax (B₄Na₂O₇·10H₂O) (1303-96-4)

Listed on the Canadian DSL (Domestic Substances List)

Dipropylene glycol (25265-71-8)

Listed on the Canadian DSL (Domestic Substances List)

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

Borax (B₄Na₂O₇·10H₂O) (1303-96-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Japanese Pollutant Release and Transfer Register Law (PRTR Law)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

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Dipropylene glycol (25265-71-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the Japanese ISHL (Industrial Safety and Health Law)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Water (7732-18-5)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican National Inventory of Chemical Substances)

SECTION 16: Other information

Issue date : 07/19/2022
Revision date : 07/19/2022

Full text of H-statements:

H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H360	May damage fertility or the unborn child.

Safety Data Sheet (SDS), Canada

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