

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

Product identifier

- Trade name: **Stone Impregnation**
- Article number: 10834, 10835, 10845
- Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the preparation: Protective impregnation





Details of the supplier of the safety data sheet

- Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH
Lechstrasse 28
D 90451 Nürnberg
Tel. +49(0)911-642960
Fax. +49(0)911-644456
e-mail info@akemi.de
- Information department: Laboratory
- Emergency telephone number: Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.

2 Composition/information on ingredients

- Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

CAS: 64742-48-9 EINECS: 265-150-3 Index number: 649-327-00-6	Naphtha (petroleum), hydrotreated heavy  Xn R65 R10-66-67 -----  H304;  H336; H227	50-100%
CAS: 34396-03-7	Trimethoxy (2,4,4-trimethylpentyl)silan R10-52/53 -----  H226; H402; H412	<1%

- Additional information: For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

Classification of the substance or mixture



GHS02 Flame

H226 Flammable liquid and vapour.



GHS08 Health hazard

H304 May be fatal if swallowed and enters airways.



GHS07

H336 May cause drowsiness or dizziness.

H313 May be harmful in contact with skin.

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



Harmful

Harmful: may cause lung damage if swallowed.

Flammable. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

Trade name: Stone Impregnation

(Contd. of page 1)

· Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

· Classification system:

Has a narcotizing effect.

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **Label elements**

· Hazard-determining components of labelling:

Naphtha (petroleum), hydrotreated heavy

· Labelling according to EU guidelines:

The product has been classified and marked in accordance with directives on hazardous materials.

· Code letter and hazard designation of product:



Xn Harmful

· Hazard-determining components of labelling:

Naphtha (petroleum), hydrotreated heavy

· Risk phrases:

Flammable.
Harmful: may cause lung damage if swallowed.
Repeated exposure may cause skin dryness or cracking
Vapours may cause drowsiness and dizziness

· Safety phrases:

Keep out of the reach of children.
Keep away from sources of ignition - No smoking.
Do not breathe fumes
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
Wear suitable protective clothing, gloves and eye/face protection.
In case of insufficient ventilation, wear suitable respiratory equipment.
If swallowed, seek medical advice immediately and show this container or label.
Use only in well-ventilated areas.

· **Classification system:**
· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



· **Other hazards**

· Results of PBT and vPvB assessment

· PBT: Not applicable.
· vPvB: Not applicable.

(Contd. on page 3)

Trade name: Stone Impregnation

(Contd. of page 2)

4 First aid measures

· Description of first aid measures

- General information: Take affected persons out into the fresh air.
Position and transport stably on side.
Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor: Symptoms in intoxication with (aromatic) hydrocarbons (dosis letalis about 30 g)
a) In acute intoxication: headache, dizziness, euphoria, gastro-intestinal dysfunction, state of excitement, coma.
b) In chronic intoxication: myelotoxic damage, fatigue, dizziness, emaciation, cardiac palpitation after physical exercise, leucopenia, anemia, leukosis.
Therapy in hydrocarbons intoxication: In case of inhalation provision of fresh air; in case of peroral intake administration of Carbo medicinalis; only after intubation conduct of gastrolavage in application of Carbo medicinalis; in case of cramps administration of Diazepam 20 mg intravenously.
- Most important symptoms and effects, both acute and delayed Headache
Dizziness
Dizziness
Nausea
Breathing difficulty
Coughing
Profuse sweating
Danger of impaired breathing.
- Danger
- Indication of any immediate medical attention and special treatment needed If swallowed, gastric irrigation with added, activated carbon.
If swallowed or in case of vomiting, danger of entering the lungs.

5 Firefighting measures

- **Extinguishing media**
- Suitable extinguishing agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- **Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire.
In case of fire, the following can be released:
Carbon monoxide (CO)
In certain fire conditions, traces of other toxic gases cannot be excluded.
- **Advice for firefighters**
- Protective equipment: Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.
- **Additional information** Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

(Contd. on page 4)

Trade name: Stone Impregnation

(Contd. of page 3)

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation
Keep away from ignition sources
Use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:**

Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

· **Reference to other sections**

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling:**

· **Precautions for safe handling**

Keep receptacles tightly sealed.
Store in cool, dry place in tightly closed receptacles.
Keep away from heat and direct sunlight.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Use only in well ventilated areas.
Ensure good ventilation/exhaustion at the workplace.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

Store only in the original receptacle.
Prevent any seepage into the ground.

· **Information about storage in one common storage facility:**

Store away from oxidizing agents.
Store away from foodstuffs.

· **Further information about storage conditions:**

Store receptacle in a well ventilated area.
Store in a cool place.
Keep receptacle tightly sealed.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:**

No further data; see item 7.

· **Control parameters**


· **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

(Contd. on page 5)

Trade name: Stone Impregnation

(Contd. of page 4)

- Additional information: The lists that were valid during the creation were used as basis.
 - **Exposure controls**
 - Personal protective equipment:
 - General protective and hygienic measures:
 - Do not eat, drink, smoke or sniff while working.
 - Apply solvent resistant skin cream before beginning work.
 - Use skin protection cream for skin protection.
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - Breathing equipment:
 - Filter AX
 - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
 - Protection of hands:
 - Preventive skin protection by use of skin-protecting agents is recommended.
 - After use of gloves apply skin-cleaning agents and skin cosmetics.
 - STOKODERM (<http://www.stoko.com>)
 - STOKO EMULSION (<http://www.stoko.com>)
 - FRAPANTOL (<http://www.stoko.com>)
 - STOKO VITAN (<http://www.stoko.com>)
- 

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- Material of gloves
 - Vitoject (KCL, Art No.890)
 - Fluorocarbon rubber (Viton)
 - Nitrile rubber, NBR
 - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
 - Penetration time of glove material
 - Value for the permeation: Level ≥ 6 , 480 min
 - The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - For the permanent contact gloves made of the following materials are suitable:
 - Fluorocarbon rubber (Viton)
 - Vitoject (KCL, Art No. 890)
 - Nitrile rubber, NBR
 - Camatril (KCL, Art No. 730, 731, 732, 733)
 - As protection from splashes gloves made of the following materials are suitable:
 - Fluorocarbon rubber (Viton)
 - Nitrile rubber, NBR
 - Camatril (KCL, 730, 731, 732, 733)
 - Not suitable are gloves made of the following materials:
 - Natural rubber, NR
 - Rubber gloves
 - Leather gloves
 - Strong gloves
 - Neoprene gloves

(Contd. on page 6)

Trade name: Stone Impregnation

(Contd. of page 5)

· Eye protection:

Tightly sealed goggles

· Body protection:

Protective work clothing

9 Physical and chemical properties**· Information on basic physical and chemical properties**· General Information· Appearance:

<u>Form:</u>	Fluid
<u>Color:</u>	Colorless
<u>Odor:</u>	Characteristic

· pH-value: Not applicable· Change in condition

<u>Melting point/Melting range:</u>	Undetermined.
<u>Boiling point/Boiling range:</u>	180°C (356°F)

· Flash point: > 40°C (> 104°F)· Ignition temperature: 240°C (464°F)· Auto igniting: Product is not selfigniting.· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.· Explosion limits:

<u>Lower:</u>	0.6 Vol %
<u>Upper:</u>	7.0 Vol %

· Vapor pressure at 20°C (68°F): 1 hPa (1 mm Hg)· Density at 20°C (68°F): 0.76 g/cm³ (6.342 lbs/gal)· Solubility in / Miscibility withWater: Not miscible or difficult to mix.· Viscosity:

<u>Dynamic:</u>	Not determined.
<u>Kinematic at 20°C (68°F):</u>	10 s (DIN 53211/4)

· Solvent content:Organic solvents: 93.4 %Solids content: 4.8 %**10 Stability and reactivity**· **Reactivity**· Chemical stability· Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· **Possibility of hazardous reactions**Reacts with strong oxidizing agents.
Forms flammable gases / fumes.· **Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

(Contd. on page 7)

Trade name: Stone Impregnation

(Contd. of page 6)

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

64742-48-9 Naphtha (petroleum), hydrotreated heavy

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rabbit)
Inhalative	LC50	>12 mg/l (rat)

· Primary irritant effect:

- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

12 Ecological information

· Toxicity

· Acquatic toxicity:

64742-48-9 Naphtha (petroleum), hydrotreated heavy

EC50	> 1000 mg/l (green alge)
	>1-<10 mg/l (bacteria)
	> 1000 mg/l (daphnia magna)
LC50	> 1000 mg/l (piscis)
LL50/96h	51 mg/l (rainbow trout)

· **Additional ecological information:**

· General notes: Do not allow product to reach ground water, water course or sewage system. Water hazard class 1 (Self-assessment): slightly hazardous for water

· **Results of PBT and vPvB assessment**

- PBT: Not applicable.
- vPvB: Not applicable.

13 Disposal considerations

· Waste treatment methods

· Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· Uncleaned packagings:

· Recommendation: Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

· Recommended cleansing agent: Alcohol

(Contd. on page 8)

Trade name: Stone Impregnation

(Contd. of page 7)

*** 14 Transport information**

· DOT regulations:



- Hazard class: 3
- Identification number: UN3295
- Packing group: III
- Proper shipping name (technical name): HYDROCARBONS, LIQUID, N.O.S.
- Label 3

· Land transport ADR/RID (cross-border):



- ADR/RID class: 3 (F1) Flammable liquids
- Danger code (Kemler): 30
- UN-Number: 3295
- Packaging group: III
- UN proper shipping name: 3295 HYDROCARBONS, LIQUID, N.O.S.

· Maritime transport IMDG:



- IMDG Class: 3
- UN Number: 3295
- Label 3
- Packaging group: III
- EMS Number: F-E,S-D
- Marine pollutant: No
- Propper shipping name: HYDROCARBONS, LIQUID, N.O.S.

· Air transport ICAO-TI and IATA-DGR:



- ICAO/IATA Class: 3
- UN/ID Number: 3295
- Label 3
- Packaging group: III
- Propper shipping name: HYDROCARBONS, LIQUID, N.O.S.

· UN "Model Regulation":

UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, III

· Special precautions for user

Warning: Flammable liquids

(Contd. on page 9)

Trade name: Stone Impregnation

(Contd. of page 8)

15 Regulatory information

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

· Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Hazard-determining components of labelling:

Naphtha (petroleum), hydrotreated heavy

· Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:



Xn Harmful

· Hazard-determining components of labelling:

Naphtha (petroleum), hydrotreated heavy

· Risk phrases:

Flammable.
Harmful: may cause lung damage if swallowed.

Trade name: Stone Impregnation

(Contd. of page 9)

- Repeated exposure may cause skin dryness or cracking
Vapours may cause drowsiness and dizziness
- Safety phrases: Keep out of the reach of children.
Keep away from sources of ignition - No smoking.
Do not breathe fumes
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
Wear suitable protective clothing, gloves and eye/face protection.
In case of insufficient ventilation, wear suitable respiratory equipment.
If swallowed, seek medical advice immediately and show this container or label.
Use only in well-ventilated areas.
- National regulations:
- Information about limitation of use: Employment restrictions concerning young persons must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
- Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- VOC USA 710.5 g/l / 5.93 lb/gl
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing MSDS: Laboratory
- Contact: Dieter Zimmermann
Elke Hake
Fon ++49 (0)911 64296-59
@mail E.Hake@akemi.de
- Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent