

# MATERIAL SAFETY DATASHEET

According to EG Nr. 1907/2006  
Version 4, Revision date 19-Oct-18  
Print date 19-Oct-18  
GENERIC MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product Name : MOPEG 4.0 mmol/l  
Product number : 250.1062  
Supplier : Antec Scientific  
REACH number : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Identified use : Laboratory chemical for Electro Chemical Detection

### 1.3 Details of the supplier of the safety data sheet

Company : Antec Scientific  
Industrieweg 12  
2382NV Zoeterwoude  
The Netherlands  
Telephone : +31 71-5813333  
Fax : +31 71-5813334  
Email : info@AntecScientific.com

### 1.4 Emergency telephone number

Emergency # : 112 (Alarm number)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Causes skin irritation, H315  
Causes serious eye irritation, H319  
For the full text of the H-Statements mentioned in this Section, see Section 16

### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

GH07  
Warning

Hazard statements

H315 Causes skin irritation  
H319 Causes serious eye irritation

Precautionary statement(s)

P302 + P352 IF ON SKIN: Wash with plenty of soap and water  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Supplemental Hazard Statements none

### 2.3 Other hazards

This substance/mixture contains no components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Component	Classification	Concentration
<b>MOPEG</b>		
CAS-no: 67423-45-4 EG-no: 266-689-7	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335	<0.01%
<b>Acetic acid ACS</b>		
CAS-Nr. 64-19-7 EG-Nr. 200-580-7 Indexnr. 607-002-00-6	Flam. Liq. 3; Skin Corr. 1A; H226, H314 Concentration limits: >= 90 %: Skin Corr. 1A, H314; 25 - < 90 %: Skin Corr. 1B, H314; 10 - < 25 %: Skin Irrit. 2, H315; 10 - < 25 %: Eye Irrit. 2, H319;	<=1%

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#### SECTION 4: First aid measures

##### 4.1 Description of first aid measures

###### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

###### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

###### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

###### In case of eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.

###### If swallowed

Wash out mouth with water provided the person is conscious, do not induce vomiting. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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

###### Notes to Physician

No data available

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#### SECTION 5: Firefighting measures

##### 5.1 Extinguishing media

###### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Mixture with combustible ingredients. Development of hazardous combustion gases or vapours possible in the event of fire. Fire may cause evolution of: Acetic acid vapours

##### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

##### 5.4 Further information

No data available

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#### SECTION 6: Accidental release measures

##### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

##### 6.2 Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas.

##### 6.3 Methods and materials for containment and cleaning up

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

##### 6.4 Reference to other sections

For disposal see section 13.

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#### SECTION 7: Handling and storage

##### 7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems. Do not eat, drink or smoke when using this product.

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

Store in a cool and dry place. Keep container tightly closed in a dry and well-ventilated place.

##### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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#### SECTION 8: Exposure controls/personal protection

##### 8.1 Control parameters

Component	EU	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetic Acid ACS CAS-no: 64-19-7	TWA: 25 mg/m <sup>3</sup>	TWA: 25 mg/m <sup>3</sup>	TWA: 25 mg/m <sup>3</sup>	TWA: 25 mg/m <sup>3</sup>

###### Other Exposure Guidelines

No other data available.

- 8.2 Exposure controls**  
**Appropriate engineering controls**  
Use general industrial hygiene practice.

**Personal protective equipment**

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**

Impervious long sleeved clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Respiratory protection is not required. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. 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. Take off contaminated clothing and wash before reuse. For environmental protection, remove and wash all contaminated protective equipment before re-use.

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**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

a) Appearance Form:	Liquid
Colour:	Colourless
b) Odour:	Characteristic
c) Odour threshold:	No data available
d) pH:	Apr. 2.5 at 20 °C
e) Melting point/freezing point:	No data available
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper/lower flammability or explosive limits:	No data available
k) Vapour pressure:	No data available
l) Vapour density:	No data available
m) Relative density:	1.01 g/cm <sup>3</sup> at 20 °C
n) Water solubility:	No data available
o) Partition coefficient octanol/water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	None

**9.2 Other safety information**

No data available

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**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

See section 10.3.

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

Risk of ignition or formation of inflammable gases or vapours with:

Metals, Iron, Mild steel, Lead

Possible formation of:

Hydrogen

Violent reactions possible with:

anhydrides, Aldehydes, alkali hydroxides, nonmetallic halides, ethanolamine, Acetaldehyde, Alcohols, halogen-halogen compounds, chlorosulfonic acid, chromosulfuric acid, Potassium hydroxide, Nitric acid, Sodium hydroxide, Strong bases, strong oxidising agents, Ethyleneimine, fuming sulfuric acid, Isocyanates.

**10.4 Conditions to avoid**

No information available.

## 10.5 Incompatible materials

Various metals.

## 10.6 Hazardous decomposition products

In the event of fire: See section 5.

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute oral toxicity

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

#### Acute inhalation toxicity

Symptoms: mucosal irritations, Cough, Shortness of breath

#### Acute dermal toxicity

This information is not available.

#### Skin irritation

Mixture causes skin irritation.

#### Eye irritation

Risk of corneal clouding. Mixture causes serious eye irritation.

#### Sensitisation

This information is not available.

#### Germ cell mutagenicity

This information is not available.

#### Carcinogenicity

This information is not available.

#### Reproductive toxicity

This information is not available.

#### Teratogenicity

This information is not available.

#### Specific target organ toxicity - single exposure

This information is not available.

#### Specific target organ toxicity - repeated exposure

This information is not available.

#### Aspiration hazard

This information is not available.

#### Additional Information

After uptake of large quantities:

Systemic effects: gastric spasms, shock, bronchitis, acidosis, Circulatory collapse, Pneumonia  
Absorption of large quantities may result in damage of the following: Kidney  
Handle in accordance with good industrial hygiene and safety practice.

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## SECTION 12: Ecological information

### 12.1 Toxicity

Chemical name	Algae	Fish	Micro-organisms	Daphnia Magna (Water Flea)
<b>MOPEG</b> CAS-no:67423-45-4	No data available	No data available	No data available	No data available
<b>Acetic acid ACS</b> CAS-no: 64-19-7	16h IC5 = 4000 mg/l; Scenedesmus quadricauda (Green algae)	96h LC50: = 75 mg/l Lepomis macrochirus (Bluegill sunfish)	16h EC5 = 2850 mg/l; Pseudomonas putida, 15min EC5 = 11 mg/l; Photobacterium phosphoreum	72h EC5 = 78 mg/l; E.sulcatum, 24h EC5 = 47 mg/l; Daphnia magna

### 12.2 Persistence and degradability

#### Biodegradability

99 %; 30 d

OECD Test Guideline 301D

(HSDB)

Readily biodegradable

95 %; 5 d

OECD Test Guideline 302B

Readily eliminated from water

*Biochemical Oxygen Demand (BOD)*

880 mg/g (5 d)  
(Lit.)

Ratio BOD/ThBOD  
BOD5 76 %  
(IUCLID)

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

This mixture contains no components considered to be persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

No data available

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**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

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**SECTION 14: Transport information**

**14.1 UN number**

ADR/RID: UN2790                      IMDG: UN2790                      IATA: UN2790

**14.2 UN proper shipping name**

ACETIC ACID SOLUTION

**14.3 Transport hazard class(es)**

ADR/RID: 8                      IMDG: 8                      IATA: 8

**14.4 Packaging group**

ADR/RID: III                      IMDG: III                      IATA: III

**14.5 Environmental hazards**

ADR/RID: no                      IMDG Marine pollutant: no                      IATA: no

**14.6 Special precautions for user**

No data available

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**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the mixture**

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.

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).

**15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

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**SECTION 16: Other information**

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

H226                      Flammable liquid and vapour.  
H314                      Causes severe skin burns and eye damage.  
H315                      Causes skin irritation.  
H319                      Causes serious eye irritation.  
H335                      May cause respiratory irritation

**Legend**

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION  
TWA                      TWA (time-weighted average)  
STEL                      STEL (Short Term Exposure Limit)  
Ceiling Maximum                      limit value

**16.1 Changes with previous revision**

The layout is changed and confirmed according to EG Nr. 1907/2006.

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