

### SECTION 1: Identification

#### 1.1. Product identifier

Product form : Mixture  
Product name : MasterMet 2  
Product code : 40-6380-006, 40-6380-064, 8175S130

#### 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](mailto: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)

Specific target organ toxicity – Single exposure, Category 3, H335 May cause respiratory irritation.  
Respiratory tract irritation  
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) : Warning

Hazard statements (GHS CA) :

H335 - May cause respiratory irritation.

Precautionary statements (GHS CA) :

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P271 - Use only outdoors or in a well-ventilated area.  
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P312 - Call a POISON CENTER or doctor if you feel unwell.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
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

# MasterMet 2

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

---

### 2.4. Unknown acute toxicity (GHS CA)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

# MasterMet 2

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

---

### 3.2. Mixtures

# MasterMet 2

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Name	Chemical name / Synonyms	Product identifier	wt%	Classification (GHS CA)
------	--------------------------------	--------------------	-----	-------------------------

# MasterMet 2

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Name	Chemical name / Synonyms	Product identifier	wt%	Classification (GHS CA)
Polyethylene glycol	Poly(oxy-1,2-ethanediyl), .alpha.-hydro- .omega.-hydroxy- / Polyethylene glycol 6000 / Polyethylene glycol ether / Polyethylene glycols / PEG-10 / Polyethylene glycol 400 / Polyethylene glycol 8000 / PEG / Macrogols / Ethylene oxide polymer / 1,2-Ethanediol, homopolymer / Macrogol / PEG-9 / PEG-14 / .alpha.-Hydro- .omega.-hydroxypoly(oxy-1,2-ethanediyl) / Ethoxylated 1,2-ethanediol / Polyethylene glycol 35 / Polyethylene glycol 115 / .alpha.-Hydro- .omega.-hydroxypoly(oxyethylene) / Polyethylene glycol-6000 / Poly(ethylene glycol) 400 / Polyethylene oxide / Polyethylene glycol esters / PEG-100 / PEG-115M / PEG-135 / PEG-14M / PEG-150 / PEG-16 / PEG-160M / PEG-18 / PEG-180 / PEG-180M / PEG-1M / PEG-20 / PEG-200 / PEG-20M / PEG-220 / PEG-23M /	CAS-No.: 25322-68-3	30	STOT SE 3, H335

# MasterMet 2

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Name	Chemical name / Synonyms	Product identifier	wt%	Classification (GHS CA)
	PEG-240 / PEG-25M / PEG-2M / PEG-32 / PEG-33 / PEG-350 / PEG-40 / PEG-400 / PEG-45 / PEG-450 / PEG-45M / PEG-500 / PEG-55 / PEG-5M / PEG-60 / PEG-65M / PEG-75 / PEG-7M / PEG-80 / PEG-800 / PEG-90 / PEG-90M / PEG-9M / Ethyleneglycol homopolymer / polyethylene glycol 1600			
Diethylene glycol	2,2'-Oxybisethanol / Ethanol, 2,2'-oxybis- / 2,2'-Dihydroxyethyl ether / Dihydroxydiethyl ether / Diglycol / DEG / Bis(2-hydroxyethyl) ether / Eithylene glycol / 2,2'-Oxydiethanol / 2,2'-Oxybis(ethanol) / DIETHYLENE GLYCOL	CAS-No.: 111-46-6	5	Acute Tox. 4 (Oral), H302 STOT SE 1, H370

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

### SECTION 4: First-aid measures

#### 4.1. Description of first aid measures

No additional information available

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

No additional information available

#### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

# MasterMet 2

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable extinguishing media

No additional information available

#### 5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Not determined.

#### 5.3. Specific hazards arising from the hazardous product

No additional information available

#### 5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire with normal precautions from a reasonable distance.

### 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

No additional information available

#### 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

No additional information available

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

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Appropriate engineering controls

No additional information available

#### 8.3. Individual protection measures/Personal protective equipment

Personal protective equipment symbol(s):



# MasterMet 2

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: slurry.
Colour	: White
Odour	: Odourless
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.2
Solubility	: No data available
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	: No additional information available
Chemical stability	: No additional information available
Possibility of hazardous reactions	: No additional information available
Conditions to avoid	: No additional information available
Incompatible materials	: Strong oxidizing agents.
Hazardous decomposition products	: No additional information available
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.

Polyethylene glycol (25322-68-3)	
LD50 oral rat	22 g/kg
LD50 dermal rabbit	> 20 g/kg
ATE CA (oral)	22000 mg/kg bodyweight
Diethylene glycol (111-46-6)	
LD50 dermal rabbit	11890 mg/kg



# MasterMet 2

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Diethylene glycol (111-46-6)	
ATE CA (oral)	500 mg/kg bodyweight

Skin corrosion/irritation	: Not classified.
Serious eye damage/irritation	: Not classified.
Respiratory or skin sensitization	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Reproductive toxicity	: Not classified.
STOT-single exposure	: May cause respiratory irritation.

Polyethylene glycol (25322-68-3)	
STOT-single exposure	May cause respiratory irritation.

Diethylene glycol (111-46-6)	
STOT-single exposure	Causes damage to organs.

STOT-repeated exposure	: Not classified.
Aspiration hazard	: Not classified.

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Not classified.
Hazardous to the aquatic environment, long-term (chronic)	: Not classified.

Diethylene glycol (111-46-6)	
LC50 - Fish [1]	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
BCF - Fish [1]	100 – 180
Partition coefficient n-octanol/water (Log Pow)	-1.98 (at 25 °C)

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

Diethylene glycol (111-46-6)	
BCF - Fish [1]	100 – 180
Partition coefficient n-octanol/water (Log Pow)	-1.98 (at 25 °C)

### 12.4. Mobility in soil

Diethylene glycol (111-46-6)	
Partition coefficient n-octanol/water (Log Pow)	-1.98 (at 25 °C)

### 12.5. Other adverse effects

Ozone	: Not classified.
-------	-------------------

# MasterMet 2

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

No additional information available

### 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

##### DOT

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

##### IMDG

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

##### IATA

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

#### 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.

#### 14.6. Special precautions for user

##### TDG

No data available

##### DOT

No data available

##### IMDG

No data available

##### IATA

No data available

# MasterMet 2

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

### 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

#### Polyethylene glycol (25322-68-3)

Listed on the Canadian DSL (Domestic Substances List)

#### Silica, amorphous (7631-86-9)

Listed on the Canadian DSL (Domestic Substances List)

#### Diethylene glycol (111-46-6)

Listed on the Canadian DSL (Domestic Substances List)

### 15.2. International regulations

#### Polyethylene glycol (25322-68-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory  
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)

#### Silica, amorphous (7631-86-9)

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 the Japanese ISHL (Industrial Safety and Health Law)  
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)

#### Diethylene glycol (111-46-6)

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)

## SECTION 16: Other information

Issue date : 05/13/2022

# MasterMet 2

## Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Supersedes : 05/13/2022

### Full text of H-statements:

H302	Harmful if swallowed.
H335	May cause respiratory irritation.
H370	Causes damage to organs.

Safety Data Sheet (SDS), Canada

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable