Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

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

· **1.1 Product identifier**

· Trade name:	**Fast Curing Putty**
· Article number:	50904, 50905, 50906, 50901, 50914

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

· Life cycle stages	IS Use at industrial Sites PW Widespread use by professional workers C Consumer use
· Sector of Use	SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites SU21 Consumer uses: Private households / general public / consumers SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
· Product category	PC9b Fillers, putties, plasters, modelling clay
· Process category	PROC5 Mixing or blending in batch processes PROC10 Roller application or brushing PROC19 Manual activities involving hand contact
· Environmental release category	ERC2 Formulation into mixture
· Article category	AC1 Vehicles
· 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.

*
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 2	H373	May cause 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.

(Contd. on page 2)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 1)

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **2.2 Label elements**

· Labelling according to Regulation (EC) No 1272/2008: The product is classified and labelled according to the CLP regulation.

· Hazard pictograms

GHS02 GHS07 GHS08

· Signal word: Warning

· 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.
H373 May cause damage to the hearing organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

· 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.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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**: During processing and product hardening the network generator is released as fume. Consequently, take care for adequate air conditioning and for fume exhaustion on request.

· 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: consisting of the following components.

· 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	<10%

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 2)

CAS: 25013-15-4 EINECS: 246-562-2 Reg.nr.: 01-2119622074-50-0000	vinyltoluene Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	1-5%
CAS: 7779-90-0 EINECS: 231-944-3 Index number: 030-011-00-6 Reg.nr.: 01-2119485044-40-0000	trizinc bis(orthophosphate) Aquatic Acute 1, H400; Aquatic Chronic 1, H410	1-5%

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

*
SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· General information: Take affected persons out into the fresh air.
Position and transport stably in side position.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· 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: 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. If symptoms persist, consult a doctor.

· After swallowing: If symptoms persist consult doctor.

· **4.2 Most important symptoms and effects, both acute and delayed**

Breathing difficulty
Headache
Dizziness
Dizziness
Nausea
Profuse sweating

· Information for doctor: 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 Danger of impaired breathing.
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,

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 3)

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

* **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)
Hydrogen cyanide (HCN)
Formation of toxic gases is possible during heating or in case of fire.
Under certain fire conditions, traces of other toxic gases cannot be excluded.
· **5.3 Advice for firefighters**
· Protective equipment: Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.
Mount respiratory protective device.
· 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.

SECTION 6: Accidental release measures

· **6.1 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.
· **6.2 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.
· **6.3 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.
· **6.4 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.

* **SECTION 7: Handling and storage**

· **7.1 Precautions for safe handling** Store in cool, dry place in tightly closed receptacles.
Keep away from heat and direct sunlight.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 4)

Keep receptacles tightly sealed.
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 fire - and explosion protection:
Fumes can combine with air to form an explosive mixture.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**
· Storage:
· Requirements to be met by storerooms and receptacles:
Store only in the original receptacle.
Store in a cool location.
Prevent any seepage into the ground.

· Information about storage in one common storage facility:
Store away from foodstuffs.
Do not store together with acids.
Do not store together with alkalis (caustic solutions).
Store away from oxidising agents.

· Further information about storage conditions:
Store receptacle in a well ventilated area.
Protect from frost.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

· **7.3 Specific end use(s)** 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 ppm Long-term value: 430 mg/m³, 100 ppm

· 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/m³ Air (ARB)
		174.25-182.75 mg/m³ Air (BEV)
	DNEL (Langzeit-wiederholt)	85 mg/m³ Air (ARB)
		10.2 mg/m³ Air (BEV)
25013-15-4 vinyltoluene		
Inhalative	DNEL (Langzeit-wiederholt)	37 mg/m³ Air (ARB)

· PNECs	
100-42-5 styrene	
PNEC (wässrig)	5 mg/l (KA)

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 5)

	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)
25013-15-4 vinyltoluene	
PNEC (wässrig)	1 mg/l (KA)
	0.002 mg/l (MW)
	0.0498 mg/l (SW)
PNEC (fest)	0.133 mg/kg Trockengew (BO)
	0.0684 mg/kg Trockengew (MWS)
	0.684 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.
Do not eat, drink, smoke or sniff while working.
Apply solvent resistant skin cream before starting 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.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

· Respiratory protection: Short term filter device:
Filter A/P2
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.

· 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:
Kresto Classic (http://debstoko.com)
Skin protection agent recommendation for skin aftercare:
STOKO VITAN (http://www.stoko.com)
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 anylyses 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).

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 6)

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: Fluorocarbon rubber (Viton)
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)

· As protection from splashes gloves made of the following materials are suitable:
Fluorocarbon rubber (Viton)
Vitoject (KCL, Art_No. 890)
Nitrile rubber, NBR
Camatril (KCL, 730, 731, 732, 733)
Butyl rubber, BR
Butoject (KCL, Art_No. 897, 898)

· Not suitable are gloves made of the following materials:
Rubber gloves
Neoprene gloves
Natural rubber, NR
Leather gloves
Strong material gloves

· Eye protection:

Tightly sealed goggles

· Body protection: Solvent resistant protective clothing

*
SECTION 9: Physical and chemical properties

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

Form:	Viscous
Colour:	Light brown Cream coloured light yellow
· Odour:	Specific type
· Odour threshold:	Not determined.
· pH-value:	Not determined.

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 7)

· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	145 °C
· Flash point:	32 °C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	480 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	1.2 Vol %
Upper:	8.9 Vol %
· Vapour pressure at 20 °C:	6 hPa
· Density at 20 °C:	1.84 g/cm³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	14.0 %
Solids content:	85.5 %
· **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**	
· Thermal decomposition / conditions to be avoided:	No decomposition if used according to specifications. No decomposition if used and stored according to specifications.
· **10.3 Possibility of hazardous reactions**	Exothermic polymerisation. Reacts with peroxides and other radical forming substances. Reacts with alkali (lyes). Reacts with acids.
· **10.4 Conditions to avoid**	No further relevant information available.
· **10.5 Incompatible materials:**	No further relevant information available.
· **10.6 Hazardous decomposition products:**	Carbon monoxide and carbon dioxide Phosphorus compounds

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 8)

*
SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)		
Inhalative	LC50/4 h	>69.3 mg/l

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/m3 (mouse)
	LC50/4 h	11.8 mg/l (rat)
	NOAEC	4.34 mg/l (rat)
25013-15-4 vinyltoluene		
Oral	LD50	3,680 mg/kg (rat)
	NOAEL	600 mg/kg (rat)
Dermal	LD50	4,490 mg/kg (rabbit)
Inhalative	LC50/4h	>3,535 mg/m3 (rat)
	LC50/4 h	11 mg/l (ATE)
7779-90-0 trizinc bis(orthophosphate)		
Oral	LD50	>5,000 mg/kg (rat)
Inhalative	LC50/4 h	>5.7 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 matabolites will pass through urine excretion.

· CMR effects (carcinogenity, 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 May cause 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)

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 9)

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)
25013-15-4 vinyltoluene	
EC50	2.6 mg/l (Bluegill.)
EC50/48h	1.3 mg/l (daphnia magna)
NOELR/72h	1.6 mg/l (green alge)
NOEC/21d	0.498 mg/l (daphnia magna)
	0.563 mg/l (piscis)
EC50/72h	5.2 mg/l (Fathead minnow)
	2.6 mg/l (selenastrum capricornutum)
LC50/96h	5.2-23.4 mg/l (piscis)
7779-90-0 trizinc bis(orthophosphate)	
EC50/48h	28.2 mg/l (daphnia magna)
ErC50/72h	11 mg/l (Desmodesmus subspicatus)
EC50/48h	0.04-0.86 mg/l (daphnia magna)
EC50/72h	0.28 mg/l (Selenastrum capricornutum)
LC50/96h	0.29-5.33 mg/l (Oncorhynchus mykiss)

· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· Ecotoxical effects:
· Remark: Harmful to fish
· Additional ecological information:
· General notes: Do not allow product to reach ground water, water course or sewage system.
Harmful to aquatic organisms
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.

(Contd. on page 11)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 10)

* **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
08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 04 00	wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances

· Uncleaned packaging:
· Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
· Recommended cleansing agents: Alcohol
acetone

* **SECTION 14: Transport information**

· **14.1 UN-Number**
· ADR, IMDG, IATA: UN1866

· **14.2 UN proper shipping name**
· ADR: 1866 RESIN SOLUTION
· IMDG, IATA: RESIN SOLUTION

· **14.3 Transport hazard class(es)**

· ADR

· Class: 3 (F1) Flammable liquids.
· Label: 3

· IMDG, IATA

· Class: 3 Flammable liquids.
· Label: 3

· **14.4 Packing group**
· ADR, IMDG, IATA: III

· **14.5 Environmental hazards:**
· Marine pollutant: No

· **14.6 Special precautions for user**: Warning: Flammable liquids.
· Danger code (Kemler): 3
· EMS Number: F-E,S-E

(Contd. on page 12)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 11)

· Stowage Category	A
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5
· Excepted quantities (EQ)	Code: E
· Transport category	3
· Tunnel restriction code	D
· Remarks:	Without hardener component: no dangerous goods < 450 l (2.2.3.1.5 ADR)
· IMDG	
· Limited quantities (LQ)	5
· Excepted quantities (EQ)	Code: E
· UN "Model Regulation":	UN 1866 RESIN SOLUTION, 3, III

*
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
· National regulations:	
· Information about limitation of use:	Employment restrictions concerning pregnant and lactating women must be observed. Employment restrictions concerning juveniles must be observed.
· Waterhazard class:	Water hazard class 2 (Self-assessment): hazardous for water.
· VOC EU	257.9 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

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.
H361d Suspected of damaging the unborn child.

(Contd. on page 13)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 04.12.2018 Version number 8 Revision: 04.12.2018

Trade name: Fast Curing Putty

(Contd. of page 12)

H372 Causes damage to the hearing organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

· Recommended restriction of use: refer to Technical Data Sheet (TDS)

· Department issuing SDS: Laboratory
· Contact: Dieter Zimmermann
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
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. 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 Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3