

# HVU2

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 08/30/2019

Revision date: 08/30/2019

Supersedes: 05/07/2019

Version: 1.1

### SECTION 1: Identification

#### 1.1. Identification

Product form	Mixture
Trade name	HVU2
Product code	BU Anchor

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

Use of the substance/mixture	Adhesive anchor capsule for anchor fastening in concrete
------------------------------	--

#### 1.3. Details of the supplier of the safety data sheet

**Supplier**

Hilti, Inc.  
Legacy Tower, Suite 1000  
7250 Dallas Parkway  
TX 75024 Plano - USA  
T +1 9724035800  
1-800-879-8000 toll free - F +1 918 254 0522

**Department issuing data specification sheet**

Hilti Entwicklungsgesellschaft mbH  
Hiltistraße 6  
86916 Kaufering - Deutschland  
T +49 8191 906876  
[anchor.hse@hilti.com](mailto:anchor.hse@hilti.com)

#### 1.4. Emergency telephone number

Emergency number	Chem-Trec Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada) Tel.: 703 527 3887 (Other countries) +1 918 8723000 1-800-879-8000 toll free
------------------	---

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

**GHS-US classification**

Skin Sens. 1	H317 - May cause an allergic skin reaction.
Repr. 1B	H360 - May damage fertility or the unborn child.
Aquatic Acute 2	H401 - Toxic to aquatic life
Aquatic Chronic 2	H411 - Toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

#### 2.2. Label elements

**GHS US labelling**

Hazard pictograms (GHS US)



GHS07

GHS08

GHS09

Signal word (GHS US)

Danger

Hazard statements (GHS US)

H317 - May cause an allergic skin reaction.  
H360 - May damage fertility or the unborn child.  
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (GHS US)

P280 - Wear eye protection, protective clothing, protective gloves.  
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.

# HVU2

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> )	(CAS-No.) 1344-28-1	>= 80	Not classified
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol	(CAS-No.) 27813-02-1	5 - 10	Eye Irrit. 2A, H319 Skin Sens. 1, H317
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester	(CAS-No.) 2082-81-7	2.5 - 5	Skin Sens. 1B, H317
dibenzoyl peroxide	(CAS-No.) 94-36-0	1 - 2.5	Org. Perox. B, H241 Eye Irrit. 2A, H319 Skin Sens. 1, H317
dicyclohexyl phthalate	(CAS-No.) 84-61-7	1 - 2.5	Skin Sens. 1, H317 Repr. 1B, H360
1,1'-(p-tolylimino)dipropan-2-ol	(CAS-No.) 38668-48-3	0.1 - 1	Acute Tox. 2 (Oral), H300 Eye Irrit. 2A, H319

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	Take off immediately all contaminated clothing. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	Wash contaminated clothing before reuse. Wash with plenty of water/.... If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth. Drink plenty of water. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact	May cause an allergic skin reaction.
Symptoms/effects after eye contact	May cause severe irritation.

### 4.3. Immediate medical attention and special treatment, if necessary

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	Water spray. Carbon dioxide. Dry powder. Foam. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

# HVU2

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 5.2. Special hazards arising from the substance or mixture

No additional information available

### 5.3. Advice for firefighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	Spilled material may present a slipping hazard.
<b>6.1.1. For non-emergency personnel</b>	
Emergency procedures	Evacuate unnecessary personnel.
<b>6.1.2. For emergency responders</b>	
Protective equipment	Use personal protective equipment as required. Equip cleanup crew with proper protection.
Emergency procedures	Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment	Collect spillage.
Methods for cleaning up	This material and its container must be disposed of in a safe way, and as per local legislation. Mechanically recover the product. Store away from other materials.
Other information	Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	Keep cool. Protect from sunlight. Expiry date: See date printed on box and capsule. Do not use if expiry date has been exceeded!.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Storage temperature	-20 - 25 °C
Heat and ignition sources	Keep away from heat and direct sunlight.

# HVU2

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>Aluminum oxide (Al2O3) (1344-28-1)</b>		
Not applicable		
<b>dibenzoyl peroxide (94-36-0)</b>		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
ACGIH	Remark (ACGIH)	TLV® Basis: URT & skin irr. Notations: A4 (Not classifiable as a Human Carcinogen)
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
<b>dicyclohexyl phthalate (84-61-7)</b>		
Not applicable		
<b>2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)</b>		
Not applicable		
<b>2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)</b>		
Not applicable		
<b>1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)</b>		
Not applicable		

#### 8.2. Exposure controls

Personal protective equipment

Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.



Hand protection

Wear protective gloves. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration.

Eye protection

Wear security glasses which protect from splashes.

Skin and body protection

Wear suitable protective clothing.

Environmental exposure controls

Avoid release to the environment.

Consumer exposure controls

Avoid contact during pregnancy/while nursing.

Other information

Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	foil capsule.
Colour	resin: yellowish liquid hardener: white powder
Odour	characteristic
Odour threshold	No data available
pH	No data available
Melting point	No data available
Freezing point	No data available

# HVU2

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Boiling point	No data available
Flash point	> 101 °C (DIN EN ISO 1523)
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available
Vapour pressure	0.1 hPa
Relative density	No data available
Relative vapour density at 20 °C	No data available
Density	2.95 g/cm <sup>3</sup>
Solubility	insoluble in water.
Log Pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Viscosity, kinematic	20 Seconds (ISO 2431)
Viscosity, dynamic	No data available

### 9.2. Other information

SADT 55 °C (Peroxide)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity Not classified

Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> ) (1344-28-1)	
LD50 oral rat	> 15900 mg/kg
LC50 inhalation rat (mg/l)	7.6 mg/l

# HVU2

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>Aluminum oxide (Al<sub>2</sub>O<sub>3</sub>) (1344-28-1)</b>	
ATE US (vapours)	7.6 mg/l/4h
ATE US (dust,mist)	7.6 mg/l/4h

<b>dicyclohexyl phthalate (84-61-7)</b>	
LD50 oral rat	41400 mg/kg (Rat)
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)
ATE US (oral)	41400 mg/kg bodyweight

<b>2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)</b>	
LD50 oral rat	> 5000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; >=2000 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	>= 5000 mg/kg bodyweight (Rabbit; Experimental value)

<b>2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)</b>	
LD50 oral rat	10066 mg/kg
LD50 dermal rat	> 3000 mg/kg
ATE US (oral)	10066 mg/kg bodyweight

<b>1,1'-(p-tolylimino)dipropen-2-ol (38668-48-3)</b>	
LD50 oral rat	25 mg/kg
LD50 dermal rat	> 2000 mg/kg
ATE US (oral)	25 mg/kg bodyweight

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

<b>dibenzoyl peroxide (94-36-0)</b>	
IARC group	3 - Not classifiable

Reproductive toxicity	May damage fertility or the unborn child.
STOT-single exposure	Not classified

STOT-repeated exposure	Not classified
------------------------	----------------

Aspiration hazard	Not classified
-------------------	----------------

Symptoms/effects after skin contact	May cause an allergic skin reaction.
Symptoms/effects after eye contact	May cause severe irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>dibenzoyl peroxide (94-36-0)</b>	
EC50 Daphnia 1	0.11 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
LC50 fish 2	0.0602 mg/l (96h; Oncorhynchus mykiss; ECHA)
NOEC (acute)	0.0316 mg/l (96h; Oncorhynchus mykiss; ECHA)
NOEC chronic fish	< 0.001

<b>dicyclohexyl phthalate (84-61-7)</b>	
LC50 fish 1	> 10000 mg/l (96 h; Brachydanio rerio; Static system)
LC50 other aquatic organisms 1	1.04 mg/l
NOEC (acute)	> 2 mg/l

# HVU2

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>dicyclohexyl phthalate (84-61-7)</b>	
NOEC chronic crustacea	0.181 mg/l
<b>2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)</b>	
LC50 fish 1	493 mg/l (48 h; Leuciscus idus; GLP)
EC50 Daphnia 1	> 143 mg/l (48 h; Daphnia magna; GLP)
Threshold limit algae 1	> 97.2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)
Threshold limit algae 2	> 97.2 mg/l (72 h; Pseudokirchneriella subcapitata; GLP)
<b>2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)</b>	
LC50 other aquatic organisms 1	9.79 mg/l
NOEC (acute)	7.51 mg/l
NOEC (chronic)	20 mg/l
<b>1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)</b>	
LC50 fish 1	≈ 17 mg/l
LC50 other aquatic organisms 1	245 mg/l
EC50 Daphnia 1	28.8 mg/l
NOEC (acute)	57.8 mg/l

### 12.2. Persistence and degradability

<b>dibenzoyl peroxide (94-36-0)</b>	
Persistence and degradability	Readily biodegradable in water. Not established. May cause long-term adverse effects in the environment.
<b>dicyclohexyl phthalate (84-61-7)</b>	
Persistence and degradability	Readily biodegradable in water. Forming sediments in water.
ThOD	2.376 g O <sub>2</sub> /g substance
<b>2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)</b>	
Persistence and degradability	Readily biodegradable in water.
<b>2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)</b>	
Biodegradation	84 %

### 12.3. Bioaccumulative potential

<b>dibenzoyl peroxide (94-36-0)</b>	
Log Pow	3.71
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
<b>dicyclohexyl phthalate (84-61-7)</b>	
BCF fish 1	640 (Pisces)
Log Pow	3 - 6.2
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).
<b>2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)</b>	
BCF fish 1	≤ 100
BCF fish 2	3.2 Quantitative structure-activity relationship (QSAR)
Log Pow	0.97 (OECD 102 method)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).
<b>2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)</b>	
Log Pow	3.1
<b>1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)</b>	
BCF fish 1	≈
Log Kow	2.1

### 12.4. Mobility in soil

# HVU2

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>dibenzoyl peroxide (94-36-0)</b>	
Log Koc	3.8 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Adsorbs into the soil.
<b>2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)</b>	
Ecology - soil	Low potential for adsorption in soil.

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
<b>14.1. UN number</b>			
Not regulated	Not regulated	Not regulated	Not regulated
<b>14.2. UN proper shipping name</b>			
Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>			
Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>			
Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>			
Not regulated	Not regulated	Not regulated	Not regulated
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg)			
No supplementary information available			

### 14.6. Special precautions for user

- Overland transport

- Transport by sea

No data available

- Air transport

No data available



# HVU2

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### - Rail transport

Carriage prohibited (RID) No

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> )	CAS-No. 1344-28-1	>= 80%
dibenzoyl peroxide	CAS-No. 94-36-0	1 - 2.5%

### 15.2. International regulations

#### CANADA

<b>Aluminum oxide (Al<sub>2</sub>O<sub>3</sub>) (1344-28-1)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>dibenzoyl peroxide (94-36-0)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>dicyclohexyl phthalate (84-61-7)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol (27813-02-1)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester (2082-81-7)</b>
Listed on the Canadian DSL (Domestic Substances List)
<b>1,1'-(p-tolylimino)dipropan-2-ol (38668-48-3)</b>
Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

# HVU2

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Component	State or local regulations
dibenzoyl peroxide(94-36-0)	
dicyclohexyl phthalate(84-61-7)	
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> )(1344-28-1)	
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol(27813-02-1)	
2-Propenoic acid, 2-methyl-, 1,4-butanediyl ester(2082-81-7)	
1,1'-(p-tolylimino)dipropan-2-ol(38668-48-3)	

### SECTION 16: Other information

Revision date 08/30/2019

Other information None.

Full text of H-statements:

H241	Heating may cause a fire or explosion.
H300	Fatal if swallowed.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H360	May damage fertility or the unborn child.
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects.

NFPA health hazard

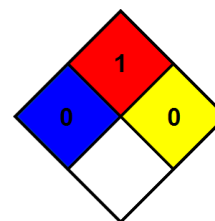
0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard

1 - Materials that must be preheated before ignition can occur.

NFPA reactivity

0 - Material that in themselves are normally stable, even under fire conditions.



Indication of changes:

Section	Changed item	Change	Comments
1	Product name	Modified	

SDS\_US\_Hilti

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*