

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No 2020/878



Item number/ Trade name
Version/ Issue date:

16402-401-3

19 / 09/21/2026

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

1.1 Product identifier

Item number/Trade name	fragrance composition 16402-401-3
UFI	Citronelle Essence 0P4W-8MXX-NU15-QS5C

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

General use	Perfumes, fragrances, Formulation of fragranced products
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1.3 Details of the supplier of the safety data sheet

Company/undertaking identification	
Name	bekro chemie GmbH & Co. KG
Street/POB-No.: 1	Industriestrasse 104
City	D-66802 Ueberherrn
Phone #	+49 6836 9198 0
E-mail	info@bekro.de

1.4 Emergency telephone number

Name	bekro chemie GmbH & Co. KG (Mo - Do 8.00 - 16.30, Fr 8.00 - 14.30)
Phone #	+49 6836 9198 0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Aquatic Chronic 1; H410 Very toxic to aquatic life with long lasting effects.
Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.
Skin Sens. 1; H317 May cause an allergic skin reaction.

2.2 Label elements



Signal word

Warning

Hazard pictograms

GHS07 Exclamation mark
GHS09 Environment

Hazard statements

H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

Safety precautions

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.

Hazard components for labelling

Citronellol(106-22-9); Citronellal(106-23-0); Pepper (Piper), P. nigrum, extract(8006-82-4)

Special provisions concerning the labelling of certain mixtures

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. The substance/mixture does not contain any

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ingredients with endocrine disrupting properties that are listed under REACH Article 57(f) (or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605) at levels of 0.1% or more.

SECTION 3: Composition/information on ingredients

3.1 Substances

3.2 Mixtures

Hazardous ingredients

Benzyl benzoate: 75 % - 100 % CAS-Number: 120-51-4 EU index number: 607-085-00-9 EC-number: 204-402-9
REACH registration No.: 01-2119976371-33-XXXX Classification according to EC regulation 1272/2008 (CLP):
Acute Tox. 4; H302 / Aquatic Acute 1; H400 (M = 1) / Aquatic Chronic 2; H411 ATE (oral): 2000 mg/kg ATE
(dermal): 4000 mg/kg

Citronellal: 3 % - 9,99 % CAS-Number: 106-23-0 EC-number: 203-376-6 REACH registration No.:
01-2119474900-37 Classification according to EC regulation 1272/2008 (CLP): Eye Irrit. 2; H319 / Skin
Irrit. 2; H315 / Skin Sens. 1B; H317

2'-acetonaphthone: 3 % - 9,99 % CAS-Number: 93-08-3 EC-number: 202-216-2 REACH registration No.:
01-2119935927-23 Classification according to EC regulation 1272/2008 (CLP): Aquatic Chronic 2; H411 / Eye
Irrit. 2; H319 / Skin Irrit. 2; H315

Citronellol: 0,1 % - 0,99 % CAS-Number: 106-22-9 EC-number: 203-375-0 REACH registration No.:
01-2119453995-23-XXXX Classification according to EC regulation 1272/2008 (CLP): Eye Irrit. 2; H319 / Skin
Irrit. 2; H315 / Skin Sens. 1B; H317

Benzaldehyde: 0,1 % - 0,99 % CAS-Number: 100-52-7 EU index number: 605-012-00-5 EC-number: 202-860-4
REACH registration No.: 01-2119455540-44-xxxx Classification according to EC regulation 1272/2008 (CLP):
Acute Tox. 4; H302 / Acute Tox. 4; H332 / Aquatic Chronic 2; H411 / Eye Irrit. 2; H319 / Repr. 2;
H361d / STOT SE 3; H335

Pepper (Piper), P. nigrum, extract: 0,1 % - 0,99 % CAS-Number: 8006-82-4 EC-number: 284-524-7 REACH
registration No.: 01-2120753044-62 Classification according to EC regulation 1272/2008 (CLP): Aquatic
Chronic 2; H411 / Asp. Tox. 1; H304 / Flam. Liq. 3; H226 / Skin Irrit. 2; H315 / Skin Sens. 1; H317

Full text of H- and EUH-phrases: see section 16.

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SECTION 4: First aid measures

4.1 Description of first aid measures

General information	Remove affected person from the danger area and lay down. Do not leave affected person unattended. Show this safety data sheet to the doctor in attendance.
In case of inhalation	If unconscious but breathing normally, place in recovery position and seek medical advice. Seek medical aid in case of troubles.
In case of skin contact	Thoroughly clean the contaminated area with water.
After eye contact	Remove contact lenses, if any. Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently seek the immediate attention of an ophthalmologist.
After swallowing	Keep airway open. Never give anything by mouth to an unconscious person. Seek medical treatment in case of troubles.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	No data available
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4.3 Indication of any immediate medical attention and special treatment needed

Information to physician	No data available
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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	carbon dioxide dry extinguishing powder, Alcohol resistant foam , , water mist
Extinguishing media which must not be used for safety reasons	Full water jet

5.2 Special hazards arising from the substance or mixture

Possible combustion products	May form dangerous gases and vapours in case of fire.
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5.3 Advice for firefighters

Special protective equipment for firefighters	Wear a self-contained breathing apparatus and chemical protective clothing.
Additional information	Do not allow water used to extinguish fire to enter drains, ground or waterways. You have to dispose of contaminated extinguishing water according to the regulations of the authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.2 environmental precautions

Do not allow to penetrate into soil, waterbodies or drains. Discharge into the environment must be avoided. If necessary, notify appropriate 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) and place in closed containers for disposal.

6.4 Reference to other sections

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

Avoid exposure - obtain special instructions before use. Avoid contact with skin, eyes, and clothing. When using do not eat, drink, smoke, sniff. Ensure all waste water is collected and treated via a waste water treatment plant. Personal protection equipment: see section 8

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers

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

Storage class

10

7.3 Specific end use(s)

General use

Perfumes, fragrances, Formulation of fragranced products

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Respiratory protection

Avoid exceeding WEL threshold levels. Respiratory protection must be worn whenever the WEL levels have been exceeded. Provide good ventilation and/or an exhaust system in the work area.

Hand protection

breakthrough time Short-term, accidental skin contact: Breakthrough time 10 min
In case of prolonged or frequently repeated skin contact: If direct skin contact with the chemical is expected during work, then gloves conforming to EN 16523-1/ASTM F739 (or equivalent local standard) with a breakthrough time at least equal to the contact time must be worn. Breakthrough time: Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Use safety glasses conforming to EN 166/ANSI Z87.1 or equivalent local standards.

Eye protection

Body protection

Wear suitable protective clothing. When handling larger quantities: face protection, rubber boots and rubber apron.

General protection and hygiene measures

When using do not eat, drink or smoke. Avoid contact with skin, eyes, and clothing. After work, wash hands and face. Wash contaminated clothing prior to re-use.

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SECTION 9: Physical and chemical properties

9.1 information on basic physical and chemical properties

Form Avoid release to the environment. liquid
Colour yellowish
Odour characteristic

Important health, safety and environmental information

	min	max		
Melting point/freezing point	< 20 °C	---		
Initial boiling point and boiling range	---	---		
Flammability			---	
Explosion limits	---	---		
Flash point/flash point range	117 °C c.c.	---		
Ignition temperature	---	---		
PH	---	---	---	---
Viscosity	---	---	---	---
Solubility	---	---	---	---
Partition coefficient: n-octanol/water	---	---		---
Vapour pressure	0,0285 hPa	---	20 °C	---
Density and/or relative density	1,091 g/cm ³	---	20 °C	---
Relative vapour density	---	---		---
Bulk density	---	---	---	
Flow time 4mm (DIN)	---			
Water solubility	---			

9.2 Other information

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

Strong oxidizing agents

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No data available

SECTION 11: Toxicological information

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

General remarks

No data available

Toxicological tests: components

Benzyl benzoate

oral	LD50	2000.0	mg/kg	-
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Rat

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dermal	LD50	4000.0	mg/kg	-
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Rabbit

Toxicological tests: components

Citronellal

oral	LD50	2420.0	mg/kg	-
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Rat

Toxicological tests: components

2'-acetonaphthone

oral	LD50	599.0	mg/kg	-
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Mouse

Toxicological tests: components

Citronellol

oral	LD50	3450.0	mg/kg	-
------	------	--------	-------	---

Rat

dermal	LD50	2650.0	mg/kg	-
--------	------	--------	-------	---

Rabbit

Toxicological tests: components

Benzaldehyde

oral	LD50	1300.0	mg/kg	-
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Rat

inhalative	LD50	1000.0	mg/kg	-
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Rat

Toxicological tests: components

Pepper (Piper), P. nigrum, extract

oral	LD50	5000.0	mg/kg	-
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Rat

dermal	LD50	5000.0	mg/kg	-
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Rabbit

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Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Sensibilisation: Respiratory system	No data available
Sensibilisation: Skin	May cause an allergic skin reaction.
Aspiration hazard	No data available
STOT-single exposure	No data available
STOT-repeated exposure	No data available

Carcinogenic, germ cell mutagen and reproduction effects (CLP)

Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available

11.2 Information on other hazards

Endocrine disrupting properties

The substance/mixture does not contain any ingredients with endocrine disrupting properties that are listed under REACH Article 57(f) (or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605) at levels of 0.1% or more.

Further details	No data available
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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity	Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.
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12.2 Persistence and degradability

Evaluation text	No data available
Degree of elimination	No data available
Analytical method	No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

The substance/mixture does not contain any ingredients with endocrine disrupting properties that are listed under REACH Article 57(f) (or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605) at levels of 0.1% or more.

12.7 Other adverse effects

An environmental hazard cannot be ruled out in the event of improper handling or disposal. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Recommendation

Dispose of waste according to applicable legislation. Discharge into the environment must be avoided.

Package

Recommendation

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

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SECTION 14: Transport information

14.1 UN number

UN-No. ADR/RID	UN3082
UN-No. IMDG	UN3082
UN-No. IATA-DGR	UN3082

14.2 UN proper shipping name

Product designation: ADR/RID

Environmentally hazardous substance, liquid n.o.s. (EXTRACTS, LIQUID) ---

Proper shipping name: IATA-DGR

Environmentally hazardous substance, liquid, n.o.s., (EXTRACTS, LIQUID) EXTRACTS, LIQUID

Proper shipping name: IMDG

Environmentally hazardous substance, liquid, n.o.s., (EXTRACTS, LIQUID) EXTRACTS, LIQUID ---

14.3 Transport hazard class(es)

Class ADR/RID	9
Classification code ADR/RID	M6
Class IATA-DGR	9
Subrisk IATA-DGR	---
Class IMDG	9
Subrisk IMDG	---

14.4 Packing group

Packaging group ADR/RID	III
Packing Group IMDG	III
Packing Group IATA-DGR	III

14.5 Environmental hazards

Marine Pollutant - IMDG	---
EmS	F-A, S-F
Stowage and segregation	Stowage Category A

14.6 Special precautions for user

Hazard label ADR	9 + Fish and Tree

14.7 Maritime transport in bulk according to IMO instruments

Additional information

EQ	E1
Limited quantities	5L
Special Provisions	ADR: 274, 335, 375, 601 IMDG: 274, 335, 969, 375 IATA: A97, A158, A197
Tunnel restriction	(-)
Transport category	3
Hazard identification number	90

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SECTION 15: Regulatory information

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

National regulations

Europe

Regulation (EC) No. 1907/2006 (REACH), substances of very high concern

Use restriction according to REACH annex XVII, no.: 3

Germany

Storage class

10

Water Hazard Class

2

Major Accident Ordinance (12. BImSchV)

E2 Hazardous to the Aquatic Environment in Category Chronic 2

Information on working limitations

Observe employment restrictions for young people.

15.2 Chemical Safety Assessment

Chemical Safety Assessment

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SECTION 16: Other information

Hazard statements (CLP)

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H361d Suspected of damaging the unborn child.

Reason of change Changes in section 1.1

Abbreviations

--- no data, not determined or not applicable
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (Verordnung (EG) Nr. 1907/2006)
OECD Organisation for Economic Co-operation and Development
LD50 Median lethal dose
LC50 Median lethal concentration
EC50 Median effective dose
IC50 Median inhibitory concentration
VCI Verband der chemischen Industrie
CAS Chemical Abstract Service
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
NLP No Longer Polymers
CLP Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging
EG European Union
WGK water hazard class (according to AwSV, Appendix 1 (5.2))
AGW Occupational Exposure Limit
ADR Accord Européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID Règlement concernant le transport international ferroviaire des marchandises dangereuses (Regulation on the international carriage of dangerous goods by rail)
IATA International Air Transport Association
IMDG International Maritime Dangerous Goods
MARPOL International Convention for the Prevention of Pollution From Ships (MARine POLLution)
EmS Emergency Schedules
PBT persistent, bioaccumulative and toxic
vPvB very persistent and very bioaccumulative