

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2017

Version number 6

Revision: 29.08.2017

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

1.1 Product identifier

Trade name: **AKS System Fillers, Component I**

Article number: 60xxx

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Application of the substance / the mixture

Knife filler/ Surfacer
Polyester resin

1.3 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

Further information obtainable from:

Laboratory

1.4 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.
+44 (171) 635 91 91
National Poison Inform. Centre
Medical Toxicology Unit
Avalonley Road
London SE14 5ER

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 health hazard

Repr. 2 H361d Suspected of damaging the unborn child.

STOT RE 1 H372 Causes damage to the hearing organs through prolonged or repeated exposure.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

The product is classified and labelled according to the CLP regulation.



GHS02



GHS07



GHS08

(Contd. on page 2)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2017

Version number 6

Revision: 29.08.2017

Trade name: AKS System Fillers, Component I

(Contd. of page 1)

- Signal word Danger
- Hazard-determining components of labelling: styrene
- Hazard statements
 - H226 Flammable liquid and vapour.
 - H315 Causes skin irritation.
 - H319 Causes serious eye irritation.
 - H361d Suspected of damaging the unborn child.
 - H372 Causes damage to the hearing organs through prolonged or repeated exposure.
- Precautionary statements
 - P101 If medical advice is needed, have product container or label at hand.
 - P102 Keep out of reach of children.
 - P103 Read label before use.
 - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 - P260 Do not breathe vapours.
 - P280 Wear protective gloves / eye protection.
 - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P314 Get medical advice/attention if you feel unwell.
 - P403+P235 Store in a well-ventilated place. Keep cool.
 - P405 Store locked up.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients**3.2 Chemical characterisation: Mixtures**

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

Dangerous components:

CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Reg.nr.: 01-2119457861-32	styrene ⚠ Flam. Liq. 3, H226 ⚠ Repr. 2, H361d; STOT RE 1, H372; Asp. Tox. 1, H304 ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 Aquatic Chronic 3, H412	12.5-25%
CAS: 141-78-6 EINECS: 205-500-4 Index number: 607-022-00-5 Reg.nr.: 01-2119475103-46 02-2119752482-38-0000	ethyl acetate ⚠ Flam. Liq. 2, H225 ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	<1%
CAS: 108-88-3 EINECS: 203-625-9 Index number: 601-021-00-3 Reg.nr.: 01-2119471310-51	toluene ⚠ Flam. Liq. 2, H225 ⚠ Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304 ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; STOT SE 3, H336	<1%

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

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2017

Version number 6

Revision: 29.08.2017

Trade name: AKS System Fillers, Component I

(Contd. of page 2)

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Clean with water and soap. If possible, also wash with polyethylene glycol 400.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Information for doctor:

Nausea
Dizziness
Headache

With reference to section 2 the formulation contains styrene in the indicated mass concentration range. Styrene fumes will preferably be incorporated by inhalation via respiratory tract, skin resorption is currently considered as an inferior way of incorporation. In case of inhalation styrene is absorbed in a 60-90% range. Distribution in organism occurs rapidly, the maximum blood concentration can be analyzed after one hour after incorporation. Styrene exposition affects skin, mucous membranes, and central nervous system (CNS).
Acute damages / risks to health:
In case of styrene poisoning mainly damages to and interactions with central nervous system (CNS) arise. In concentration ranges above 200 ml/m3 symptoms such as fatigue, nausea, imbalance and prolonged response times are observed.
Chronical health risks:
Effects at central and peripheral nervous system and respiratory tract are evident in literature.
Main health risks are:
- prolonged response times
- reduced cognitive performance, partial amnesia
- retardation of nervous impulse transition speed
- disturbances of pulmonary function

- Hazards Skin contact with polyester and epoxy resin solutions as ingredient of the product should be avoided due to risks of skin irritations or allergic skin appearances. If occasional hand contact can not be avoided, protection gloves, proper protection ointments and protective agents generating a protective layer on the skin were applied.

4.3 Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation with added, activated carbon.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:
Carbon monoxide (CO)
Formation of toxic gases is possible during heating or in case of fire.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2017

Version number 6

Revision: 29.08.2017

Trade name: AKS System Fillers, Component I

(Contd. of page 3)

· 5.3 Advice for firefighters· Protective equipment:· Additional information

Mount respiratory protective device.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures**· 6.1 Personal precautions, protective equipment and emergency procedures****· 6.2 Environmental precautions:****· 6.3 Methods and material for containment and cleaning up:****· 6.4 Reference to other sections**

Wear protective equipment. Keep unprotected persons away.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage**· 7.1 Precautions for safe handling**· Information about fire - and explosion protection:**· 7.2 Conditions for safe storage, including any incompatibilities**· Storage:· Requirements to be met by storerooms and receptacles:· Information about storage in one common storage facility:· Further information about storage conditions:**· 7.3 Specific end use(s)**

Ensure good ventilation/exhaustion at the workplace.

Keep ignition sources away - Do not smoke.

Store in a cool location.

Not required.

Protect from heat and direct sunlight.

Store in cool, dry conditions in well sealed receptacles.

No further relevant information available.

SECTION 8: Exposure controls/personal protection· Additional information about design of technical facilities:

No further data; see item 7.

· 8.1 Control parameters· Ingredients with limit values that require monitoring at the workplace:**100-42-5 styrene**WEL Short-term value: 1080 mg/m³, 250 ppmLong-term value: 430 mg/m³, 100 ppm**141-78-6 ethyl acetate**

WEL Short-term value: 400 ppm

Long-term value: 200 ppm

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2017

Version number 6

Revision: 29.08.2017

Trade name: AKS System Fillers, Component I

(Contd. of page 4)

108-88-3 toluene

WEL	Short-term value: 384 mg/m ³ , 100 ppm Long-term value: 191 mg/m ³ , 50 ppm Sk
-----	--

· DNELs**100-42-5 styrene**

Oral	DNEL (Langzeit-wiederholt)	2.1 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	406 mg/kg bw/day (ARB)
		343 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	289-306 mg/m ³ Air (ARB)
		174.25-182.75 mg/m ³ Air (BEV)
	DNEL (Langzeit-wiederholt)	85 mg/m ³ Air (ARB) 10.2 mg/m ³ Air (BEV)

· PNECs**100-42-5 styrene**

PNEC (wässrig)	5 mg/l (KA)
	0.014 mg/l (MW)
	0.028 mg/l (SW)
	0.04 mg/l (WAS)
PNEC (fest)	0.2 mg/kg Trockengew (BO)
	0.307 mg/kg Trockengew (MWS)
	0.614 mg/kg Trockengew (SWS)

· Additional information: The lists valid during the making were used as basis.

· **8.2 Exposure controls**· Personal protective equipment:· General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Do not eat, drink, smoke or sniff while working.

Clean skin thoroughly immediately after handling the product.

Use skin protection cream for skin protection.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Short term filter device:

Filter A/P2

· 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.

Skin protection agent recommendation for preventive skin shelter without use of protective gloves:

ARRETIL (<http://www.stoko.com>)

Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:

STOKO EMULSION (<http://www.stoko.com>)

Skin protection recommendation for skin cleaning after product handling:

SLIG SPEZIAL (<http://www.stoko.com>)

Skin protection agent recommendation for skin aftercare:

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2017

Version number 6

Revision: 29.08.2017

Trade name: AKS System Fillers, Component I

(Contd. of page 5)

STOKO VITAN (<http://www.stoko.com>)



Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
 The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory analyses of the company KCL GmbH in compliance with EN374.
 This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: <http://www.kcl.de>).

· Material of gloves

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.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Value for the permeation: Level \leq 1, 30 min

· For the permanent contact gloves made of the following materials are suitable:

Butyl rubber, BR
 Butoject (KCL, Art_No. 897, 898)

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

Butoject (KCL, Art_No. 897, 898)
 Butyl rubber, BR

· Not suitable are gloves made of the following materials:

Leather gloves
 Strong material gloves

· Eye protection:



Tightly sealed goggles

· Body protection:

Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid
 Colour: Different according to colouring

· Odour:

Specific type

· pH-value:

Not applicable

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2017

Version number 6

Revision: 29.08.2017

Trade name: AKS System Fillers, Component I

(Contd. of page 6)

· <u>Change in condition</u>	
<u>Melting point/freezing point:</u>	Undetermined.
<u>Initial boiling point and boiling range:</u>	145°C
· <u>Flash point:</u>	32°C
· <u>Ignition temperature:</u>	480°C
· <u>Auto-ignition temperature:</u>	Product is not selfigniting.
· <u>Explosive properties:</u>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <u>Explosion limits:</u>	
<u>Lower:</u>	1.2 Vol %
<u>Upper:</u>	8.9 Vol %
· <u>Vapour pressure at 20°C:</u>	6 hPa
· <u>Density at 20°C:</u>	2.06 g/cm ³ ([2,01-2,06 g/cm ³])
· <u>Solubility in / Miscibility with water:</u>	Not miscible or difficult to mix.
· <u>Viscosity:</u>	
<u>Dynamic at 20°C:</u>	4,500 mPas
<u>Kinematic:</u>	Not determined.
· <u>Solvent content:</u>	
<u>Organic solvents:</u>	16.4 %
<u>Solids content:</u>	75.9 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity	No further relevant information available.
· 10.2 Chemical stability	
· <u>Thermal decomposition / conditions to be avoided:</u>	No decomposition if used according to specifications.
· 10.3 Possibility of hazardous reactions	Exothermic polymerisation. Reacts with peroxides and other radical forming substances. Reacts with strong alkali. Reacts with strong acids. Reacts with strong oxidising agents.
· 10.4 Conditions to avoid	No further relevant information available.
· 10.5 Incompatible materials:	No further relevant information available.
· 10.6 Hazardous decomposition products:	No dangerous decomposition products known.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects	
· <u>Acute toxicity</u>	Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Oral	LD50	>12,723 mg/kg (rat)
Dermal	LD50	>12,723 mg/kg (rat)
Inhalative	LC50/4 h	75.1 mg/l (rat)

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2017

Version number 6

Revision: 29.08.2017

Trade name: AKS System Fillers, Component I

(Contd. of page 7)

100-42-5 styrene

Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat) (OECD-Prüfrichtlinie 402)
Inhalative	LC50/4h	9.5 mg/m ³ (mouse)
	LC50/4 h	11.8 mg/l (rat)
	NOAEC	4.34 mg/l (rat)

- Primary irritant effect:
- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Experience with humans: After incorporation and inhalation styrene predominantly will be metabolized in the organism to mandelic and phenylglyoxylic acid and metabolites will pass through urine excretion.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Suspected of damaging the unborn child.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Causes damage to the hearing organs through prolonged or repeated exposure.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information**12.1 Toxicity**· Aquatic toxicity:**100-42-5 styrene**

EC50/96h	0.15-3.2 mg/l (Pseudokirchneriella subcapitata)
EC50	500 mg/l (BES) (ISO Vorschrift 8192-1986 E)
	5.5 mg/l (Photobac. phosphoreum)
IC50/72h	4.9 mg/l (green alge)
	1.4 mg/l (selenastrum capricornutum)
IC5/8d	>200 mg/l (Scenedesmus quadricauda)
EC10/16h	72 mg/l (pseudomonas putida)
EC50/16h	>72 mg/l (pseudomonas putida)
EC50/8d	>200 mg/l (Scenedesmus quadricauda)
EC50/72u	>1-<10 mg/l (green alge)
EC20/0.5h	140 mg/l (BES) (OECD 209)
NOEC/21d	1.01 mg/l (daphnia magna)
EC10	0.28 mg/l (Pseudokirchneriella subcapitata) (EPA OTS 797.1050)
EC50/48h	0.56 mg/l (green alge)
	3.3-7.4 mg/l (daphnia magna)
EC50/72h	0.46-4.3 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	>1-<10 mg/l (piscis)
	19.03-33.53 mg/l (lem)
	3.24-4.99 mg/l (pimephales promelas)
	6.75-14.5 mg/l (Pimephales promelas)
	58.75-95.32 mg/l (poecilia reticulata)
LC50/72h	4.9 mg/l (green alge)

12.2 Persistence and degradability

No further relevant information available.

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2017

Version number 6

Revision: 29.08.2017

Trade name: AKS System Fillers, Component I

(Contd. of page 8)

- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Do not allow product to reach ground water, water course or sewage system.
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue	
20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 27*	paint, inks, adhesives and resins containing hazardous substances

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, ADN, IMDG · IATA	Void UN3269
· 14.2 UN proper shipping name · ADR, ADN, IMDG · IATA	Void POLYESTER RESIN KIT
· 14.3 Transport hazard class(es) · ADR, ADN, IMDG · Class · IATA	Void
· Class · Label	3 Flammable liquids. 3
· 14.4 Packing group · ADR, IMDG · IATA	Void III
· 14.5 Environmental hazards: · Marine pollutant:	No

(Contd. on page 10)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2017

Version number 6

Revision: 29.08.2017

Trade name: AKS System Fillers, Component I

(Contd. of page 9)

· 14.6 Special precautions for user	Not applicable.
--	-----------------

· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
--	-----------------

· UN "Model Regulation":	Void
--------------------------	------

SECTION 15: Regulatory information**· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I

None of the ingredients is listed.

· Seveso category

P5c FLAMMABLE LIQUIDS

· Qualifying quantity (tonnes) for the application of lower-tier requirements

5,000 t

· Qualifying quantity (tonnes) for the application of upper-tier requirements

50,000 t

· REGULATION (EC) No 1907/2006 ANNEX XVII

Conditions of restriction: 3, 48

· National regulations:· Waterhazard class:

Water hazard class 2 (Self-assessment): hazardous for water.

· VOC EU

336.9 g/l

· **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

SECTION 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.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child.

H372 Causes damage to the hearing organs through prolonged or repeated exposure.

H373 May cause damage to the hearing organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

· Recommended restriction of use

refer to Technical Data Sheet (TDS)

· Department issuing SDS:

Laboratory

· Contact:

Elke Hake

Fon ++49 (0)911 64296-59

@mail E.Hake@akemi.de

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

(Contd. on page 11)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.08.2017

Version number 6

Revision: 29.08.2017

Trade name: AKS System Fillers, Component I

(Contd. of page 10)

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 2: Flammable liquids – Category 2
 Flam. Liq. 3: Flammable liquids – Category 3
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Repr. 2: Reproductive toxicity – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 Asp. Tox. 1: Aspiration hazard – Category 1
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· * Data compared to the previous version altered.

Adaptation in accordance with REACH directive 1907/2006/EC

GB