

SAFETY DATA SHEET

Korsolex PAA Activator

Version 1.7	Revision Date: 15.08.2022	SDS Number: R11945	Date of last issue: 26.07.2022 Date of first issue: 14.12.2020
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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Korsolex PAA Activator

Manufacturer or supplier's details

Manufacturer : BODE Chemie GmbH
Melanchthonstraße 27
22525 Hamburg (Germany)
Tel.: +49 (0)40 / 54 00 60

Supplier :

Responsible Department : Scientific Affairs
sds@bode-chemie.de

Emergency telephone number : Giftnotruf Göttingen
24h-Phone +49 (0)551 / 1 92 40

Recommended use of the chemical and restrictions on use

Recommended use : In-door use
For further information, refer to the product technical data sheet.

Restrictions on use : For professional users only.

2. HAZARDS IDENTIFICATION

GHS Classification

Organic peroxides : Type E

Corrosive to metals : Category 1

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Skin corrosion/irritation : Sub-category 1A

Serious eye damage/eye irritation : Category 1

Specific target organ toxicity - single exposure : Category 3

Short-term (acute) aquatic hazard : Category 2

Long-term (chronic) aquatic hazard : Category 2

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H242 Heating may cause a fire.

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H290 May be corrosive to metals.
H302 + H332 Harmful if swallowed or if inhaled.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

:

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P304 + P312 IF INHALED: Call a POISON CENTER/ doctor if you feel unwell.

Storage:

P411 Store at temperatures not exceeding 25°C/ 77°F.
P410 Protect from sunlight.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
hydrogen peroxide	7722-84-1	>= 30 - < 50
acetic acid	64-19-7	>= 5 - < 10
peracetic acid	79-21-0	>= 1 - < 2,5

4. FIRST AID MEASURES

General advice

: Move out of dangerous area.

If inhaled

: If breathed in, move person into fresh air.

In case of skin contact

: Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
If symptoms persist, call a physician.

In case of eye contact

: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

: Rinse mouth with water.

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		Do NOT induce vomiting. If accidentally swallowed obtain immediate medical attention.
Most important symptoms and effects, both acute and delayed	:	Harmful if swallowed or if inhaled. Causes serious eye damage. May cause respiratory irritation. Causes severe burns.
Notes to physician	:	Keep under medical supervision for at least 48 hours. For specialist advice physicians should contact the Poisons Information Service.

5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water spray jet
Unsuitable extinguishing media	:	Foam Dry powder
Specific hazards during fire-fighting	:	Cool closed containers exposed to fire with water spray.
Specific extinguishing methods	:	Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	:	Use personal protective equipment. In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment.
Environmental precautions	:	Should not be released into the environment.
Methods and materials for containment and cleaning up	:	Dilute with water. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Keep away from heat and sources of ignition.
Advice on safe handling	:	Use ventilation adequate to keep exposures below recommended exposure limits. See the safety datasheet. Avoid formation of aerosol. Prepare the working solution as given on the label(s) and/or the user instructions. Avoid contact with eyes. Do not get on skin or clothing.
Conditions for safe storage	:	Do not keep container sealed. Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.
Materials to avoid	:	Keep away from metals.

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Further information on storage stability : Protect from frost, heat and sunlight.

Packaging material : Unsuitable material: Aluminium, Zinc

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
hydrogen peroxide	7722-84-1	TWA	1 ppm	ACGIH
acetic acid	64-19-7	TWA	10 ppm	ACGIH
		STEL	15 ppm	ACGIH
peracetic acid	79-21-0	STEL (Inhalable fraction and vapor)	0,4 ppm	ACGIH

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Filter type : Filter type B-P

Hand protection

butyl-rubber

Material : Protective gloves complying with EN 374.

Break through time : > 480 min

Glove thickness : 0,5 mm

Protective index : Class 6

Eye protection : Safety glasses with side-shields conforming to EN166
Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection : Work uniform or laboratory coat.
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : Keep away from food and drink.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless

Odour : stinging

pH : 3 (20 °C)

Melting point/freezing point : -18 °C

Boiling point/boiling range : > 100 °C

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Flash point	:	> 60 °C
Vapour pressure	:	23 hPa (20 °C)
Density	:	1,19 g/cm ³ (20 °C)
Solubility(ies) Water solubility	:	completely miscible
Metal corrosion rate	:	Corrosive to metals

10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	Heat Strong sunlight for prolonged periods.
Incompatible materials	:	Bases Metals Reducing agents
Hazardous decomposition products	:	This product may release the following: Oxygen

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

Acute oral toxicity	:	Acute toxicity estimate: 1.093 mg/kg Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: > 5.000 mg/kg Method: Calculation method

Components:

hydrogen peroxide (CAS: 7722-84-1):

Acute oral toxicity	:	LD50 Oral (Rat): 694 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	Acute toxicity estimate: 11 mg/l Exposure time: 4 h Test atmosphere: vapour

acetic acid (CAS: 64-19-7):

Acute oral toxicity	:	LD50 Oral (Rat): 3.310 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 40 mg/l Exposure time: 4 h Test atmosphere: vapour

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peracetic acid (CAS: 79-21-0):

Acute inhalation toxicity : Acute toxicity estimate: 0,204 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): 1.147 mg/kg

Skin corrosion/irritation

Causes severe burns.

Components:

acetic acid (CAS: 64-19-7):

Species : Rabbit
Method : OECD Test Guideline 404
Result : Extremely corrosive and destructive to tissue.

peracetic acid (CAS: 79-21-0):

Result : Corrosive

Serious eye damage/eye irritation

Causes serious eye damage.

Components:

acetic acid (CAS: 64-19-7):

Species : Rabbit
Method : OECD Test Guideline 405
Result : Corrosive

peracetic acid (CAS: 79-21-0):

Result : Corrosive

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause respiratory irritation.

Components:

peracetic acid (CAS: 79-21-0):

Exposure routes : Inhalation
Target Organs : Respiratory system
Assessment : May cause respiratory irritation.

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STOT - repeated exposure

Not classified based on available information.

Repeated dose toxicity

No data available

Aspiration toxicity

Not classified based on available information.

Experience with human exposure

No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

hydrogen peroxide (CAS: 7722-84-1):

Toxicity to fish : LC50 (Fish): 16,4 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2,4 mg/l
Exposure time: 48 h
Test Type: semi-static test

Toxicity to algae/aquatic plants : EC50 (algae): 1,38 mg/l
Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,63 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)

acetic acid (CAS: 64-19-7):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 300,82 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 300,82 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Skeletonema costatum (marine diatom)): 300,82 mg/l
Exposure time: 72 h

peracetic acid (CAS: 79-21-0):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,53 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,73 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 0,16 mg/l
Exposure time: 72 h

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M-Factor (Acute aquatic toxicity)	:	1
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,00094 mg/l Exposure time: 33 d Species: Leuciscus idus (Golden orfe) Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,05 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	10

Persistence and degradability

Product:

Biodegradability	:	Remarks: According to the results of tests of biodegradability this product is considered as being readily biodegradable.
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Components:

hydrogen peroxide (CAS: 7722-84-1):

Biodegradability	:	Result: Totally biodegradable
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acetic acid (CAS: 64-19-7):

Biodegradability	:	Result: Readily biodegradable. Biodegradation: > 95 % Exposure time: 5 d
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Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	Dispose of as hazardous waste in compliance with local and national regulations. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
Contaminated packaging	:	Empty remaining contents. Store containers and offer for recycling of material when in accordance with the local regulations.

14. TRANSPORT INFORMATION

ADR

UN number	:	UN 3107
Proper shipping name	:	ORGANIC PEROXIDE TYPE E, LIQUID (PEROXYACETIC ACID, TYPE E) (peracetic acid, hydrogen peroxide)

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Class : 5.2
Subsidiary risk : 8
Packing group : Not assigned by regulation
Labels : 5.2 (8)
Tunnel restriction code : (D)
Limited quantity (LQ) : 125,00 ML
Environmentally hazardous : yes

UNRTDG

UN number : UN 3107
Proper shipping name : ORGANIC PEROXIDE TYPE E, LIQUID (PEROXYACETIC ACID, TYPE E)
(peracetic acid, hydrogen peroxide)

Class : 5.2
Subsidiary risk : 8
Packing group : Not assigned by regulation
Labels : 5.2 (8)

IATA-DGR

UN/ID No. : UN 3107
Proper shipping name : Organic peroxide type E, liquid (Peroxyacetic acid, type E)
(peracetic acid, hydrogen peroxide)

Class : 5.2
Subsidiary risk : 8
Packing group : Not assigned by regulation
Labels : Organic Peroxides, Keep Away From Heat, Corrosive
Packing instruction (cargo aircraft) : 570
Packing instruction (passenger aircraft) : 570

IMDG-Code

UN number : UN 3107
Proper shipping name : ORGANIC PEROXIDE TYPE E, LIQUID (PEROXYACETIC ACID, TYPE E)
(peracetic acid, hydrogen peroxide)

Class : 5.2
Subsidiary risk : 8
Packing group : Not assigned by regulation
Labels : 5.2 (8)
EmS Code : F-J, S-R
Limited quantity (LQ) : 125,00 ML
Marine pollutant : yes

Transport in bulk according to IMO instruments

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. REGULATORY INFORMATION

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

Other international regulations

The components of this product are reported in the following inventories:

TSCA : All substances listed as active on the TSCA inventory

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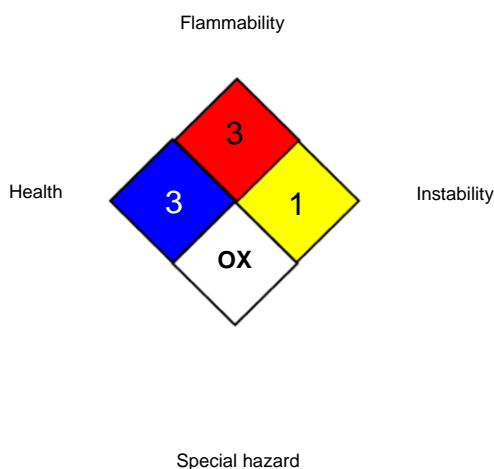
16. OTHER INFORMATION

Safety datasheet sections which have been updated:

8. Exposure controls/personal protection

Further information

NFPA:



HMIS® IV:

HEALTH	/	3
FLAMMABILITY		3
PHYSICAL HAZARD		1

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit

AiIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA -

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Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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.

TC / EN