

Safety Data Sheet

according to UK REACH Regulation

KOESTER Universal cleaner

Revision date: 11.03.2021

Product code: X_910

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

1.1. Product identifier

KOESTER Universal cleaner

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

Use of the substance/mixture

The product is intended for professional use.

Uses advised against

Do not use for injecting or spraying. Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name:	KÖSTER BAUCHEMIE AG	
Street:	Dieselstrasse 1 - 10	
Place:	D-26607 Aurich	
Telephone:	+49-4941-9709-0	Telefax: +49-4941-9709-40
e-mail:	info@koester.eu	
Contact person:	Forschung & Entwicklung	
e-mail:	produktsicherheit@koester.eu	
Internet:	www.koester.eu	

1.4. Emergency telephone number:

+49-551-19240 (24 h, Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Flam. Liq. 2; H225
Asp. Tox. 1; H304
Skin Irrit. 2; H315
Eye Dam. 1; H318
Skin Sens. 1; H317
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Orange oil
Undeceth-7

Signal word: Danger

Pictograms:



Hazard statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

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H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see SECTION 4: First aid measures on this label).
P331 Do NOT induce vomiting.
P370+P378 In case of fire: Use Water spray, Carbon dioxide (CO2), Foam to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.

Additional advice on labelling

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

2.3. Other hazards

Vapours of flammable solvents can accumulate in the gas phase of closed container, especially during heat treatment. Therefore keep away from fire and sources of ignition.

Avoid contact during pregnancy and while nursing.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Washing and cleaning products (including solvent based products)

Hazardous components

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification (GB CLP Regulation)	
8028-48-6	Orange oil	20 - < 40 %
	232-433-8	
	Flam. Liq. 3, Skin Irrit. 2, Skin Sens. 1, Asp. Tox. 1, Aquatic Chronic 2; H226 H315 H317 H304 H411	
127036-24-2	Undeceth-7	< 10 %
	Acute Tox. 4, Eye Dam. 1; H302 H318	

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
8028-48-6	232-433-8	Orange oil	20 - < 40 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 4400 mg/kg	
127036-24-2		Undeceth-7	< 10 %
		oral: LD50 = 1940 mg/kg	

Labelling for contents according to Regulation (EC) No 648/2004

5 % - < 15 % phosphonates.

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information

First aider: Pay attention to self-protection! Remove contaminated clothing immediately and dispose off safely. If skin irritation occurs: Get medical advice/attention.

After inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water.
Caution if victim vomits: Risk of aspiration!

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

Vapours may cause drowsiness and dizziness. Processing vapours can irritate the respiratory tracts, skin and eyes.

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). Foam. Extinguishing powder.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air.

5.3. Advice for firefighters

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

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. 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

General advice

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion hazard.

6.3. Methods and material for containment and cleaning up

Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

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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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours may form explosive mixtures with air.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

Further information on handling

Always close containers tightly after the removal of product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from sources of ignition - No smoking.

Hints on joint storage

Do not store together with: Material, rich in oxygen, oxidizing.

Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place. Protect from direct sunlight.

7.3. Specific end use(s)

Further information: see technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly sealed safety glasses.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Suitable material: Butyl rubber. NBR (Nitrile rubber).

Skin protection

Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection

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If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental exposure controls

Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	whitish	
Odour:	characteristic	
Boiling point or initial boiling point and boiling range:		100 °C
Lower explosion limits:		0,7 vol. %
Upper explosion limits:		6,1 vol. %
Flash point:		45 °C
Auto-ignition temperature:		237 °C
pH-Value:		not applicable
Vapour pressure:		2 hPa
(at 20 °C)		
Vapour pressure:		11,2 hPa
(at 50 °C)		
Density:		1 g/cm³

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

In use may form flammable/explosive vapour-air mixture.

Other safety characteristics

Solvent content:	23,00 %
Sublimation point:	not applicable
Softening point:	not applicable
Viscosity / dynamic:	10 - 50 mPa·s

SECTION 10: Stability and reactivity

10.1. Reactivity

No known hazardous reactions.

10.2. Chemical stability

No risks worthy of mention.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Keep away from heat. Ignition hazard.

10.5. Incompatible materials

PE (polyethylene)

10.6. Hazardous decomposition products

Carbon dioxide (CO₂). Carbon monoxide

SECTION 11: Toxicological information

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11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicokinetics, metabolism and distribution

No information available.

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
8028-48-6	Orange oil				
	oral	LD50 > 4400 mg/kg	Rat		
	dermal	LD50 > 2000 mg/kg	Rabbit		
127036-24-2	Undeceth-7				
	oral	LD50 1940 mg/kg	Rat	OECD 401	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (Orange oil)

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

May be fatal if swallowed and enters airways.

Information on likely routes of exposure

inhalation. ingestion.

Specific effects in experiment on an animal

No information available.

Additional information on tests

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

Practical experience

No information available.

11.2. Information on other hazards

Other information

No information available.

Further information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
8028-48-6	Orange oil					
	Acute fish toxicity	LC50 0,7 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 4,0 mg/l	96 h	Algae		
	Acute crustacea toxicity	EC50 0,4 mg/l	48 h	Daphnia magna (Big water flea)		
127036-24-2	Undeceth-7					
	Acute fish toxicity	LC50 10 mg/l	96 h	Danio rerio (zebrafish)	OECD 203	
	Acute bacteria toxicity	(EC50 100 mg/l)			OECD 209	

12.2. Persistence and degradability

Not easily bio-degradable (according to OECD-criteria).

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
127036-24-2	Undeceth-7				
	OECD 301E	90 %	28		

12.3. Bioaccumulative potential

On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment cannot be ruled out.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.
No information available.

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

highly hazardous to water

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

Contaminated packaging

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

SECTION 14: Transport information

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Land transport (ADR/RID)

14.1. UN number or ID number: UN 2319
14.2. UN proper shipping name: TERPENE HYDROCARBONS, N.O.S. (Orange oil)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3



Classification code: F1
 Limited quantity: 5 L
 Excepted quantity: E1
 Transport category: 3
 Hazard No: 30
 Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 2319
14.2. UN proper shipping name: TERPENE HYDROCARBONS, N.O.S. (Orange oil)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3



Classification code: F1
 Limited quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number or ID number: UN 2319
14.2. UN proper shipping name: TERPENE HYDROCARBONS, N.O.S. (Orange oil)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3



Marine pollutant: 1
 Special Provisions: -
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 2319
14.2. UN proper shipping name: TERPENE HYDROCARBONS, N.O.S. (Orange oil)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
 Hazard label: 3

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Limited quantity Passenger:	10 L	
Passenger LQ:	Y344	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:		355
IATA-max. quantity - Passenger:		60 L
IATA-packing instructions - Cargo:		366
IATA-max. quantity - Cargo:		220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: SECTION 12: Ecological information

14.6. Special precautions for user

- SECTION 6: Accidental release measures
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection

14.7. Maritime transport in bulk according to IMO instruments

No information available.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):
Entry 3, Entry 40

2004/42/EC (VOC): 23 % (230 g/l)

National regulatory information

Water hazard class (D): 3 - highly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

- CLP: Classification, labelling and Packaging
- REACH: Registration, Evaluation and Authorization of Chemicals
- GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
- UN: United Nations
- CAS: Chemical Abstracts Service
- DNEL: Derived No Effect Level
- DMEL: Derived Minimal Effect Level
- PNEC: Predicted No Effect Concentration
- ATE: Acute toxicity estimate
- LC50: Lethal concentration, 50%
- LD50: Lethal dose, 50%
- LL50: Lethal loading, 50%
- EL50: Effect loading, 50%

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EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
 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.
 H318 Causes serious eye damage.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

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.)