

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH), (EU) 2020/878

Revision date: 1 Aug 2023

Print date: 15 Feb 2024

Version: 2

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Putty HD Flex + Hardener 1kg

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

1.1. Product identifier

Trade name/designation:

Putty HD Flex + Hardener 1kg

Article No.:

T123001

UFI:

D5HM-T7DE-CJ11-XHNQ

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

Use of the substance/mixture:

Bodyfiller/stopper

Relevant identified uses:

Product Categories [PC]

PC 9b: Fillers, putties, plasters, modelling clay

Process categories [PROC]

PROC 10: Roller application or brushing

1.3. Details of the supplier of the safety data sheet

Supplier:

KANDO Service GmbH

Hartleitnerstraße 3

4653 Eberstalzell

Austria

Telephone: +43 (0) 7241 213 79

E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids (<i>Flam. Liq. 3</i>)	H226: Flammable liquid and vapour.	
Skin corrosion/irritation (<i>Skin Irrit. 2</i>)	H315: Causes skin irritation.	
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
Reproductive toxicity (<i>Repr. 2</i>)	H361d: Suspected of damaging the unborn child.	
STOT-repeated exposure (<i>STOT RE 1</i>)	H372: Causes damage to organs through prolonged or repeated exposure.	

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS02
Flame



GHS07
Exclamation mark



GHS08
Health hazard

Signal word: Danger

Hazard components for labelling:

Styrene

Hazard statements for physical hazards	
H226	Flammable liquid and vapour.

Hazard statements for health hazards	
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.

Supplemental hazard information	
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/eye protection.

Precautionary statements Response	
P314	Get medical advice/attention if you feel unwell.

Precautionary statements Storage	
P405	Store locked up.

Precautionary statements Disposal	
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

2.3. Other hazards

Other adverse effects:

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Description:

Mixture of substances listed below with non-hazardous admixtures.

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Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 100-42-5 EC No.: 202-851-5 Index No.: 601-026-00-0 REACH No.: 01-2119457861-32	Styrene Acute Tox. 4 (H332), Aquatic Chronic 3 (H412), Asp. Tox. 1 (H304), Eye Irrit. 2 (H319), Flam. Liq. 3 (H226), Repr. 2 (H361d), STOT RE 1 (H372), STOT SE 3 (H335), Skin Irrit. 2 (H315) Danger	10 - < 12.5 Vol-%
CAS No.: 7727-43-7 EC No.: 231-784-4 REACH No.: 01-2119491274-35	barium sulfate The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].	5 - < 10 Vol-%
CAS No.: 13463-67-7 EC No.: 236-675-5 REACH No.: 01-2119489379-17	titanium dioxide The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].	< 2.5 Vol-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

Symptoms of poisoning may not appear for many hours, therefore medical monitoring for at least 48 hours after an accident.

Following inhalation:

If unconscious, position and transport in stable lateral position.

In case of skin contact:

Wash off immediately with soap and water and rinse well.

After eye contact:

Rinse opened eye for several minutes under running water. Consult a doctor if symptoms persist

Following ingestion:

Drink plenty of water. Provide fresh air. Call a physician 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 media:

Carbon dioxide (CO₂), Extinguishing powder, Water spray jet
Fight larger fires with water spray or alcohol-resistant foam.

Unsuitable extinguishing media:

Water in full jet

5.2. Special hazards arising from the substance or mixture

No further relevant information available.

5.3. Advice for firefighters

No special measures are necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Wear protective equipment. Keep unprotected persons away.

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Keep away from sources of ignition - No smoking.

6.1.2. For emergency responders

No data available

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of spillage into water or sewage system, inform the competent authorities.

6.3. Methods and material for containment and cleaning up

For cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Other information:

Dispose of contaminated material as waste according to section 13..

Provide adequate ventilation.

6.4. Reference to other sections

See section 7 for further information on safe handling.

For further information on personal protective equipment: see section 8.

For further information on disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

No special measures required if used properly.

Fire prevent measures:

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:

No special requirements.

Hints on storage assembly:

Not required.

Storage class (TRGS 510, Germany): 3 - Flammable liquids

Further information on storage conditions:

Keep container tightly closed.

7.3. Specific end use(s)

Recommendation:

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT)	Styrene CAS No.: 100-42-5 EC No.: 202-851-5	② 80 ppm (340 mg/m ³) ⑤ (max. 4x15 min./Schicht) d
MAK (AT)	Styrene CAS No.: 100-42-5 EC No.: 202-851-5	① 20 ppm (85 mg/m ³) ⑤ d

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Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT) from 11 Sept 2007	titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	② 10 mg/m ³ ⑤ (alveolengängige Fraktion, max. 2x60 min./Schicht)
MAK (AT) from 11 Sept 2007	titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5	① 5 mg/m ³ ⑤ (alveolengängige Fraktion)

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No further details. See section 7.

8.2.2. Personal protection equipment



Eye/face protection:

Safety goggles with side shields (EN 166).

Skin protection:

Hand protection:

Wear protective gloves.

Glove material: Butyl caoutchouc (butyl rubber)

The selection of a suitable glove depends not only on the material but also on other quality features and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of glove materials cannot be calculated in advance and must therefore be checked before use. Permeation time (maximum wear duration):

Gloves made of butyl rubber with a material thickness of 0.4mm are resistant to: Acetone 480 min; Butyl acetate 60 min; Ethyl acetate 170 min; Xylene 42 min

Gloves made of butyl rubber with a layer thickness of 0.4 mm are resistant to solvents for 42 - 480 minutes. As a precautionary measure, we recommend users and those responsible for occupational safety to take a resistance of 42 minutes as a basis. Taking into account the information in chapter 3 of the MSDS, it is possible to assume a higher resistance in individual cases.

Respiratory protection:

In case of short or low exposure use breathing filter apparatus; in case of intensive or prolonged exposure use self-contained breathing apparatus. Filter A2/P3

Other protection measures:

General protective and hygienic measures:

Keep away from food, drink and animal feed.

Remove contaminated, saturated clothing immediately.

Wash hands before breaks and after work.

Separate storage of work clothes.

Avoid contact with eyes and skin.

8.2.3. Environmental exposure controls

No data available

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: According to product designation

Odour: characteristic

Odour threshold: not determined

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	No data available		
Melting point	No data available		
Freezing point	No data available		
Initial boiling point and boiling range	145 °C		
Flash point	31 °C		
Evaporation rate	No data available		
Auto-ignition temperature	480 °C		② Styrene (100-42-5)
Upper/lower flammability or explosive limits	1.2 - 8.9 Vol-%		② Styrene (100-42-5)
Vapour pressure	6 hPa	20 °C	② Styrene (100-42-5)
Vapour density	No data available		
Density	0.7 - 1.9 g/cm ³	20 °C	
Bulk density	not applicable		
Water solubility	practically insoluble		
Dynamic viscosity	No data available		
Kinematic viscosity	No data available		

9.2. Other information

The product is not explosive, but the formation of explosive vapour/air mixtures is possible.

Organic solvents: 0,3%

Solid content:93,0%

9.2.1. Information with regard to physical hazard classes

Explosives:

Not applicable

Flammable gases:

Not applicable

Aerosols:

Not applicable

Oxidizing gases:

Not applicable

Gases under pressure:

Not applicable

Flammable liquids:

Flammable liquid and vapour.

Flammable solids:

Not applicable

Self-reactive substances and mixtures:

Not applicable

Pyrophoric liquids:

Not applicable

Pyrophoric solids:

Not applicable

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Self-heating substances and mixtures:

Not applicable

Substances or mixtures which, in contact with water, emit flammable gases:

Not applicable

Oxidizing liquids:

Not applicable

Oxidizing solids:

Not applicable

Organic peroxides:

Not applicable

Corrosive to metals:

Not applicable

Desensitised explosives:

Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No further relevant information available.

10.2. Chemical stability

Thermal decomposition / Conditions to avoid No decomposition when used as directed.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

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 hazard classes as defined in Regulation (EC) No 1272/2008

Styrene CAS No.: 100-42-5 EC No.: 202-851-5
LD₅₀ oral: 5,000 mg/kg (Ratte)
LD₅₀ dermal: >2,000 mg/kg (Ratte)
LC₅₀ Acute inhalation toxicity (vapour): 11.8 mg/L (Ratte)

Acute oral toxicity:

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

Acute dermal toxicity:

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

Acute inhalation toxicity:

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

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. No sensitising effect known.

Germ cell mutagenicity:

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

Carcinogenicity:

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

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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 organs through prolonged or repeated exposure.

Aspiration hazard:

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

11.2. Information on other hazards

Endocrine disrupting properties:

None of the ingredients are included.

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity:

No further relevant information available.

Assessment/classification:

No further relevant information available.

12.2. Persistence and degradability

Additional information:

No further relevant information available.

12.3. Bioaccumulative potential

Accumulation / Evaluation:

No further relevant information available.

12.4. Mobility in soil

No further relevant information available.

12.5. Results of PBT and vPvB assessment

Styrene CAS No.: 100-42-5 EC No.: 202-851-5
Results of PBT and vPvB assessment: —
barium sulfate CAS No.: 7727-43-7 EC No.: 231-784-4
Results of PBT and vPvB assessment: —
titanium dioxide CAS No.: 13463-67-7 EC No.: 236-675-5
Results of PBT and vPvB assessment: —

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

The product does not contain any substances with endocrine-disrupting properties.

12.7. Other adverse effects

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Drinking water hazard even when small quantities leak into the subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Must not be disposed of together with household waste. Do not allow to enter into surface water or drains.

For Austria: Full and empty containers are to be disposed of by private end users at the responsible hazardous waste collection centre.

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13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

08 04 09 *	Waste adhesives and sealants containing organic solvents or other dangerous substances
15 01 10 *	packaging containing residues of or contaminated by dangerous substances

*: Evidence for disposal must be provided.

Waste code packaging





15 01 04	metallic packaging
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Waste treatment options

Appropriate disposal / Package:

Uncleaned packaging: Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 3269	UN 3269	UN 3269	UN 3269
14.2. UN proper shipping name			
POLYESTER RESIN KIT	POLYESTER RESIN KIT, liquid base material	POLYESTER RESIN KIT	POLYESTER RESIN KIT
14.3. Transport hazard class(es)			
 3	 3	 3	 3
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
No	No	No	No
14.6. Special precautions for user			
Special Provisions: 236 340 Limited quantity (LQ): 5 L Excepted Quantities (EQ): siehe SV 340 Classification code: F3 Tunnel restriction code: (E) Remark: Caution: Flammable liquid substances!	Special Provisions: 236 340 Limited quantity (LQ): 5 L Excepted Quantities (EQ): siehe SV 340 Classification code: F3 Remark: Caution: Flammable liquid substances!	Special Provisions: 236 340 Limited quantity (LQ): 5 L Excepted Quantities (EQ): Siehe SV340 EmS-No.: F-E, S-D Remark: Caution: Flammable liquid substances!	Special Provisions: A66 A163 Limited quantity (LQ): Y370 Excepted Quantities (EQ): E0 Remark: Caution: Flammable liquid substances!

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU legislation

Authorisations:

Named dangerous substances - ANNEX I: None of the ingredients are included.

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Restrictions on use:

Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment - Annex II: None of the ingredients are included.

Regulation (EU) 2019/1148

Regulation (EC) No 273/2004 on drug precursors: None of the ingredients are included.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade in drug precursors between the Community and third countries: None of the ingredients are included.

Other regulations (EU):

Hazard categories:

- P3a 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids
- E2 Hazardous to the Aquatic Environment in Category Chronic 2

Named dangerous substances:

- Liquefied flammable gases, Category 1 or 2 (including liquefied petroleum gas) and natural gas

Regulation (EC) No 1907/2006 ANNEX XVII Restriction conditions: 3

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:

Volatile organic compounds (VOC) content in percent by weight: 12 Vol-%

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DNEL	derived no-effect level
EC ₅₀	Effective Concentration 50%
EN	European Standard
ES	Exposure scenario
EWC	European Waste Catalogue
IC ₅₀	Inhibition Concentration 50 %
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
KG	body weight
LC ₅₀	Lethal (fatal) Concentration 50%
LD ₅₀	Lethal (fatal) Dose 50%
MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
OEL	Threshold Limit Value
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic
PC	Product category
PNEC	Predicted No Effect Concentration
PROC	Process Category
REACH	Registration, Evaluation and Authorization of Chemicals

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RID Dangerous goods regulations for transport by rail
SCL Specific concentration limit
TRGS Technische Regeln für Gefahrstoffe
UN United Nations
VOC Volatile organic compounds

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
flammable liquids (<i>Flam. Liq. 3</i>)	H226: Flammable liquid and vapour.	
Skin corrosion/irritation (<i>Skin Irrit. 2</i>)	H315: Causes skin irritation.	
Serious eye damage/eye irritation (<i>Eye Irrit. 2</i>)	H319: Causes serious eye irritation.	
Reproductive toxicity (<i>Repr. 2</i>)	H361d: Suspected of damaging the unborn child.	
STOT-repeated exposure (<i>STOT RE 1</i>)	H372: Causes damage to organs through prolonged or repeated exposure.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
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.
H372	Causes damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

16.6. Training advice

No data available

16.7. Additional information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.