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

- **Product identifier**
  - **Trade name:** Hilti HIT-HY 50
  - **Container size:** 330 ml
- **Relevant identified uses of the substance or mixture and uses advised against**
  - **Sector of Use:** Building and construction work
  - **Application of the substance / the preparation:** Adhesive mortar for anchor fastenings in solid masonry

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - Hilti (Schweiz) AG
    - Soodstrasse 61
    - CH-8134 Adliswil
    - Telefon: 0844 84 84 85
    - Fax: 0844 84 84 86
    - E-Mail: info@hilti.ch
  - **Informing department:**
    - anchor.hse@hilti.com
    - see section 16
  - **Emergency telephone number:**
    - Schweizerisches Toxikologisches Informationszentrum - 24 h Service
    - Tel.: 0041 / 44 251 51 51 (international)
    - Hilti (Schweiz) AG
    - Tel: 0844 84 84 85
    - Fax: 0844 84 84 86

2 Hazards identification

- **Classification of the substance or mixture**
  - **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
    - Xi; Sensitising
    - O; Oxidising
- **Information concerning particular hazards for human and environment:**
  - The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
  - The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

- **Label elements**
  - **Labelling according to EU guidelines:**
    - The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
  - **Code letter and hazard designation of product:**
    - Xi Irritant
    - O Oxidising

- **Hazard-determining components of labelling:**
  - dibenzoyl peroxide
  - methacrylic acid, monoester with propane-1,2-diol
- **Risk phrases:**
  - 7 May cause fire.
  - 43 May cause sensitisation by skin contact.
- **Safety phrases:**
  - 3 Keep in a cool place.
  - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  - 28 After contact with skin, wash immediately with plenty of water and soap.
  - 37/39 Wear suitable gloves and eye/face protection.
- **Special labelling of certain preparations:**
  - Restricted to professional users.
  - Other hazards
  - **Results of PBT and vPvB assessment**
    - PBT: Not applicable.
    - vPvB: Not applicable.
3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description:
  2-Component-foilpack, contains:
  Component A: Urethane methacrylate resin, inorganic filler
  Component B: Dibenzoyl peroxide, phlegmatized

  Mixture of the substances listed below with harmless additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th>CAS: 2/7813-02-1</th>
<th>methacrylic acid, monoester with propane-1,2-diol</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 248-666-3</td>
<td></td>
<td>Xi R36; Xi R43; Eye Irrit. 2; Skin Sens. 1; H317; H319</td>
</tr>
<tr>
<td>Reg.nr.: 01-2119490226-37</td>
<td>2.5%</td>
<td></td>
</tr>
<tr>
<td>CAS: 94-36-0</td>
<td>dibenzoyl peroxide</td>
<td>Xi R36; Xi R43; E R3; Org. Perox. B; H241; Eye Irrit. 2; Skin Sens. 1; H319; H317</td>
</tr>
<tr>
<td>EINECS: 202-327-6</td>
<td>10-15%</td>
<td></td>
</tr>
</tbody>
</table>

- Additional information

4 First aid measures

- Description of first aid measures
- General information Instantly remove any clothing soiled by the product.
- After inhalation Take affected persons into the open air and position comfortably.
- After skin contact Instantly wash with water and soap and rinse thoroughly. If skin irritation persist, call a physician.
- After eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- After swallowing Rinse out mouth and then drink plenty of water.
- Seek immediate medical advice.

- 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 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents
- Fire-extinguishing powder
- Sand
- Foam
- Carbon dioxide
- Water spray jet
- For safety reasons unsuitable extinguishing agents Water with full jet.
- Special hazards arising from the substance or mixture
- Can be released in case of fire
  Carbon monoxide (CO)
  Carbon dioxide (CO2)
  Nitrogen oxides (NOx)
- Under certain fire conditions, traces of other toxic gases cannot be excluded.
**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**
  - Wear protective clothing.
  - Keep away from ignition sources.
  - Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

- **Environmental precautions:**
  - Do not allow product to reach sewage system or water bodies.
  - Do not allow to enter the ground/soil.

- **Methods and material for containment and cleaning up:**
  - Collect mechanically.
  - Dispose of the material collected according to regulations.

- **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 information on disposal.

**7 Handling and storage**

- **Handling**
  - **Precautions for safe handling**
    - Check the expiry date: see imprint on manifold (month/year). Do not use expired mortar!
    - The usual precautionary measures should be adhered to general rules for handling chemicals.
    - Keep away from heat and direct sunlight.
  - **Information about protection against explosions and fires:**
    - Keep ignition sources away - Do not smoke.
    - Protect from heat.

- **Conditions for safe storage, including any incompatibilities**

- **Storage**
  - **Requirements to be met by storerooms and containers:** Keep in a cool, dry and dark place; 5 °C to 25 °C.
  - **Information about storage in one common storage facility:** Store away from foodstuffs.
  - **Further information about storage conditions:** Protect from heat and direct sunlight.

- **Storage class**
  - As per VCI (1991) storage classification concept.

- **Specific end use(s)**
  - Adhesive mortar for anchor fastenings in solid masonry

**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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
    - The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.
  - **Additional information:** The lists that were valid during the compilation were used as basis.

- **Exposure controls**
  - **Personal protective equipment**
    - **General protective and hygienic measures**
      - The usual precautionary measures should be adhered to general rules for handling chemicals.
      - Do not inhale gases / fumes / aerosols.
      - Do not eat, drink or smoke while working.
      - Keep away from foodstuffs, beverages and food.
      - Wash hands during breaks and at the end of the work.
      - Avoid contact with the eyes and skin.
      - Take off immediately all contaminated clothing.
  - **Breathing equipment:** Not required.
  - **Protection of hands:**
    - Protective gloves
      - EN 374 / EN 388
      - Avoid direct contact with the chemical/ the product/ the preparation by organizational measures.
      - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  - **Material of gloves**
    - Nitrile rubber, NBR
    - 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong>:</td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>pasty</td>
</tr>
<tr>
<td>Colour</td>
<td>Grey</td>
</tr>
<tr>
<td>Odour</td>
<td>Ester-like</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>pH-value</strong></td>
<td></td>
</tr>
<tr>
<td>Component A:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Component B:</td>
<td>~ 6</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td></td>
</tr>
<tr>
<td>Component A:</td>
<td>&gt; 100 °C (DIN 53213)</td>
</tr>
<tr>
<td>Component B:</td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>Inflammability (solid, gaseous)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Ignition temperature</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td></td>
</tr>
<tr>
<td>Component A:</td>
<td>not relevant</td>
</tr>
<tr>
<td>Component B:</td>
<td>SADT 65°C UN test H4</td>
</tr>
<tr>
<td><strong>Self-inflammability</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Danger of explosion</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Product is not explosive.</td>
</tr>
<tr>
<td><strong>Critical values for explosion</strong></td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td></td>
</tr>
<tr>
<td>Component A:</td>
<td>0,1 hPa (20 °C)</td>
</tr>
<tr>
<td><strong>Density at 20°C</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,7 g/cm³ (DIN 51757)</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with</strong></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Not miscible or difficult to mix</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water)</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Viscosity</strong>:</td>
<td></td>
</tr>
<tr>
<td>dynamic at 23°C:</td>
<td>~ 60 Pa.s (DIN 53788)</td>
</tr>
<tr>
<td>kinematic at 20°C:</td>
<td>&gt; 20 s (DIN 53211/4)</td>
</tr>
<tr>
<td><strong>Solvent content</strong>:</td>
<td></td>
</tr>
<tr>
<td>Organic solvents:</td>
<td>0 %</td>
</tr>
<tr>
<td>Water</td>
<td>Component B: ~ 30%</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided**: To avoid thermal decomposition do not overheat.
- **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**: No dangerous decomposition products known

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect**
- **on the skin**: No irritant effect.
- **on the eye**: No irritant effect.
- **Sensitization**: Sensitization possible by skin contact.
35.0.20

· Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

  - Irritant

12 Ecological information

· Toxicity
· Aquatic toxicity: No further relevant information available.
· Persistence and degradability: No further relevant information available.
· Behaviour in environmental systems:
· Bioaccumulative potential: No further relevant information available.
· Mobility in soil: No further relevant information available.
· Additional ecological information:
  - According to recipe contains the following heavy metals and compounds according to EC guideline NO. 76/464 EC: None
  - General notes: The product does not contain organically bounded halogens (AOX-free).
  - Results of PBT and vPvB assessment:
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - Other adverse effects: No further relevant information available.

13 Disposal considerations

· Waste treatment methods
· Recommendation:
  For disposal, local regulations issued by the authorities must be observed.
  Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations.
  After curing, the product can be disposed of with household waste.

  - European waste catalogue:
    - 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 dangerous substances
    - 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 dangerous substances

  - Uncleaned packagings:
    - Recommendation:
      Disposal must be made according to official regulations.
      Dispose of packaging according to regulations on the disposal of packagings.
      Empty packs. May be disposed via the local Green Dot collecting system or EAK waste material code 150102 (plastic packaging materials)

14 Transport information

· UN-Number
  - ADR, IMDG, IATA: Void
· UN proper shipping name
  - ADR, IMDG, IATA: Void
· Transport hazard class(es)
  - ADR, IMDG, IATA: Void
· Class
  - ADR, IMDG, IATA: Void
· Packing group
  - ADR, IMDG, IATA: Void
· 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:
  - Not dangerous according to the above specifications.
  - available oxygen content < 1 %
· HS-Code:
  - 3214 10 10: Glaziers' putty, grafting putty, resin cements, caulking compounds and other mastics

(Contd. on page 5)
Safety data sheet
according to 1907/2006/EC, Article 31 / ISO 11014

Trade name: Hilti HIT-HY 50

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- National regulations
- VOCV (Switzerland) 0.0%
- Information about limitation of use: Employment restrictions concerning young persons must be observed.
- Chemical safety assessment: not required.

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
  H241 Heating may cause a fire or explosion.
  H317 May cause an allergic skin reaction.
  H319 Causes serious eye irritation.
  R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.
  R36 Irritating to eyes.
  R43 May cause sensitisation by skin contact.
  R7 May cause fire.

- Department issuing data specification sheet:
  Hilti Entwicklungsgesellschaft mbH
  Hiltistrasse 6
  D-86916 Kaufering
  Tel.: +49 8191 906310
  Fax: +49 8191 90176310
  e-mail: anchor.hse@hilti.com
- Contact: Mechthild Krauter
- * Data compared to the previous version altered.