

Safety Data Sheet

SoilPak-250+



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

- 1.1. **Product Name:** SoilPak-250+
- 1.2. **Relevant identified uses of the substance or mixture and uses advised against**
Relevant identified uses
A water-based nonhazardous & environmentally friendly soil stabilization
- 1.3. **Company:** Corporate Address:
SoilChem, LLC
117 Snow Dr.
Newcastle, OK 73065
(405-392-3888)

S.D.S. Revision Date: 12/03/2020

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

Skin Corr. 1 / H314	skin corrosion/irritation	Causes severe skin burns and eye damage.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Skin Sens. 1 / H317	respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic life.

Classification according to Directive 67/548/EEC or 1999/45/EC

This mixture is classified as hazardous according to 1999/45/EC.

C; R34	Corrosive	Causes burns.
R43		May cause sensitization by skin contact.
N; R50	Dangerous for the environment	Very toxic to aquatic life.

2.2. Label elements

The product is classified and labelled according to EC directives or corresponding national laws.

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

Hazard pictograms



Danger

Hazard statements

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.

Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

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P501 easy to do. Continue rinsing.
Dispose of contents/container to industrial incineration plant.

contains:

Quaternary ammonium-silane
methanol

Supplemental Hazard information (EU)

n.a.

Labelling (67/548/EEC or 1999/45/EC)



C Corrosive



N Dangerous for the environment

Hazard statements

34 Causes burns.
43 May cause sensitization by skin contact.
50 Very toxic to aquatic life.

Precautionary statements

24 Avoid contact with skin.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
29 Do not empty into drains.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
60 This material and its container must be disposed of as hazardous waste.

contains:

methanol
Quaternary ammonium-silane

Special provisions concerning the labelling of certain mixtures

n.a.

2.3. Other hazards

No special hazards except those arising from the marking.

SECTION 3: Composition / information on ingredients

3.1. Substances

This product is a preparation.

3.2. Mixtures

Product description / chemical characterization

Description:
Antimicrobial
mixture

Hazardous ingredients

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

EC No.	REACH No.	Wt %
CAS No.	Chemical name	Remark
INDEX No.	classification:	
255-451-8		
41591-87-1	Quaternary ammonium-silane Skin Corr. 1 H314 / Eye Dam. 1 H318 / Skin Sens. 1 H317 / Aquatic Acute 1 H400	25 - 50
200-659-6	01-2119433307-44	
67-56-1	methanol	< 0,5
603-001-00-X	Flam. Liq. 2 H225 / Acute Tox. 3 H331 / Acute Tox. 3 H311 / Acute Tox. 3 H301 / STOT SE 1 H370	

Classification according to Directive 67/548/EEC or 1999/45/EC

EC No. **REACH No.**

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CAS No. INDEX No.	Chemical name classification:	Wt % Remark
255-451-8 41591-87-1	Quaternary ammonium-silane C; R34 / R43 / N; R50	25 - 50
200-659-6 67-56-1 603-001-00-X	methanol F; R11 / T; R39/23/24/25 / T; R23/24/25	< 0,5

Additional information

Full text of R-phrases: see section 16.

Full text of H-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Keep eyelids open, wash out with plenty of clean, fresh water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

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

4.3. Indication of any immediate medical attention and special treatment needed

Treatment

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water spray jet, Foam, Carbon dioxide, Extinguishing powder

Extinguishing media which must not be used for safety reasons:

strong water jet

5.2. Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. Special protective equipment for firefighters:

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

Additional information

Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

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6.3. Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Dispose of waste according to applicable legislation.

6.4. Reference to other sections

Observe protective provisions (see chapter 7 and 8).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Use personal protection equipment.

Advices on safe handling

Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

General health and safety measures

When using do not eat, drink or smoke. Remove contaminated, saturated clothing immediately. Thorough skin-cleansing after handling the product.

Precautions against fire and explosion:

No special fire protection measures are necessary.

Additional information

Protect from sunlight.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Unsuitable container/equipment material: Metal

Suitable container/equipment material: Polyethylene

Hints on joint storage

Do not store together with: Alkali (lye), Oxidising agent, Reducing agent

Further information on storage conditions

Store in a well-ventilated and dry room at temperatures between 10 °C and 30 °C. Protect from heat and direct sunlight.

7.3. Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

methanol

INDEX No. 603-001-00-X / EC No. 200-659-6 / CAS No. 67-56-1

TWA: 266 mg/m³; 200 ppm

STEL: 333 mg/m³; 250 ppm

Additional information

TWA : long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

8.2. Exposure controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Occupational exposure controls

Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Use only respiratory protection equipment with CE-symbol including four digit test number.

Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)

Thickness of the glove material > 0,4 mm ; Breakthrough time (maximum wearing time) > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles DIN EN 374

Eye protection

Wear closed protection glasses.

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Protective clothing

Wear suitable protective clothing.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser. Immediately remove any contaminated clothing, shoes or stockings.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state	liquid
Colour	light yellow
Odour	characteristic

Safety relevant basis data	Unit	Method	Remark
Flash point (°C)	64 °C	DIN 53213	
Ignition temperature in °C	275 °C		
Lower explosion limit	NB		
Upper explosion limit	NB		
Vapour pressure at 20 °C	NB		
Density at 20 °C	1,01 g/cm ³		
Water solubility (g/L)	partially soluble		
pH at 20 °C	6,90		
Viscosity at 20 °C	56 mPa·s		
boiling point in °C at 101,3 kPa	200 °C		

9.2. Other information:

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to chapter 7.

10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

10.4. Conditions to avoid

Protect from heat and direct sunlight.

10.5. Incompatible materials

Metal
Acid
Alkali (lye)
Oxidising agent

10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

SoilPak-250+ Additive for textile industry oral,

LD50, Rat: > 2000 mg/kg

Methode: OECD 423

dermal, LD50, Rat: > 2000 mg/kg

Quaternary ammonium-silane

oral, LD50, Rat: > 5000 mg/kg

dermal, LD50, Rat: > 2000 mg/kg

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inhalative (vapours), LC50, Rat: > 2 mg/L (4 h)

Irritant and corrosive effects

SoilPak-250+ Additive for textile industry Skin

Causes severe skin burns and eye damage.

Eyes

Causes serious eye damage.

Quaternary ammonium-silane

Skin

Causes severe skin burns and eye damage.

Eyes

Causes serious eye damage.

Sensitisation

SoilPak-250+ Additive for textile industry Skin,

Guinea pig:

Methode: OECD 406

May cause an allergic skin reaction.

Specific target organ toxicity

Toxicological data are not available.

Aspiration hazard

Toxicological data are not available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

SoilPak-250+ Additive for textile industry Germ

cell mutagenicity

No indications of human germ cell mutagenicity exist.

Carcinogenicity

No indications of human carcinogenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Quaternary ammonium-silane

Germ cell mutagenicity; evaluation: No indications of human germ cell mutagenicity exist.

Carcinogenicity; evaluation: No indication of human carcinogenicity.

Reproductive toxicity; evaluation: No indications of human reproductive toxicity exist.

Overall Assessment on CMR properties

The ingredients in this preparation do not meet the criteria for classification as CMR category 1 or 2 according to 67/548/EEC.

SECTION 12: Ecological information

12.1. Toxicity

SoilPak-250+ Additive for textile industry

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 1.3 mg/L (96 h)

Methode: OECD 203

Very toxic to aquatic life.

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 0.29 mg/L (48 h)

Methode: OECD 202

Very toxic to aquatic life.

Bacteria toxicity, NOEC: 32 mg/L (3 h); evaluation: Respiratory inhibition of municipal activated sludge.

Methode: OECD 209

Bacteria toxicity, EC50: 140 mg/L (3 h); evaluation: Respiratory inhibition of municipal activated sludge.

Methode: OECD 209

Quaternary ammonium-silane

Fish toxicity, LC50, Oncorhynchus mykiss (Rainbow trout): 1.73 mg/L (96 h)

Long-term Ecotoxicity

Toxicological data are not available.

12.2. Persistence and degradability

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SoilPak-250+ Additive for textile industry
: > 76 % (6 D); evaluation: Readily biodegradable (according to OECD criteria).
Methode: OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A

12.3. Bioaccumulative potential

Toxicological data are not available.

Bioconcentration factor (BCF)

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

200129 detergents containing dangerous substances

packaging

Handle contaminated packages in the same way as the substance itself.

Additional information

Observe in addition any national regulations!

SECTION 14: Transport information

14.1. UN number

1760

14.2. UN proper shipping name

Land transport (ADR/RID):

Corrosive liquid, n.o.s.

(Quaternary ammonium-silane)

Sea transport (IMDG):

CORROSIVE LIQUID, N.O.S.

(Quaternary ammonium-silane)

Air transport (ICAO-TI / IATA-DGR):

Corrosive liquid, n.o.s.

(Quaternary ammonium-silane)

14.3. Transport hazard class(es)

8

14.4. Packing group

II

14.5. Environmental hazards

Land transport (ADR/RID)

UMWELTGEFÄHRDEND

Marine pollutant

p

14.6. Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

Additional information

Land transport (ADR/RID)

tunnel restriction code

E

Sea transport (IMDG)

EmS-No.

F-A, S-B

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

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

EU legislation

Regulation (EU) No 528/2012

biocide, active substance

Quaternary ammonium-silane

400 g/kg

Input

0.2 - 1.0 %

Biocide authorizations

USA: 3090-220

DE: N-42566

Use

Preservatives

PA09 Fibre, leather, rubber and polymerised materials

preservatives

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

VOC-value (in g/L) ISO 11890-2: 573,5

VOC-value (in g/L) ASTM D 2369: 573,5

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations, restrictions and prohibition regulations

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

Relevant R-and H-phrases (Number and full text):

Skin Corr. 1 / H314	skin corrosion/irritation	Causes severe skin burns and eye damage.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Skin Sens. 1 / H317	respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic life.
Flam. Liq. 2 / H225	flammable liquids	Highly flammable liquid and vapour.
Acute Tox. 3 / H331	Acute toxicity (inhalative)	Toxic if inhaled.
Acute Tox. 3 / H311	Acute toxicity (dermal)	Toxic in contact with skin.
Acute Tox. 3 / H301	Acute toxicity (oral)	Toxic if swallowed.
STOT SE 1 / H370	Specific target organ toxicity (single exposure)	Causes damage to organs (or state all organs affected, if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
C; R34	Corrosive	Causes burns.
R43		May cause sensitization by skin contact.
N; R50	Dangerous for the environment	Very toxic to aquatic life.
F; R11	Highly flammable	Highly flammable
T; R39/23/24/25	Toxic	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
T; R23/24/25	Toxic	Toxic by inhalation, in contact with skin and if swallowed.

Additional information

This product's safety information is provided to assist our customers in assessing compliance with health, safety and environmental regulations. The information contained herein, is based on data available to us and is believed to be accurate, although no guarantee or warranty is provided by this company in this respect. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions of safe use of this product. Such conditions should comply with all Federal regulations concerning the product. All materials in this product are produced in compliance with Public Law 94-469 (also known as the "Toxic Substances Control Act" of 1976).