according to Regulation (EC) No. 1907/2006



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

1.1 Product identifier

Trade name : euxyl® K 712

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

Use of the Sub- : Preservative for cosmetics & toiletries

stance/Mixture

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Supplier : Schülke & Mayr GmbH

Robert-Koch-Str. 2

22851 Norderstedt

Germany

Telephone: +49 (0)40/ 52100-0 Telefax: +49 (0)40/ 52100318

mail@schuelke.com www.schuelke.com

E-mail address of person

responsible for the SDS/Contact person

: SAI/AT +49 40 52100 100 or S&M UK +44 114 254 3500

sai-at@schuelke.com

1.4 Emergency telephone number

Emergency telephone num-

ber

: UK Poisons Emergency number: 0870 600 6266

Emergency telephone num- : +49 (0)40 / 52 100 -0

ber

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2 H319: Causes serious eye irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.

Precautionary statements : P280 Wear eye protection/ face protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with wa-



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ter for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P313 Get medical advice/ attention.

2.3 Other hazards

This substance/mixture contains no components considered to be either 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

Chemical nature : Aqueous solution

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate)	24634-61-5 246-376-1 019-003-00-3 01-2119950315-41- xxxx	Eye Irrit. 2; H319	14,3 - 15,7
Sodium benzoate	532-32-1 208-534-8 01-2119460683-35- XXXX	Eye Irrit. 2; H319	28,5 - 31,5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : If symptoms persist, call a physician.

In case of skin contact : Wash off with soap and water.

In case of eye contact : Flush eyes with water as a precaution.

If swallowed : If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : No information available.



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4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water

> Dry powder Foam

Carbon dioxide (CO2)

Unsuitable extinguishing

media

No information available.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

No information available. :

5.3 Advice for firefighters

Further information Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions Do not flush into surface water or sanitary sewer system.

Avoid subsoil penetration.

6.3 Methods and material for containment and cleaning up

Wipe up with absorbent material (e.g. cloth, fleece). Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

6.4 Reference to other sections

See chapter 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Handle and open container with care.

Advice on protection against :

fire and explosion

No special protective measures against fire required.



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Hygiene measures : Avoid contact with clothing.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

: Store in original container.

Further information on stor- :

age conditions

Keep away from heat. Keep away from direct sunlight. Limited

stability - see label on pack. Keep container tightly closed.

7.3 Specific end use(s)

Specific use(s) : none

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

none

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Potassium (E,E)- hexa-2,4-dienoate (Potassium Sorbate)	Workers	Skin contact	Long-term systemic effects	40 mg/kg
	Workers	Inhalation	Long-term systemic effects	17,63 mg/m3
	Consumers	Inhalation	Long-term systemic effects	52,17 mg/m3
	Consumers	Skin contact	Long-term systemic effects	20 mg/kg
	Consumers	Ingestion	Long-term systemic effects	2 mg/kg
	Workers	Inhalation	Long-term local ef- fects	26,08 mg/m3
	Workers	Skin contact	Long-term local ef- fects	0,17 mg/cm2
Sodium benzoate	Consumers	Ingestion	Long-term systemic effects	25 mg/kg
	Workers	Skin contact	Long-term systemic effects	34,7 mg/cm2
	Consumers	Skin contact	Long-term systemic effects	20,8 mg/cm2
	Workers	Skin contact	Long-term local ef- fects	4,5 mg/cm2
	Consumers	Skin contact	Long-term local ef- fects	20,8 mg/cm2
	Workers	Inhalation	Long-term systemic effects	10,4 mg/m3
	Consumers	Inhalation	Long-term systemic effects	2,1 mg/m3
	Workers	Inhalation	Long-term local ef- fects	6,3 mg/m3



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Consumers Inhalation Long-term local effects 1,3 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Potassium (E,E)-hexa-2,4-	Water	0,48 mg/l
dienoate (Potassium Sorbate)		
	Soil	1,67 mg/kg
	Sediment	0,173 mg/kg
	Sewage treatment plant	10 mg/l
Sodium benzoate	Fresh water	0,13 mg/l
	Marine water	0,013 mg/l
	Intermittent use/release	0,305 mg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	1,76 mg/kg
	Marine sediment	0,176 mg/kg
	Soil	0,276 mg/kg
	Oral	300 mg/kg food

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses with side-shields conforming to EN166

Hand protection : Skin should be washed after contact.

Protective measures : Avoid contact with skin and eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Liquid

Colour : yellow, -, brown

Odour : characteristic

Odour Threshold : not determined

pH : 8 - 10 (20 °C)

concentrate

Freezing point : ca. -5 °C

Boiling point/boiling range : > 100 °C

Flash point : $> 100 \, ^{\circ}\text{C}$

Method: ISO 2719

Evaporation rate : not determined

Flammability (solid, gas) : not auto-flammable

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Upper explosion limit / Upper

flammability limit

Not applicable

Lower explosion limit / Lower :

flammability limit

Not applicable

Vapour pressure : ca. 25 hPa (20 °C)

Vapour density : not determined

Relative density : 1,166 - 1,185 g/ml (20 °C)

Solubility(ies)

Water solubility : in all proportions (20 °C)

Partition coefficient: n-

octanol/water

: Not applicable

Auto-ignition temperature : Not applicable

Viscosity

Viscosity, dynamic : 2 mPa*s

Method: Rheo WIN RS 600

Flow time : ca. < 15 s at 20 °C

Method: DIN 53211

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

9.2 Other information

Surface tension : 42 mN/m

Refractive index : 1,436 - 1,441 at 20 °C

Self-ignition : not auto-flammable

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored normally.

10.3 Possibility of hazardous reactions

Hazardous reactions : None reasonably foreseeable.

10.4 Conditions to avoid

Conditions to avoid : Protect from frost, heat and sunlight.



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10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Components:

Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate):

Acute oral toxicity : LD50 (Rat): 4.200 mg/kg

Acute inhalation toxicity : LC50: > 5,15 mg/l

Exposure time: 4 h

Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 402

Sodium benzoate:

Acute oral toxicity : LD50 Oral (Rat): 4.070 mg/kg

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Skin corrosion/irritation

Components:

Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate):

Result : Mild skin irritation

Sodium benzoate:

Species : Rabbit

Assessment : No skin irritation

Serious eye damage/eye irritation

Components:

Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate):

Result : Irritating to eyes.



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Sodium benzoate:

Species : Rabbit

Method : OECD Test Guideline 405
Result : Causes serious eye irritation.

Respiratory or skin sensitisation

Components:

Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate):

Species : Guinea pig

Result : Did not cause sensitisation on laboratory animals.

Sodium benzoate:

Remarks : May cause sensitisation of susceptible persons.

Germ cell mutagenicity

Components:

Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate):

Genotoxicity in vitro : Test Type: Ames test

Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Species: Mouse Method: OECD 474 Remarks: negative

Sodium benzoate:

Genotoxicity in vitro : Test Type: Mutagenicity (Salmonella typhimurium - reverse

mutation assay)

Method: OECD Test Guideline 471

Result: Non mutagenic

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

Carcinogenicity

Components:

Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate):

Species : Rat Application Route : Oral

3.000 mg/kg bw/day

Method : OECD Test Guideline 416

Carcinogenicity - Assess-

ment

: Animal testing did not show any carcinogenic effects.



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Sodium benzoate:

Carcinogenicity - Assess-

ment

Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Components:

Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate):

Effects on foetal develop: Species: Rat

ment Application Route: Oral

General Toxicity Maternal: NOAEL: 340 mg/kg body weight Remarks: Based on available data, the classification criteria

are not met.

Sodium benzoate:

Reproductive toxicity - As-

sessment

No data available

Repeated dose toxicity

Components:

Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate):

Species : Rat

NOAEL : 750 mg/kg Application Route : Oral

Aspiration toxicity

No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate):

Toxicity to fish : LC50 (Brachidanio rerio): 1.250 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

EC50 (Daphnia magna (Water flea)): 982 mg/l

aquatic invertebrates Exposure time: 48 h

Method: OECD Test Guideline 202

Sodium benzoate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 100 mg/l



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aquatic invertebrates Exposure time: 48 h

Toxicity to algae : IC50 (Pseudokirchneriella subcapitata (microalgae)): 24,8

mg/l

Exposure time: 72 h

12.2 Persistence and degradability

Components:

Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate):

Biodegradability : Result: rapidly biodegradable

Method: OECD Test Guideline 301D

Sodium benzoate:

Biodegradability : Result: rapidly biodegradable

Biodegradation: 84 % Exposure time: 10 d

Method: OECD Test Guideline 301C

12.3 Bioaccumulative potential

Components:

Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate):

Partition coefficient: n-

octanol/water

: log Pow: -1,72

Sodium benzoate:

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <=

4).

Partition coefficient: n-

octanol/water

log Pow: -2,27

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

Components:

Sodium benzoate:

Mobility : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of



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0.1% or higher...

12.6 Other adverse effects

Product:

Adsorbed organic bound

halogens (AOX)

Remarks: Product does not contain any organic halogens.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of as special waste in compliance with local and na-

tional regulations.

Can be disposed of as a solid waste or burned in a suitable

installation subject to local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

Waste key for the unused

product(Group)

: The waste producer itself must, in consultation with the appropriate authorities and a waste disposal company, obtain a waste code from the EWC (European Waste Catalogue)

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

For personal protection see section 8.

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

Not applicable for product as supplied.



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SECTION 15: Regulatory information

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Volatile organic compounds : none, Directive 2010/75/EC on the limitation of emissions of

volatile organic compounds

15.2 Chemical safety assessment

Exempt

SECTION 16: Other information

Full text of H-Statements

H319 : Causes serious eye irritation.

Full text of other abbreviations

Eye Irrit. : Eye irritation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified: NO(A)EC - No Observed (Adverse) Effect Concentration: NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical



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Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008

Eye Irrit. 2, H319 : Calculation method

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

