Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Trade name :	Bio Grill liquid ME		
Revision date :	13.09.2023	Version (Revision) :	2.0.6 (2.0.5)
Print date :	13-09-2023		

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

1.1 Product identifier

Bio Grill liquid ME (122000)

Fatty Acids, Methylesters ; CAS No. : 308065-15-8 ; REACH No. : 01-2119491160-46

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

Relevant identified uses

Lighter fluid for barbecue and fire place. Consumer uses: Private households (= general public = consumers)

Uses advised against

This product should not be used for purposes other than the applications referred to above.

1.3 Details of the supplier of the safety data sheet

Supplier

Sel Chemie BV

Street : Broekstraat 23

Postal code/City : 7122 MN Aalten

Telephone : +31 (0)543-471956

Information contact : Email: MSDS@selchemie.com

1.4 Emergency telephone number

Members of the public seeking specific information on poisons should contact: In England and Wales: NHS 111 - dial 111, in Scotland: NHS 24 - dial 111 Ireland +353 (0)1 8092566 or +353 (0)1 8379964 National Poisons Information Centre

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

None

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P391	Collect spillage.
P501	Dispose of contents/container in accordance with local / national regulations.

2.3 Other hazards

Adverse human health effects and symptoms

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Adverse environmental effects

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name : Fatty Acids, Methylesters

REACH No. : 01-2119491160-46

CAS No. : 308065-15-8

Purity : 100 % [mass]

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician in any case!

In case of skin contact

Wash immediately with: Water and soap Change contaminated, saturated clothing. Wash contaminated clothing prior to re-use. In case of skin irritation, consult a physician.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Following ingestion

Call a physician in any case! Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam Extinguishing powder Carbon dioxide (CO2)

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Hazardous combustion products Carbon monoxide Carbon dioxide (CO2)

5.3 Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment

Avoid contact with skin, eyes and clothes. Use personal protection equipment. Provide adequate ventilation.

Emergency procedures

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

For containment

Collect in closed and suitable containers for disposal. Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

Suitable material for taking up: Sand

6.4 Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Measures to prevent fire

Observe the usage/storage instructions. Avoid contact with eyes. Avoid contact with skin. Provide adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Keep away from alkali Strong oxidizers

Storage class (TRGS 510) : 10

7.3 Specific end use(s)

Lighter fluid for barbecue and fire place.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

DNEL-/PNEC-values

PNEC

Limit value type :	PNEC (Aquatic, freshwater)
Exposure route :	Water
Limit value :	2 mg/l
Limit value type :	PNEC (Aquatic, intermittent release)
Exposure route :	Water
Limit value :	0,00255 mg/l
Limit value type :	PNEC (Aquatic, marine water)
Exposure route :	Water
Limit value :	0,2 mg/l
Limit value type :	PNEC (Sediment, freshwater)
Exposure route :	Sediment
Limit value :	26,6 mg/kg
Limit value type :	PNEC (Sediment, marine water)
Exposure route :	Sediment
Limit value :	2,66 mg/kg
Limit value type :	PNEC Soil, Freshwater
Exposure route :	Soil
Limit value :	10 mg/kg dw

Limit value type : PNEC (Secondary poisoning)
Exposure route : Oral
Limit value : 66,6 mg/kg
Limit value type : PNEC (Sewage treatment plant)
Exposure route : Water (Including sewage plant)
Limit value : 100 mg/l

8.2 Exposure controls

Appropriate engineering controls

Use only in well-ventilated areas.

Personal protection equipment

Eye/face protection

Suitable eye protection

Eye glasses with side protection

Skin protection

Hand protection

Suitable gloves type : The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable material : NBR (Nitrile rubber)

Required properties : liquid-tight.

Remark : DIN-/EN-Norms EN 420 EN ISO 374

Body protection

Protective clothing is not necessary for normal use.

Remark : Immediately remove any contaminated clothing, shoes or stockings. Wash contaminated clothing prior to re-use.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Usually no personal respirative protection necessary.

General information

Wash hands before breaks and after work.

Environmental exposure controls

Disposal: see section 13

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance :	Liquid		
Colour	colourless		
Odour	characteristic		

Safety characteristics

Melting point/freezing point :		6,5	°C
Initial boiling point and boiling range :	(1013 hPa)	260 - 300	°C
Flash point :		130 - 150	°C

Auto-ignition temperature :			220	°C	
Vapour pressure :	(25 °C)	<	0,0055	hPa	
Density :	(15 °C)		0,867 - 0,872	g/cm³	
Water solubility :	(20 °C)	<	60	g/l	
log P O/W :			5,4 - 6,4		Estimated
Cinematic viscosity :	(40 °C)		2,4 - 2,7	mm²/s	Calculated

Decomposition temperature :	No data available(test not performed)
Flammable liquids :	not applicable, (not relevant under normal conditions of use)
Lower explosion limit :	not applicable
Upper explosion limit :	not applicable
Evaporation rate (n-butylacetate = 1) :	No data available(test not performed)
pH :	No data available(test not performed)
Relative vapour density :	not applicable, (not relevant under normal conditions of use)
Particle characteristics	not applicable
Oxidising liquids :	No data available(test not performed)
Explosive properties :	Not applicable.

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

Strong oxidizers Alkali

10.2 Chemical stability

Stable under normal conditions of use

10.3 Possibility of hazardous reactions

Stable under normal conditions of use

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Strong oxidizers Alkali

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Acute oral toxicity

Parameter :	LD50
Exposure route :	Oral
Species :	Rat
Effective dose :	2000 Mg/kg bw/day
Method :	OECD 401

Acute inhalation toxicity

Parameter :	LC50
Exposure route :	Inhalation
Species :	Rat
Effective dose :	> 5 mg/l
Exposure time :	4 h
Method :	OECD 436

Corrosion

Skin corrosion/irritation

Parameter :	Skin corrosion/irritation
Species :	Rabbit
Exposure time :	4 h
Result :	Non-irritant
Method :	OECD 404

Serious eye damage/eye irritation

Parameter :	Serious eye damage/eye irritation
Species :	Rabbit
Exposure time :	72 h
Result :	Non-irritant
Method :	OECD 405

Respiratory or skin sensitisation

Skin sensitisation

Parameter :	Skin sensitisation
Species :	Guinea pig
Result :	Not sensitising.
Method :	OECD 406

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

In vitro mutagenicity

Parameter :	Gene-mutations microrganisms
Species :	Salmonella typhimurium
Result :	Negative.
Method :	OECD 471 (Ames test)
Parameter :	Chromosomal aberrations mammalian cells
Species :	Hamster cells
Result :	Negative.
Method :	OECD 473

Reproductive toxicity

This substance does not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Adverse effects on developmental toxicity

Parameter :	NOAEL(C)
Species :	Rat
Effective dose :	1000 Mg/kg bw/day
Result :	Negative.
Method :	OECD 414
Parameter :	NOAEL(C)
Species :	Rat
Effective dose :	1000 Mg/kg bw/day
Result :	Negative.
Method :	OECD 422

STOT-repeated exposure

STOT RE 1 and 2

Parameter :	STOT RE 1 and 2
Exposure route :	Rat
Effective dose :	5500 mg/kg bw
Result :	Negative.

11.2 Information on other hazards

No information available.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter :	LC50
Species :	Oryzias latipes (Ricefish)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 1 mg/l
Exposure time :	96 h
Method :	OECD 203

Acute (short-term) toxicity to crustacea

Parameter :	EC50
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	> 100 mg/l
Exposure time :	7 day(s)
Method :	OECD 211

Chronic (long-term) toxicity to aquatic invertebrate

Parameter :	NOELR
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Chronic (long-term) daphnia toxicity
Effective dose :	> 100 mg/l
Exposure time :	21 day(s)
Method :	OECD 211

Acute (short-term) toxicity to algae and cyanobacteria

Parameter :	EL50
Species :	Algae
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	>= 100 mg/l
Exposure time :	72 h
Method :	OECD 201

Toxicity to microorganisms

Parameter :	Bacteria toxicity
Species :	Bacteria toxicity
Effective dose :	>= 1000 mg/kg
Exposure time :	3 h
Method :	OECD 209

Terrestrial toxicity

Toxicity to soil macroorganisms except of arthropods

Chronical earthworm toxicity (reproduction)

Parameter :	NOEC
Species :	Eisenia fetida
Evaluation parameter :	Chronical earthworm toxicity (reproduction)
Effective dose :	= 1000 mg/kg
Exposure time :	28 day(s)
Method :	OECD 222

12.2 Persistence and degradability

Readily biodegradable (according to OECD criteria).

Abiotic degradation

Abiotic degradation (Air)

Parameter :	Half-life time
Species :	Hydrolysis
Degradation rate :	87,396
Test duration :	month(s)

Parameter : Half-life time
Species : Photolysis
Degradation rate : 29,2
Test duration : h

Biodegradation

Parameter : Biodegradation
Degradation rate : = 78 %
Test duration : 28 day(s)
Evaluation : Biodegradable.
Method : OECD 301C

12.3 Bioaccumulative potential

Parameter : Bioconcentration factor (BCF)
Value : 201 L/kg
Parameter : Partition coefficient n-octanol /water (log P O/W)
Value : 5,41 - 6,41

No indication of bioaccumulation potential.

12.4 Mobility in soil

Log Koc :

Adsorption

Parameter : Log KOW
Effective dose : 3,85 - 25 °C

12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 Endocrine disrupting properties

There is no evidence of endocrine disrupting properties.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Contain and dispose of waste according to local regulations. Handle contaminated packages in the same way as the substance itself.

Directive 2008/98/EC (Waste Framework Directive)

Before intended use

Waste codes/waste designations according to EWC/AVV

15 01 02 (Plastic packaging)
15 01 10* (Packaging containing residues of or contaminated by dangerous substances)
13 07 03* (Other fuels (including mixtures))

After intended use

Waste codes/waste designations according to EWC/AVV

15 01 02 (Plastic packaging)
15 01 10* (Packaging containing residues of or contaminated by dangerous substances)
13 07 03* (Other fuels (including mixtures))

SECTION 14: Transport information

14.1 UN number or ID number

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

14.4 Packing group
No dangerous good in sense of these transport regulations.

14.5 Environmental hazards
No dangerous good in sense of these transport regulations.

14.6 Special precautions for user
None

14.7 Maritime transport in bulk according to IMO instruments
not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU legislation

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

National regulations

Water hazard class

Class : nwg (Non-hazardous to water)

non-hazardous to water

15.2 Chemical Safety Assessment
For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes
MSDS in accordance with Regulation EC 2020/878.

16.2 Abbreviations and acronyms
a.i. = Active ingredient
ACGIH = American Conference of Governmental Industrial Hygienists (US)
ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road
AFFF = Aqueous Film Forming Foam
AISE = International Association for Soaps, Detergents and Maintenance Products (joint project of AISE and CEFIC)
AOAC = AOAC International (formerly Association of Official Analytical Chemists)
aq. = Aqueous
ASTM = American Society of Testing and Materials (US)
atm = Atmosphere(s)
B.V. = Beperkt Vennootschap (Limited)
BCF = Bioconcentration Factor
bp = Boiling point at stated pressure
bw = Body weight
ca = (Circa) about
CAS No = Chemical Abstracts Service Number (see ACS - American Chemical Society)
CEFIC = European Chemical Industry Council (established 1972)
CIPAC = Collaborative International Pesticides Analytical Council
CLP = REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.
Conc = Concentration
cP = CentiPoise
cSt = Centistokes
d = Day(s)
DIN = Deutsches Institut für Normung e.V.
DNEL = Derived No-Effect Level
DT50 = Time for 50% loss; half-life
EbC50 = Median effective concentration (biomass, e.g. of algae)
EC = European Community; European Commission

EC50 = Median effective concentration
EINECS = European Inventory of Existing Commercial Chemical Substances (EU, outdated, now replaced by EC Number)
ELINCS = European List of Notified (New) Chemicals (see Tab 7, Background - Guide)
ErC50 = Median effective concentration (growth rate, e.g. of algae)
EU = European Union
EWC = European Waste Catalogue
FAO = Food and Agriculture Organization (United Nations)
GIFAP = Groupement International des Associations Nationales de Fabricants de Produits Agrochimiques (now CropLife International)
h = Hour(s)
hPa = HectoPascal (unit of pressure)
IARC = International Agency for Research on Cancer
IATA = International Air Transport Association
IC50 = Concentration that produces 50% inhibition
IMDG Code = International Maritime Dangerous Goods Code
IMO = International Maritime Organization
ISO = International Organization for Standardization
IUCLID = International Uniform Chemical Information Database
IUPAC = International Union of Pure and Applied Chemistry
kg = Kilogram
Kow = Distribution coefficient between n-octanol and water
kPa = KiloPascal (unit of pressure)
LC50 = Concentration required to kill 50% of test organisms
LD50 = Dose required to kill 50% of test organisms
LEL = Lower Explosive Limit/Lower Explosion Limit
LOAEL = Lowest observed adverse effect level
mg = Milligram
min = Minute(s)
ml = Milliliter
mmHg = Pressure equivalent to 1 mm of mercury (133.3 Pa)
mp = Melting point
MRL = Maximum Residue Limit
MSDS = Material Safety Data Sheet
n.o.s. = Not Otherwise Specified
NIOSH = National Institute for Occupational Safety and Health (US)
NOAEL = No Observed Adverse Effect Level
NOEC = No observed effect concentration
NOEL = No Observable Effect Level
NOx = Oxides of Nitrogen
OECD = Organization for Economic Cooperation and Development
OEL = Occupational Exposure Limits
Pa = Pascal (unit of pressure)
PBT = Persistent, Bioaccumulative or Toxic
pH = -log10 hydrogen ion concentration
pKa = -log10 acid dissociation constant
PNEC = Previsible Non Effect Concentration
POPs = Persistent Organic Pollutants
ppb = Parts per billion
PPE = Personal Protection Equipment
ppm = Parts per million
ppt = Parts per trillion
PVC = Polyvinyl Chloride
QSAR = Quantitative Structure-Activity Relationship
REACH = Registration, Evaluation and Authorization of CHemicals (EU, see NCP)
SI = International System of Units
STEL = Short-Term Exposure Limit
tech. = Technical grade
TSCA = Toxic Substances Control Act (US)
TWA = Time-Weighted Average
vPvB = Very Persistent and Very Bioacccumulative

WHO = World Health Organization = OMS
y = Year(s)

16.3 Key literature references and sources for data

None

16.4 Relevant H- and EUH-phrases (Number and full text)

None

16.5 Training advice

None

16.6 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.