

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

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

1.1 Product identifier

Trade name: RADEX UNI+ putty

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

Identified uses: professional use.

Application of the substance / the mixture Knife filler/ Surfacer

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

RADEX-Europe Ltd.

Uriekstes iela 3, Riga

LV-1005, Latvia

Tel: +371 67387778

Fax: +371 67387789

info@radex-europe.lv

Further information obtainable from: info@radex-europe.lv

1.4 Emergency telephone number: Tel: +371 67387778 (9:00 – 18:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08

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.

Skin Sens. 1 H317 May cause an allergic skin reaction.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

(Contd. on page 2)

— EN —

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

Trade name: RADEX UNI+ putty

(Contd. of page 1)

Hazard pictograms

GHS02 GHS07 GHS08

Signal word Danger**Hazard-determining components of labelling:**

styrene
 cobalt(II) 2-ethylhexanoate
 N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)

Hazard statements

H226 Flammable liquid and vapour.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H361d Suspected of damaging the unborn child.
 H372 Causes damage to the hearing organs through prolonged or repeated exposure.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
 No smoking.
 P260 Do not breathe mist/vapours/spray.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 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 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-<20%
CAS: 123-26-2 EINECS: 204-613-6 Reg.nr.: 01-2119978265-26	N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide) ⚠ Skin Sens. 1B, H317; Aquatic Chronic 3, H412	0.1-<1%
CAS: 136-52-7 EINECS: 205-250-6 Reg.nr.: 01-2119524678-29	cobalt(II) 2-ethylhexanoate ⚠ Repr. 2, H361f; ⚠ Aquatic Acute 1, H400; ⚠ Eye Irrit. 2, H319; Skin Sens. 1A, H317; Aquatic Chronic 3, H412	0.1-<1%

(Contd. on page 3)

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

Trade name: RADEX UNI+ putty

(Contd. of page 2)

CAS: 141-78-6	ethyl acetate	0.1-<1%
EINECS: 205-500-4	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE	
Reg.nr.: 01-2119475103-46	3, H336	

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:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Take affected persons out of danger area and lay down.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

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

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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

Can form explosive gas-air mixtures.

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

5.3 Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

Additional information

Cool endangered receptacles with water spray.

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)

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

Trade name: RADEX UNI+ putty

(Contd. of page 3)

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

Avoid contact with the eyes and skin.

6.2 Environmental precautions: 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).

Do not flush with water or aqueous cleansing agents.

Dispose of the material collected according to regulations.

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**

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

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

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

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Keep respiratory protective device available.

Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:**

Store only in the original receptacle.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidising agents.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

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.

(Contd. on page 5)

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

Trade name: RADEX UNI+ putty

(Contd. of page 4)

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
100-42-5 styrene	
WEL (Great Britain)	Short-term value: 1080 mg/m ³ , 250 ppm Long-term value: 430 mg/m ³ , 100 ppm
136-52-7 cobalt(II) 2-ethylhexanoate	
WEL (Great Britain)	Long-term value: 0.1 mg/m ³ as Co; Carc, Sen
141-78-6 ethyl acetate	
WEL (Great Britain)	Short-term value: 1468 mg/m ³ , 400 ppm Long-term value: 734 mg/m ³ , 200 ppm
IOELV (EU)	Short-term value: 1468 mg/m ³ , 400 ppm Long-term value: 734 mg/m ³ , 200 ppm

Regulatory information

WEL (Great Britain): EH40/2018

IOELV (EU): (EU) 2017/164

DNELs	
100-42-5 styrene	
Dermal	DNEL 406 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL 289 mg/m ³ (acute - systemic effects, workers) 306 mg/m ³ (acute - local effects, workers) 85 mg/m ³ (long-term - systemic effects, workers)
123-26-2 N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)	
Inhalative	DNEL 3.35 mg/m ³ (long-term - local effects, workers)
141-78-6 ethyl acetate	
Dermal	DNEL 63 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL 1,468 mg/m ³ (acute - systemic effects, workers) 1,468 mg/m ³ (acute - local effects, workers) 734 mg/m ³ (long-term - systemic effects, workers) 734 mg/m ³ (long-term - local effects, workers)
PNECs	
100-42-5 styrene	
PNEC	0.028 mg/l (freshwater environment) 0.0028 mg/l (marine environment) 0.04 mg/l (intermittent releases) 5 mg/l (sewage treatment plants)
PNEC	0.614 mg/kg (freshwater sediment environment) 0.0614 mg/kg (marine sediment environment) 0.2 mg/kg (soil)
123-26-2 N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)	
PNEC	100 µg/l (sewage treatment plants)

(Contd. on page 6)

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

Trade name: RADEX UNI+ putty

(Contd. of page 5)

141-78-6 ethyl acetate	
PNEC	0.24 mg/l (freshwater environment) 0.024 mg/l (marine environment) 1.65 mg/l (intermittent releases) 650 mg/l (sewage treatment plants)
PNEC	1.15 mg/kg (freshwater sediment environment) 0.115 mg/kg (marine sediment environment)

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

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

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Keep ignition sources away - Do not smoke.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Do not eat or drink while working.

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.

Filter A2/P2

Protection of hands:

Protective gloves

Check the permeability prior to each renewed use of the glove.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation (EN 374).

Material of gloves

Fluorocarbon rubber (Viton)

Recommended thickness of the material: $\geq 0,7$ mm

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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 7)

EN

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

Trade name: RADEX UNI+ putty

(Contd. of page 6)

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:	Pasty
Colour:	Beige
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not applicable.
Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	145 °C
Flash point:	31 °C
Flammability (solid, gas):	Not applicable.
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Not determined.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	1.1 Vol %
Upper:	6.1 Vol %
Vapour pressure at 20 °C:	6.7 hPa
Density:	1.84-1.87 g/cm ³
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.
9.2 Other information	No further relevant information available.

(Contd. on page 8)

— EN —

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

Trade name: RADEX UNI+ putty

(Contd. of page 7)

SECTION 10: Stability and reactivity

10.1 Reactivity No decomposition if used according to specifications.

10.2 Chemical stability 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.

Fumes can combine with air to form an explosive mixture.

10.4 Conditions to avoid Protect from heat and direct sunlight.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products:

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

* 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:

100-42-5 styrene

Oral	LD50	5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	11.8 mg/l (rat)

123-26-2 N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)

Oral	LD50	>2,000 mg/kg (rat)
------	------	--------------------

141-78-6 ethyl acetate

Oral	LD50	6,100 mg/kg (rat)
Dermal	LD50	>20,000 mg/kg (rabbit)
Inhalative	LC50/6 h	58 mg/l (rat)

Primary irritant effect:

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

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.

(Contd. on page 9)

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

Trade name: RADEX UNI+ putty

(Contd. of page 8)

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

LC50/96 h | 4.02 mg/l (Pimephales promelas)

EC50/48 h | 4.7 mg/l (Daphnia magna)

EC50/72 h | 4.9 mg/l (Pseudokirchnerella subcapitata)

123-26-2 N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)

EC50/72 h | 100 mg/l (algae)

141-78-6 ethyl acetate

LC50/96 h | 230 mg/l (Pimephales promelas)

EC50/48 h | 165 mg/l (Daphnia cucullata)

EC50/72 h | >900 mg/l (Scenedesmus subspicatus)

EC3/16 h | 650 mg/l (Pseudomonas putida)

12.2 Persistence and degradability**100-42-5 styrene**

Biodegradation | 70.9 % (readily biodegradable) (ISO 9408, 28 d, aerobic)

141-78-6 ethyl acetate

Biodegradation | 93.9 % (readily biodegradable) (OECD 301 B, aerobic)

12.3 Bioaccumulative potential**100-42-5 styrene**

BCF | 74 (-)

log Pow | 2.96

141-78-6 ethyl acetate

BCF | 30 (-)

log Pow | 0.66

12.4 Mobility in soil**100-42-5 styrene**

log Koc | 2.55

Koc | 352

123-26-2 N,N'-ethane-1,2-diylbis(12-hydroxyoctadecan-1-amide)

log Koc | >5.63

Additional ecological information:**General notes:**

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

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 10)

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

Trade name: RADEX UNI+ putty

(Contd. of page 9)

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

08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
-----------	---

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number ADR, IMDG, IATA

UN1866

14.2 UN proper shipping name

ADR
IMDG, IATA

1866 RESIN SOLUTION
RESIN SOLUTION

14.3 Transport hazard class(es)

ADR, IMDG, IATA



Class
Label

3
3

14.4 Packing group ADR, IMDG, IATA

III

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user Hazard identification number (Kemler code):

Warning: Flammable liquids.

EMS Number:
Stowage Category

30
F-E,S-E
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)
Transport category
Tunnel restriction code
Remarks:

5L
3
D/E
ADR 2.2.3.1.5

(Contd. on page 11)

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

Trade name: RADEX UNI+ putty

(Contd. of page 10)

IMDG	
Limited quantities (LQ)	5L
Remarks:	IMDG 2.3.2.5
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 juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

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.

H317 May cause an allergic skin reaction.

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.

H361f Suspected of damaging fertility.

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

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 12)

— EN —

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

Printing date 09.03.2020

V- 2.0

Revision: 05.03.2020

Trade name: RADEX UNI+ putty

(Contd. of page 11)

Classification according to Regulation (EC) No 1272/2008	
Flammable liquids	Bridging principles
Skin corrosion/irritation Serious eye damage/eye irritation Skin sensitisation Reproductive toxicity Specific target organ toxicity (repeated exposure)	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

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)

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 - inhalation – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Sensitisation - Skin. Hazard Category 1

Skin Sens. 1A: Sensitisation - Skin. Hazard Category 1A

Skin Sens. 1B: Sensitisation - Skin. Hazard Category 1B

Repr. 2: Reproductive toxicity. Hazard Category 2

Repr. 2: Reproductive toxicity. Hazard Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Sources European Chemicals Agency, <http://echa.europa.eu/>

*** Data compared to the previous version altered.**