

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

### Product identifier

- Trade name: **Stain Repellent Nano Effect**
- Article number: 11931, 11932/11933, 11934/11935, 11936
- 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  
Dieter Zimmermann  
@mail\_D.Zimmermann@akemi.de
- 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: 90622-58-5 EINECS: 292-460-6	Alkanes, C11-C15, iso  Xn R65 R53-66 -----  H304; H227; H413	50-100%
CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1	n-butyl acetate R10-66-67 -----  H226;  H336	<12.5%
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	<12.5%

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

## 3 Hazards identification

### Classification of the substance or mixture



GHS08 Health hazard

H304 May be fatal if swallowed and enters airways.

H227 Combustible liquid.

H413 May cause long lasting harmful effects to aquatic life.

### Prevention:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Do not breathe vapours.

Wear protective gloves/protective clothing/eye protection/face protection.  
Use only outdoors or in a well-ventilated area.

### Response:

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.  
Rinse skin with water/shower.

(Contd. on page 2)

**Trade name: Stain Repellent Nano Effect**

(Contd. of page 1)

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF exposed or concerned: Get medical advice/attention.
- Storage: Store in a well-ventilated place. Keep cool.  
Store locked up.
  - Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

---

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


Harmful

Harmful: may cause lung damage if swallowed.

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

 · Information concerning particular hazards for human and environment:

Contact with skin and inhalation of aerosols/ vapours of the preparation should be avoided.

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.

Has a narcotizing effect.

 · Classification system:

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:
Alkanes, C11-C15, iso  
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:
C9-12-iso-Alkane  
Naphtha (petroleum), hydrotreated heavy
 · Risk phrases:
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.  
Do not breathe fumes  
Avoid contact with 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.  
If swallowed, seek medical advice immediately and show this container or label.  
Use only in well-ventilated areas.

(Contd. on page 3)

**Trade name: Stain Repellent Nano Effect**

(Contd. of page 2)

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



Health = 0  
Fire = 2  
Reactivity = 0

- HMS-ratings (scale 0 - 4)



Health = 0  
Fire = 2  
Reactivity = 0

- **Other hazards**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

- Results of PBT and vPvB assessment

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

**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.

- After eye contact:

Immediately wash with water and soap and rinse thoroughly.

Rinse opened eye for several minutes under running water. Then consult a doctor.

- After swallowing:

A person vomiting while lying on their back should be turned onto their side.

- 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  
Gastric or intestinal disorders  
Cramp  
Danger of impaired breathing.

- Danger

- Indication of any immediate medical attention and special treatment needed

If swallowed or in case of vomiting, danger of entering the lungs.

If swallowed, gastric irrigation with added, activated carbon.

Monitor circulation.

**5 Firefighting measures**

- **Extinguishing media**

- Suitable extinguishing agents:

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

In certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

(Contd. on page 4)

**Trade name: Stain Repellent Nano Effect**

(Contd. of page 3)

- Carbon monoxide (CO)
- **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.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation  
Use respiratory protective device against the effects of fumes/dust/aerosol.  
Keep away from ignition sources
- **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 ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires: Highly volatile, flammable constituents are released during processing.
- **Conditions for safe storage, including any incompatibilities**
- Storage:
- Requirements to be met by storerooms and receptacles: Prevent any seepage into the ground.  
Provide solvent resistant, sealed floor.  
Store only in the original receptacle.
- 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.

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 5)

USA

**Trade name: Stain Repellent Nano Effect**

(Contd. of page 4)

**Control parameters****Components with limit values that require monitoring at the workplace:****123-86-4 n-butyl acetate**

PEL	710 mg/m <sup>3</sup> , 150 ppm
REL	Short-term value: 950 mg/m <sup>3</sup> , 200 ppm Long-term value: 710 mg/m <sup>3</sup> , 150 ppm
TLV	Short-term value: 950 mg/m <sup>3</sup> , 200 ppm Long-term value: 713 mg/m <sup>3</sup> , 150 ppm

**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 or drink while working.  
Apply solvent resistant skin cream before beginning work.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.

**Breathing equipment:**

Short term filter device:  
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:**

After use of gloves apply skin-cleaning agents and skin cosmetics.  
Preventive skin protection by use of skin-protecting agents is recommended.  
STOKODERM (<http://www.stoko.com>)  
STOKO EMULSION (<http://www.stoko.com>)  
Prior to working with gloves the rubbing in with tanniferous skin-protecting agents for the avoidance of skin softening due to perspiration is recommended.  
STOKO EMULSION (<http://www.stoko.com>)  
Skin cleaning with acid-neutral Syndet, if required, with peeling agent for removal of heavy soilings.  
FRAPANTOL (<http://www.stoko.com>)  
After each cleaning use treatment creams, for very dry skin greasy ointments.  
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**

Nitrile rubber, NBR  
Fluorocarbon rubber (Viton)  
Butyl rubber, BR  
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  $\geq 1$ , 30 min

(Contd. on page 6)

**Trade name: Stain Repellent Nano Effect**

(Contd. of page 5)

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:

Nitrile rubber, NBR  
Camatril (KCL, Art No. 730, 731, 732, 733)  
Fluorocarbon rubber (Viton)  
Vitoject (KCL, Art No. 890)  
Butyl rubber, BR  
Butoject (KCL, Art No. 897, 898)

- As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR  
Camatril (KCL, 730, 731, 732, 733)

- Not suitable are gloves made of the following materials:

Chloroprene rubber, CR  
Strong gloves  
Leather gloves  
Natural rubber, NR

- Eye protection:

Goggles recommended during refilling.

- Body protection:

Solvent resistant protective 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
--------------	----------------

<u>pH-value:</u>	Not applicable
------------------	----------------

**· Change in condition**

<u>Melting point/Melting range:</u>	Not applicable
<u>Boiling point/Boiling range:</u>	124°C (255°F)

<u>Flash point:</u>	62°C (144°F)
---------------------	--------------

<u>Flammability (solid, gaseous):</u>	Not determined
---------------------------------------	----------------

<u>Ignition temperature:</u>	240°C (464°F)
------------------------------	---------------

<u>Auto igniting:</u>	Product is not selfigniting.
-----------------------	------------------------------

<u>Danger of explosion:</u>	Product does not present an explosion hazard.
-----------------------------	---

**· Explosion limits:**

<u>Lower:</u>	0.6 Vol %
<u>Upper:</u>	10.4 Vol %

<u>Vapor pressure at 20°C (68°F):</u>	10.7 hPa (8 mm Hg)
---------------------------------------	--------------------

<u>Density at 20°C (68°F):</u>	0.79 g/cm <sup>3</sup> (6.593 lbs/gal)
--------------------------------	--

**· Solubility in / Miscibility with**

<u>Water:</u>	Not miscible or difficult to mix.
---------------	-----------------------------------

**· Viscosity:**

<u>Dynamic:</u>	Not determined.
<u>Kinematic at 20°C (68°F):</u>	11 s (DIN 53211/4)

(Contd. on page 7)

**Trade name: Stain Repellent Nano Effect**

(Contd. of page 6)

· Solvent content:  
Organic solvents: 85.0 %

· Solids content: 3.9 %

**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**

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.

Reacts with strong oxidizing agents.

Reacts with acids.

Forms flammable gases / fumes.

· **Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

Hydrogen fluoride

**11 Toxicological information**· **Information on toxicological effects**· Acute toxicity:· LD/LC50 values that are relevant for classification:**90622-58-5 Alkanes, C11-C15, iso**

Oral LD50 &gt; 5000 mg/kg (rat)

Dermal LD50 &gt; 3160 mg/kg (rabbit)

Inhalative LC50/4 h &gt; 6.6 mg/l (rat)

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

Oral LD50 &gt;5000 mg/kg (rat)

Dermal LD50 &gt;3000 mg/kg (rabbit)

Inhalative LC50 &gt;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:**90622-58-5 Alkanes, C11-C15, iso**

EC50/48h &lt; 100 mg/l (daphnia magna)

LC50/96h 2890 mg/l (pimephales promelas)

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

EC50 &gt; 1000 mg/l (green alge)

&gt;1-&lt;10 mg/l (bacteria)

(Contd. on page 8)



**Trade name: Stain Repellent Nano Effect**

(Contd. of page 7)

LC50	> 1000 mg/l (daphnia magna)
LL50/96h	> 1000 mg/l (piscis)
	51 mg/l (rainbow trout)

**Persistence and degradability**

**Other information:** The product is difficultly biodegradable.

**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

**14 Transport information**

**DOT regulations:**

**Hazard class:** -

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

**ADR/RID class:** -

**Maritime transport IMDG:**

**IMDG Class:** -

**Marine pollutant:** No

**Air transport ICAO-TI and IATA-DGR:**

**ICAO/IATA Class:** -

**UN "Model Regulation":**

-

**Special precautions for user** Not applicable.

**Transport/Additional information:**

Not dangerous according to the above specifications.

**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):**

123-86-4 n-butyl acetate

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

(Contd. on page 9)



**Trade name: Stain Repellent Nano Effect**

(Contd. of page 8)

· 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.

· Carcinogeny 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:

Alkanes, C11-C15, iso  
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:

C9-12-iso-Alkane  
Naphtha (petroleum), hydrotreated heavy

· Risk phrases:

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.  
Do not breathe fumes  
Avoid contact with 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

(Contd. on page 10)

**Trade name: Stain Repellent Nano Effect**

(Contd. of page 9)

Wear suitable protective clothing, gloves and eye/face protection.  
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 580.9 g/l / 4.85 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
- International Product Registration Status USA (Toxic Substances Control Act, TSCA)  
J (Existing and New Chemical Substance List, ENCS)