




## 1 Identification

- **Product identifier**
- **Trade name:** **Hilti HIT-HY 70**
- **Container size:** 330 ml, 500 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 mixture** Adhesive mortar for anchor and rebar fastenings
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Hilti, Inc.  
5400 South 122nd East Ave.  
US-Tulsa, OK 74146  
Phone: (800) 879-8000  
Fax: (800) 879-7000  
Español: (800) 879-5000
- **Information department:** see section 16
- **Emergency telephone number:**  
Chem-Trec  
Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)  
Tel.: 703 527 3887 (Other countries)  
Hilti, Inc.  
Phone: (800) 879-8000  
Fax: (800) 879-7000  
Español: (800) 879-5000

## \* 2 Hazard(s) identification

- **Classification of the substance or mixture**

Repr. 1B	H360	May damage fertility or the unborn child.
Aquatic Acute 1	H400	Very toxic to aquatic life.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2A	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.
- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**

		
GHS07	GHS08	GHS09
- **Signal word** Danger
- **Hazard-determining components of labeling:**  
Hydroxypropyl methacrylate  
dibenzoyl peroxide  
Boric acid
- **Hazard statements**  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H360 May damage fertility or the unborn child.  
H400 Very toxic to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.
- **Precautionary statements**  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P262 Do not get in eyes, on skin, or on clothing.  
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P302+P352 If on skin: Wash with plenty of water.

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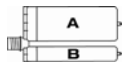
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- **Classification system**
- **NFPA ratings (scale 0-4)**



Health = 2  
Fire = 1  
Reactivity = 1

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Additional information:**



Hilti HIT

- **Information pertaining to particular dangers for man and environment: A**
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H360 May damage fertility or the unborn child.
- H412 Harmful to aquatic life with long lasting effects.
- **Information pertaining to particular dangers for man and environment: B**
- H317 May cause an allergic skin reaction.
- H400 Very toxic to aquatic life.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:**
- 2-Component-Foilpack, contains:
- Component A: Urethane methacrylate resin, inorganic filler
- Component B: Dibenzoylperoxide, phlegmatized

Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

#### · Dangerous components A:

27813-02-1	Hydroxypropyl methacrylate	5-15%
24448-20-2	(1-methylethylidene)bis(4,1-phenyleneoxy-2,1-ethanediyl) bismethacrylate	5-10%
43048-08-4	Tricyclodecane dimethanol dimethacrylate	2-5%
3290-92-4	Trimethylolpropane trimethacrylate	2-5%
10043-35-3	Boric acid	<1%

#### · Dangerous components B:

94-36-0	dibenzoyl peroxide	5-10%
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- **Additional information** For the wording of the listed risk phrases refer to section 16.

### 4 First-aid measures

- **Description of first aid measures**
- **General information** Immediately remove any clothing soiled by the product.
- **After inhalation** Take affected persons into fresh air and keep quiet.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Seek immediate medical advice.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

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## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Special hazards arising from the substance or mixture**  
Formation of toxic gases is possible during heating or in case of fire.  
In case of fire, the following can be released:  
Nitrogen oxides (NO<sub>x</sub>)  
Carbon monoxide (CO)  
Carbondioxide (CO<sub>2</sub>)
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Wear protective clothing.
- **Environmental precautions:**  
Do not allow to enter sewers/ surface or ground water.  
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**  
Clean the affected area carefully; suitable cleaners are:  
organic solvent
- **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.

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling**  
Check the expiry date: see imprint on manifold (month/year). Do not use expired mortar!  
Keep away from heat and direct sunlight.  
The usual precautionary measures for handling chemicals should be followed.
- **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:**  
Keep in a cool, dry and dark place; 41 °F / 5 °C to 77 °F / 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.  
Keep receptacle tightly sealed.
- **Storage class**  
As per VCI (1991) storage classification concept.  
11  
11
- **Specific end use(s)** Adhesive mortar for anchor and rebar fastenings

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

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 · **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.

**3290-92-4 Trimethylolpropane trimethacrylate**

WEEL	Long-term value: 1 mg/m <sup>3</sup>
	Skin

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

 · **Exposure controls**

 · **Personal protective equipment**

 · **General protective and hygienic measures**

The usual precautionary measures for handling chemicals should be followed.

Avoid contact with the eyes and skin.

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

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

 · **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

Recommended thickness of the material:  $\geq 0.12$  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**

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

 · **Not suitable are gloves made of the following materials:**

Leather gloves

Strong gloves

 · **Eye protection:**


Tightly sealed goggles.

EN 166 / EN 170

 · **Body protection:**


Protective work clothing.

**9 Physical and chemical properties**

 · **Information on basic physical and chemical properties**

 · **General Information**

 · **Appearance:**

**Form:** Pasty

**Color:** Light grey

· **Odor:** Ester-like

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· <b>Odour threshold:</b>	Not determined
· <b>pH-value:</b>	Componente A: not applicable Componente B: ~ 6
· <b>Change in condition</b> <b>Melting point/Melting range:</b> <b>Boiling point/Boiling range:</b>	Not determined. undetermined
· <b>Flash point:</b>	> 100 °C (> 212 °F) (DIN EN ISO 1523)
· <b>Flammability (solid, gaseous)</b>	Not determined
· <b>Ignition temperature:</b>	Not determined
· <b>Decomposition temperature:</b>	Component A: not relevant Component B: SADT 65 °C UN test H4
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b> <b>Lower:</b> <b>Upper:</b>	Not determined Not determined
· <b>Vapor pressure:</b>	Not determined
· <b>Density at 20 °C (68 °F):</b>	1.7 g/cm <sup>3</sup> (14.187 lbs/gal) (DIN 51757)
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with</b> <b>Water:</b>	Not miscible or difficult to mix
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b> <b>dynamic at 20 °C (68 °F):</b> <b>kinematic at 20 °C (68 °F):</b>	~ 70 Pas (DIN 53019) >20 s (ISO 2431)
· <b>Solvent content:</b> <b>Water:</b>	Component B: ~ 30%
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **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:**

 · **LD/LC50 values that are relevant for classification:**
**10043-35-3 Boric acid**

Oral | LD50 | 2660 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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Irritant

**· Carcinogenic categories**
**· NTP (National Toxicology Program)**

 14808-60-7 | Quartz (SiO<sub>2</sub>)

K

**12 Ecological information**
**· Toxicity**
**· Aquatic toxicity:**
**3290-92-4 Trimethylolpropane trimethacrylate**

EC50/96h 4.43 mg/l (magna daphnia)

2 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.

**· Ecotoxicological effects:**
**· Remark:** Harmful to fish

**· Additional ecological information:**
**· According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 2006/11/EC:**

None

**· General notes:**

The product does not contain organically bounded halogens (AOX-free).

Harmful to aquatic organisms

**· 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**

Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations.

**· European waste catalogue:**

08 04 09\* | waste adhesives and sealants containing organic solvents or other dangerous substances

20 01 27\* | paint, inks, adhesives and resins containing dangerous substances

**· Uncleaned packagings:**
**· Recommendation:** Dispose of packaging according to regulations on the disposal of packagings.

**14 Transport information**
**· UN-Number**
**· DOT, ADR, ADN, IMDG, IATA** Void

**· UN proper shipping name**
**· DOT, ADN, IMDG, IATA** Void

**· ADR** 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 marking (ADR):** None

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· <b>Special marking (IATA):</b>	None
· <b>Special precautions for user</b>	Not applicable.
· <b>Danger code (Kemler):</b>	Void
· <b>EMS Number:</b>	Void
· <b>Segregation groups</b>	Void
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	Not dangerous according to the above specifications. available oxygen content < 1 %
· <b>UN "Model Regulation":</b>	-
· <b>HS-Code:</b>	3214 10 10: Glaziers' putty, grafting putty, resin cements, caulking compounds and other mastics

### 15 Regulatory information

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

 · **Section 355 (Extremely hazardous substances):**

None of the ingredients is listed.

 · **Section 313 (Specific toxic chemical listings):**

94-36-0 | Dibenzoyl peroxide

 · **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

 · **Proposition 65:**

 · **Chemicals known to cause cancer:**

None of the ingredients are listed.

 · **Carcinogenicity categories**

 · **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

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

14808-60-7	Quartz (SiO <sub>2</sub> )	A2
94-36-0	Dibenzoyl peroxide	A4
10043-35-3	Boric acid	A4

 · **MAK (German Maximum Workplace Concentration)**

14808-60-7	Quartz (SiO <sub>2</sub> )	1
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 · **NIOSH-Ca (National Institute for Occupational Safety and Health)**

14808-60-7	Quartz (SiO <sub>2</sub> )	
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 · **National regulations**

 · **Information about limitation of use:** Employment restrictions concerning young persons must be observed.

 · **Other regulations, limitations and prohibitive regulations** None

 · **Chemical safety assessment:** not required.

### 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**

H241 Heating may cause a fire or explosion.

H360 May damage fertility or the unborn child.

R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.

R7 May cause fire.

R36 Irritating to eyes.

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

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**Trade name: Hilti HIT-HY 70**

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R50 Very toxic to aquatic organisms.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R60 May impair fertility.

R61 May cause harm to the unborn child.

**· Department issuing SDS:**

Hilti Entwicklungsgesellschaft mbH

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D-86916 Kaufering

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**· Contact:** Mechthild Krauter**· Date of preparation / last revision 05/18/2015 / 8****· 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

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

Repr. 1B: Reproductive toxicity, Hazard Category 1B

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

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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