

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Test Solution per GMW14445, Type: Sun Protection

Print date: 27.04.2016

Product code: GM-PM001, COMP. NO. C21/11422.01

Page 1 of 10

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Test Solution per GMW14445, Type: Sun Protection

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Test substance

Uses advised against

any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	Thierry GmbH	
Street:	Motorstrasse 30	
Place:	D-70499 Stuttgart	
Telephone:	+49 (0)711 8399 7470	Telefax: +49 (0)711 8399 7480
e-mail:	info@thierry-gmbh.de	
Contact person:	Veronika Krieger	Telephone: 0711/839974-0
Internet:	www.thierry-gmbh.de	
Responsible Department:	Dr. Gans-Eichler Chemieberatung GmbH Raesfeldstr. 22 D-48149 Münster	e-mail: info@tge-consult.de Tel.: +49 (0)251/924520-60 www.tge-consult.de

1.4. Emergency telephone number:

Emergency medical information: Poison Information Center Mainz - Tel: +49 (6131) 19240

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

Harmful to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

homosalate

Signal word: Warning**Pictograms:****Hazard statements**

H315

Causes skin irritation.

H319

Causes serious eye irritation.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Test Solution per GMW14445, Type: Sun Protection

Print date: 27.04.2016

Product code: GM-PM001, COMP. NO. C21/11422.01

Page 2 of 10

H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of waste according to applicable legislation.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
134-62-3	N,N-diethyl-m-toluamide, deet			25 - < 30 %
	205-149-7	616-018-00-2		
	Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2, Aquatic Chronic 3; H302 H319 H315 H412			
6197-30-4	octocrilene			25 - < 30 %
	228-250-8		01-2119457637-27	
	Aquatic Chronic 4; H413			
118-56-9	homosalate			25 - < 30 %
	204-260-8			
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335			

Full text of H and EUH statements: see section 16.

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Remove contaminated, saturated clothing immediately.

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. Where appropriate artificial ventilation. In case of respiratory tract irritation, consult a physician.

After contact with skin

Remove contaminated, saturated clothing immediately. Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Test Solution per GMW14445, Type: Sun Protection

Print date: 27.04.2016

Product code: GM-PM001, COMP. NO. C21/11422.01

Page 3 of 10

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunk in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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**

Carbon dioxide (CO₂). Dry extinguishing powder. Alcohol resistant foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon monoxide, Carbon dioxide. Nitrogen oxides (NO_x)

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation.

Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.

Wear personal protection equipment (refer to section 8).

6.2. Environmental precautions

Discharge into the environment must be avoided. Prevent spread over a wide area (e.g. by containment or oil barriers). 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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Usual measures for fire prevention.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Test Solution per GMW14445, Type: Sun Protection

Print date: 27.04.2016

Product code: GM-PM001, COMP. NO. C21/11422.01

Page 4 of 10

Further information on handling

Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.

General protection and hygiene measures: refer to chapter 8

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

Advice on storage compatibility

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and feedingstuffs.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Recommended storage temperature: 20°C

Protect against: Light. UV-radiation/sunlight. heat. moisture.

7.3. Specific end use(s)

refer to chapter 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PNEC values

CAS No	Substance	
	Environmental compartment	Value
6197-30-4	octocrilene	
Freshwater		0,023 mg/l
Marine water		0,023 mg/l
Freshwater sediment		4110 mg/kg
Marine sediment		411 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		820 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Take off contaminated clothing and wash it before reuse.

Eye/face protection

Eye glasses with side protection DIN EN 166

Hand protection

Wear suitable gloves.

Suitable material:

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Test Solution per GMW14445, Type: Sun Protection

Print date: 27.04.2016

Product code: GM-PM001, COMP. NO. C21/11422.01

Page 5 of 10

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Protective clothing.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Environmental exposure controls

This material and its container must be disposed of in a safe way.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	yellow
Odour:	characteristic

Test method

pH-Value:	6,45-6,65 (1%)
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Changes in the physical state

Melting point:	not determined
Initial boiling point and boiling range:	not determined
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Flash point:	not determined
Sustaining combustion:	Not sustaining combustion

Explosive properties

none

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined

Auto-ignition temperature

Gas:	not determined
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Decomposition temperature:	not determined
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Oxidizing properties

none

Vapour pressure:	not determined
Density:	1,01-1,04 g/cm ³
Water solubility:	Immiscible

Solubility in other solvents

not determined

Partition coefficient:	not determined
Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Test Solution per GMW14445, Type: Sun Protection

Print date: 27.04.2016

Product code: GM-PM001, COMP. NO. C21/11422.01

Page 6 of 10

Flow time:	not determined
Vapour density:	not determined
Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined

9.2. Other information

Solid content:	not determined
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SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide, Carbon dioxide. Nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose		Species	Source
134-62-3	N,N-diethyl-m-toluamide, deet				
	oral	LD50	1800 mg/kg	Rat	RTECS
	dermal	LD50	>2000 mg/kg	Rabbit	RTECS
	inhalative aerosol	LC50	5,930 mg/l		
6197-30-4	octocrilene				
	oral	LD50	>5000 mg/kg	Rat.	ECHA Dossier
	dermal	LD50	> 2000 mg/kg	Rat.	ECHA Dossier

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Test Solution per GMW14445, Type: Sun Protection

Print date: 27.04.2016

Product code: GM-PM001, COMP. NO. C21/11422.01

Page 7 of 10

Based on available data, the classification criteria are not met.

octocrilene (CAS-No.: 6197-30-4):

In-vitro mutagenicity: No experimental indications of mutagenicity in-vitro exist.

Developmental toxicity/teratogenicity:

Method: OECD Guideline 414 (Prenatal Developmental Toxicity Study)

Species: Rat.

Exposure time: 20d

Result: NOAEL = 1000 mg/kg(bw)/day

literature information: ECHA Dossier

homosalate (CAS-No.: 118-56-9):

In-vitro mutagenicity: No experimental indications of mutagenicity in-vitro exist.

literature information: ECHA Dossier

STOT-single exposure

May cause respiratory irritation. (homosalate)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

octocrilene (CAS-No.: 6197-30-4):

Subchronic oral toxicity:

Method: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Species: Rat.

Exposure time: 90d

Result: NOAEL = 175 mg/kg(bw)/day

literature information: ECHA Dossier

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No data available.

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h] [d]	Species	Source
134-62-3	N,N-diethyl-m-toluamide, deet				
	Acute fish toxicity	LC50 75 mg/l	96 h	Oncorhynchus mykiss	US EPA Ecotox
	Acute crustacea toxicity	EC50 75 mg/l	48 h	Daphnia magna	US EPA Ecotox
6197-30-4	octocrilene				
	Acute fish toxicity	LC50 (> 0,5) mg/l	96 h	Brachydanio rerio (zebra-fish)	ECHA Dossier
	Acute algae toxicity	ErC50 > 220 mg/l	72 h	Desmodesmus subspicatus	ECHA Dossier
	Acute crustacea toxicity	EC50 (> 0,023) mg/l	48 h	Daphnia magna	ECHA Dossier

12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
6197-30-4	octocrilene			
	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D	0%	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Test Solution per GMW14445, Type: Sun Protection

Print date: 27.04.2016

Product code: GM-PM001, COMP. NO. C21/11422.01

Page 8 of 10

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
6197-30-4	octocrilene	6,1

BCF

CAS No	Chemical name	BCF	Species	Source
6197-30-4	octocrilene	915	Brachydanio rerio (zebra-fish)	ECHA

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to EAKV:

Waste disposal number of waste from residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products;
organic wastes containing hazardous substances
Classified as hazardous waste.

Waste disposal number of used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products;
organic wastes containing hazardous substances
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE
CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal
packaging waste); packaging containing residues of or contaminated by hazardous substances
Classified as hazardous waste.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Test Solution per GMW14445, Type: Sun Protection

Print date: 27.04.2016

Product code: GM-PM001, COMP. NO. C21/11422.01

Page 9 of 10

14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO)

14.1. UN number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

refer to chapter 6-8

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): No information available.

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

REACH 1907/2006 Appendix XVII: 3

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D): 2 - water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Rev. 1.0; 11.04.2016, Initial release

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Test Solution per GMW14445, Type: Sun Protection

Print date: 27.04.2016

Product code: GM-PM001, COMP. NO. C21/11422.01

Page 10 of 10

CAS Chemical Abstracts Service
DNEL: Derived No Effect Level
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OSHA: Concerning the International Transport of Dangerous Goods by Rail)
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS Technische Regeln für Gefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Further Information

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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)