

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

euxyl® K 712 **No Change Service!**

Version
07.00

Revision Date:
12.07.2017

Date of last issue: 21.11.2014
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Specific risk from the substance or the product itself, its combustion products or evolved gases : Decomposition products, see chapter 10

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

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
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.
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 storage 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-	Workers	Skin contact	Long-term systemic	40 mg/kg

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2,4-dienoate (Potassium Sorbate)			effects	
	Workers	Inhalation	Long-term systemic effects	17,63 mg/m ³
	Consumers	Inhalation	Long-term systemic effects	52,17 mg/m ³
	Consumers	Skin contact	Long-term systemic effects	20 mg/kg
	Consumers	Ingestion	Long-term systemic effects	2 mg/kg
	Workers	Inhalation	Long-term local effects	26,08 mg/m ³
	Workers	Skin contact	Long-term local effects	0,17 mg/cm ²
Sodium benzoate	Consumers	Ingestion	Long-term systemic effects	25 mg/kg
	Workers	Skin contact	Long-term systemic effects	34,7 mg/cm ²
	Consumers	Skin contact	Long-term systemic effects	20,8 mg/cm ²
	Workers	Skin contact	Long-term local effects	4,5 mg/cm ²
	Consumers	Skin contact	Long-term local effects	20,8 mg/cm ²
	Workers	Inhalation	Long-term systemic effects	10,4 mg/m ³
	Consumers	Inhalation	Long-term systemic effects	2,1 mg/m ³
	Workers	Inhalation	Long-term local effects	6,3 mg/m ³
	Consumers	Inhalation	Long-term local effects	1,3 mg/m ³

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

Substance name	Environmental Compartment	Value
Potassium (E,E)-hexa-2,4-dienoate (Potassium Sorbate)	Water	0,48 mg/l
	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

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	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 °C, ISO 2719
Evaporation rate : not determined
Flammability (solid, gas) : not auto-flammable
Upper explosion limit : Not applicable
Lower explosion limit : Not applicable
Vapour pressure : ca. 25 hPa, 20 °C
Relative vapour density : not determined
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, Rheo WIN RS 600
Flow time : ca. < 15 s at 20 °C, 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

SECTION 10: Stability and reactivity

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10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored normally.

10.3 Possibility of hazardous reactions

None reasonably foreseeable.

10.4 Conditions to avoid

Protect from frost, heat and sunlight.

10.5 Incompatible materials

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, 4 h, OECD Test Guideline 403
Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg, OECD Test Guideline 402

Sodium benzoate:

Acute oral toxicity : LD50 Oral (Rat): 4.070 mg/kg
Acute inhalation toxicity : No data available
Acute dermal toxicity : No data available

Skin corrosion/irritation

Components:

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

Mild skin irritation

Sodium benzoate:

Rabbit, No skin irritation

Serious eye damage/eye irritation

Components:

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

Irritating to eyes.

Sodium benzoate:

Rabbit, OECD Test Guideline 405, Causes serious eye irritation.

Respiratory or skin sensitisation

Components:

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

Did not cause sensitisation on laboratory animals. Guinea pig

Sodium benzoate:

May cause sensitisation of susceptible persons.

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Germ cell mutagenicity

Components:

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

Genotoxicity in vitro : Ames test, negative
Genotoxicity in vivo : In vivo micronucleus test, Mouse, OECD 474, negative

Sodium benzoate:

Genotoxicity in vitro : Mutagenicity (Salmonella typhimurium - reverse mutation assay), OECD Test Guideline 471, not mutagenic

Germ cell mutagenicity- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Components:

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

Rat, Oral, 3.000 mg/kg bw/day, OECD Test Guideline 416
Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

Sodium benzoate:

Carcinogenicity - Assessment : Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Components:

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

Effects on fertility : Rat, Oral, NOAEL: 340 mg/kg, , Directive 67/548/EEC, Annex V, B.31., Based on available data, the classification criteria are not met.

Effects on foetal development : Rat, Oral, NOAEL: 340 mg/kg, Directive 67/548/EEC, Annex V, B.31., Based on available data, the classification criteria are not met.

Sodium benzoate:

Reproductive toxicity - Assessment : No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Repeated dose toxicity

Components:

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

Rat, NOAEL: 750 mg/kg, Oral

Aspiration toxicity

No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

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

Toxicity to fish : LC50 (Brachidanio rerio): 1.250 mg/l, 96 h, OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 982 mg/l, 48 h, OECD Test Guideline 202

Sodium benzoate:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l, 96 h
Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l, 48 h
Toxicity to algae : IC50 (Pseudokirchneriella subcapitata (microalgae)): 24,8 mg/l, 72 h

12.2 Persistence and degradability

Components:

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

Biodegradability : rapidly biodegradable, OECD Test Guideline 301D

Sodium benzoate:

Biodegradability : rapidly biodegradable, Biodegradation: 84 %, Exposure time: 10 d, 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 : 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 : No data available

Components:

Sodium benzoate:

Mobility : 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 0.1% or higher.

12.6 Other adverse effects

Product:

Adsorbed organic bound halogens (AOX) : Product does not contain any organic halogens.

SECTION 13: Disposal considerations

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13.1 Waste treatment methods

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

For personal protection see section 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Seveso III: Directive : Not applicable
2012/18/EU of the European
Parliament and of the Council
on the control of major-
accident hazards involving
dangerous substances.

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.

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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; TCSI - Taiwan Chemical 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 compared with the previous edition!!!

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.

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