



**Safety Data Sheet
acc. to OSHA HCS**

Printing date 05/19/2020

Reviewed on 05/19/2020

1 Identification

· **Product identifier**

· **Trade name:** **Flexitime Easy Putty Base (1:1), Flexitime Dynamix Putty Base (5:1)**

· **Application of the substance / the mixture** Dental impression material

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Kulzer GmbH

Leipziger Straße 2, 63450 Hanau (Germany)

Tel.: +49 (0)800 4372522

· **Information department:**

Tel. +1 (800) 431-1785 Fax: +1 (800) 522-1545

e-mail: customer.servicehkna@kulzer-dental.com

· **Emergency telephone number:**

Emergency CONTACT (24-Hour-Number)

ID 105860: (domestic) 1 800 535 5053 or international (001) 352 323 3500

2 Hazard(s) identification

· **Classification of the substance or mixture**

Carc. 1A H350 May cause cancer.

STOT RE 1 H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

· **Label elements**

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

crystalite

· **Hazard statements**

May cause cancer.

Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

· **Precautionary statements**

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/protective clothing/eye protection/face protection.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

· **Classification system**

· **NFPA ratings for USA (scale 0-4)**



Health = 0

Fire = 1

Reactivity = 0

(Contd. on page 2)



Safety Data Sheet
acc. to OSHA HCS

Printing date 05/19/2020

Reviewed on 05/19/2020

Trade name: Flexitime Easy Putty Base (1:1), Flexitime Dynamix Putty Base (5:1)

(Contd. of page 1)

· **HMIS-Ratings (Scale 0-4)**

HEALTH	*0	Health = *0
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

· **Results of PBT and vPvB assessment**

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

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** -

· **Dangerous components:**

14464-46-1	cristobalite	Carc. 1A, H350; STOT RE 1, H372	50-75%
------------	--------------	---------------------------------	--------

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

4 First-aid measures

· **Description of first aid measures**

- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** If skin irritation continues, consult a doctor.
- **After eye contact**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
If symptoms persist consult doctor.
- **Information for doctor**
 - **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
 - **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire fighting measures that suit the environment.

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:** No special measures required.

· **Additional information** -

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation
Avoid contact with eyes and skin.

(Contd. on page 3)



Safety Data Sheet
acc. to OSHA HCS

Printing date 05/19/2020

Reviewed on 05/19/2020

Trade name: Flexitime Easy Putty Base (1:1), Flexitime Dynamix Putty Base (5:1)

(Contd. of page 2)

- **Environmental precautions:** Prevent seepage into sewage system, workpits and cellars.
- **Methods and material for containment and cleaning up:**
Absorb with liquid binding material (diatomite, universal binders, for small amounts tissues).
- **Reference to other sections**
No dangerous substances are released.
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**

· PAC-1:		
14464-46-1	crystalite	0.075 mg/m ³
68083-19-2	Polydimethylsiloxan	48 mg/m ³
7631-86-9	silicon dioxide, chemically prepared	18 mg/m ³
540-97-6	Dodecamethylcyclohexasiloxane	150 mg/m ³
556-67-2	octamethylcyclotetrasiloxane	30 ppm
· PAC-2:		
14464-46-1	crystalite	33 mg/m ³
68083-19-2	Polydimethylsiloxan	530 mg/m ³
7631-86-9	silicon dioxide, chemically prepared	740 mg/m ³
540-97-6	Dodecamethylcyclohexasiloxane	1,700 mg/m ³
556-67-2	octamethylcyclotetrasiloxane	68 ppm
· PAC-3:		
14464-46-1	crystalite	200 mg/m ³
68083-19-2	Polydimethylsiloxan	3,200 mg/m ³
7631-86-9	silicon dioxide, chemically prepared	4,500 mg/m ³
540-97-6	Dodecamethylcyclohexasiloxane	9,900 mg/m ³
556-67-2	octamethylcyclotetrasiloxane	130 ppm

7 Handling and storage

- **Handling**
 - **Precautions for safe handling**
Please observe the additional instructions in the product's instructions for use.
Keep receptacles tightly sealed.
No special precautions are necessary if used correctly.
 - **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
 - **Storage**
 - **Requirements to be met by storerooms and receptacles:** No special requirements.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.



**Safety Data Sheet
acc. to OSHA HCS**

Printing date 05/19/2020

Reviewed on 05/19/2020

Trade name: Flexitime Easy Putty Base (1:1), Flexitime Dynamix Putty Base (5:1)

(Contd. of page 3)

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
 - **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

14464-46-1 cristobalite

PEL	Long-term value: 0.05* mg/m ³ *resp. dust; ½ value from resp.dust formulae Quartz
REL	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m ³ *as respirable fraction

· **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**
 - **Personal protective equipment**
 - **General protective and hygienic measures**
Wash hands before breaks and at the end of work.
 - **Breathing equipment:** Use a mask with particle filter in case of dust generation.
 - **Protection of hands:**
Check protective gloves prior to each use for their proper condition.
recommended
 - **Material of gloves**
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**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
Butyl rubber, BR
Nitrile rubber, NBR
 - **Eye protection:** Safety glasses
 - **Body protection:** Light weight protective clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
 - **General Information**
 - **Appearance:**
 - **Form:** Pasty
 - **Color:** Violet
 - **Odor:** Characteristic
 - **Odor threshold:** Not determined.
 - **pH-value:** Not determined.

(Contd. on page 5)



Safety Data Sheet
acc. to OSHA HCS

Printing date 05/19/2020

Reviewed on 05/19/2020

Trade name: Flexitime Easy Putty Base (1:1), Flexitime Dynamix Putty Base (5:1)

(Contd. of page 4)

· Change in condition	
· Melting point/Melting range:	undetermined
· Boiling point/Boiling range:	300 °C (572 °F)
· Flash point:	>130 °C (>266 °F)
· Flammability (solid, gaseous)	Not applicable.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard. Not determined.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	1.6 g/cm ³ (13.352 lbs/gal)
· Relative density	Not determined.
· Vapor 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.
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** none
- **Additional information:** -

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
68083-19-2 Polydimethylsiloxan		
Oral	LD50	>5,000 mg/kg (rat)
8042-47-5 White mineral oil, petroleum		
Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

(Contd. on page 6)



Safety Data Sheet
acc. to OSHA HCS

Printing date 05/19/2020

Reviewed on 05/19/2020

Trade name: Flexitime Easy Putty Base (1:1), Flexitime Dynamix Putty Base (5:1)

(Contd. of page 5)

- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Silicosis: Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling and sometimes fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function. This disease is exacerbated by smoking. Individuals with silicosis are predisposed to develop mycobacterial infections (tuberculous and non-tuberculous) and fungal infections. Inhalation of air with a very high concentration of respirable silica dust can cause the most serious forms of silicosis in a matter of months or a few years. Some epidemiologic studies have concluded that there is significant risk of developing silicosis even at airborne exposure levels that are equal to the recommended NIOSH REL, the ACGIH TLV.

Cancer Status: The International Agency for Research on Cancer has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1 - carcinogenic to humans). Refer to IARC Monograph 100C, A Review of Human Carcinogens: Arsenic, Fibres and Dusts (published in 2011) in conjunction with the use of these materials. The National Toxicology Program (NTP) classifies respirable crystalline silica as "known to be a human carcinogen". Refer to the Twelfth Report on Carcinogens (2011). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

14464-46-1	cristobalite	1
7631-86-9	silicon dioxide, chemically prepared	3
1318-02-1	zeolites	3

- **NTP (National Toxicology Program)**

14464-46-1	cristobalite	K
------------	--------------	---

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

· Aquatic toxicity:
8042-47-5 White mineral oil, petroleum
LC50/96h >100 mg/l (fish)

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

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

- **Results of PBT and vPvB assessment**

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

(Contd. on page 7)



Safety Data Sheet
acc. to OSHA HCS

Printing date 05/19/2020

Reviewed on 05/19/2020

Trade name: Flexitime Easy Putty Base (1:1), Flexitime Dynamix Putty Base (5:1)

· **Other adverse effects** No further relevant information available.

(Contd. of page 6)

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

· **Uncleaned packagings:**

· **Recommendation:**

Disposal must be made according to official regulations.

Non contaminated packagings can be used for recycling.

14 Transport information

· **UN-Number**

· DOT, ADR, IMDG, IATA

Void

· **UN proper shipping name**

· DOT, ADR, IMDG, IATA

Void

· **Transport hazard class(es)**

· DOT, ADR, ADN, IMDG, IATA

· Class

Void

· **Packing group**

· DOT, ADR, IMDG, IATA

Void

· **Environmental hazards:**

· **Marine pollutant:**

No

· **Special precautions for user**

Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

-

· **UN "Model Regulation":**

Void

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **SARA Section 355 (extremely hazardous substances)**

None of the ingredients is listed.

· **SARA Section 313 (specific toxic chemical listings)**

None of the ingredients is listed.

· **Hazardous Air Pollutants**

None of the ingredients is listed.

(Contd. on page 8)



**Safety Data Sheet
acc. to OSHA HCS**

Printing date 05/19/2020

Reviewed on 05/19/2020

Trade name: Flexitime Easy Putty Base (1:1), Flexitime Dynamix Putty Base (5:1)

(Contd. of page 7)

· **Proposition 65**

· **Prop 65 - Chemicals known to cause cancer**

The listing is for silica, crystalline as "airborne particles of respirable size". Silica, crystalline of this product is within a product matrix.

14464-46-1	cristobalite
------------	--------------

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

14464-46-1	cristobalite	A2
------------	--------------	----

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

14464-46-1	cristobalite
------------	--------------

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H350 May cause cancer.

H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalation.

· **Date of preparation / last revision 05/19/2020 / 1**

· **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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Carc. 1A: Carcinogenicity – Category 1A

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