

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

- **Product identifier**
- **Trade name:** **Hilti OneStep-Anchor N 30**
- **Container size** Rock anchor HOS 120 - 300
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation**
Rock anchor for the stabilization of tunnels, galleries and the like in mining.

The Hilti OneStep-Anchor is classified as an article in accordance with section 3, paragraph 5, of the EC Chemicals Bill. The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials.

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

- **Manufacturer/Supplier:**

Hilti Deutschland AG
Hiltistr. 2
D-86916 Kaufering
Tel +49 8191 90-0
Fax +49 8191 90-1122
Customer Service:
Tel: 0800 - 888 55 22 (toll free)
Fax: 0800 - 888 55 23 (toll free)
E-Mail: de.kundenservice@hilti.com

- **Informing department:** see section 16
- **Emergency telephone number:**
Schweizerisches Toxikologisches Informationszentrum - 24 h Service
Tel.: 0041 / 44 251 51 51 (international)
- Hilti Deutschland AG
Tel +49 8191 90-0
Fax +49 8191 90-1122

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
In accordance with article 3 (3) of REACH, this / these item(s) are products.
A product is not subject to the mandatory marking regulations applicable to dangerous substances.
(Arnsberg District Government AZ 84.12.22.67-2003-7)
Although this product is not subject to identification regulations, we recommend that the safety suggestions are observed
The product is not classified as hazardous to health or environment according to the CLP regulation.

- **Label elements**

- **Labelling according to Regulation (EC) No 1272/2008** Void

- **Hazard pictograms** Void

- **Signal word** Void

- **Hazard statements** Void

- **Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P235 Keep cool.
P262 Do not get in eyes, on skin, or on clothing.
P260 Do not breathe vapours.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.

- **Information pertaining to particular dangers for man and environment**

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The OneStep-Anchor presents no hazards to be particularly mentioned if used correctly.
Please note the information of this Material Safety Data Sheet.

The OneStep-Anchor forms a unit in which the constituents are contained in encapsulated form (dual foil pack) inside a steel tube. Access to the integrated foil pack and thus to the components A and B is possible only through intentional, forceful manipulation and misuse of the product.

The integrated dual foil pack contains inflammable constituents.
The inhalation of styrene vapors is harmful.
Skin contact with component B (white) may cause sensitization.
Components A and B are irritating to the eyes and skin.

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

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:**
Rock anchor with internally integrated 2-component foil pack.
The foil pack unit contains:
Unsaturated polyester resin with styrene, filler materials
Phlegmatized dibenzoyl peroxide as a paste, filler materials

- **Dangerous components:**

CAS: 100-42-5 EINECS: 202-851-5	styrene ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	10-25%
CAS: 94-36-0 EINECS: 202-327-6	dibenzoyl peroxide ⚠ Org. Perox. B, H241; ⚠ Eye Irrit. 2, H319; Skin Sens. 1, H317	<2,5%
CAS: 99-97-8 EINECS: 202-805-4	N,N-dimethyl-p-toluidine ⚠ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; ⚠ STOT RE 2, H373; Aquatic Chronic 3, H412	<1%

- **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**
First aid measures only required by release of ingredients or generation of decomposition products.
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 persists, 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.
- **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**
Water spray, carbon dioxide (CO₂), carbon dioxide blanket, foam, or dry powder.
Sand
- **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 (NO_x)

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- Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **Advice for firefighters**
- **Protective equipment:** In the event of fire, wear self contained breathing apparatus

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Keep away from ignition sources
- **Environmental precautions:** Do not allow to enter the ground/soil.
- **Methods and material for containment and cleaning up:**
Collect mechanically.
Remove remainders with solvent and liquid-binding material.
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**
Observe expiry date.
Keep ignition sources away - Do not smoke.
Do not disassemble the OneStep bolt
- **Information about protection against explosions and fires:**
keep away from heat and direct sunlight
Keep ignition sources away - Do not smoke.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
Keep in a cool, dry and dark place; -20 °C to 25 °C.
Please attend to the local storage regulations for underground mining operations
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Please attend to the local storage regulations for underground mining operations
Protect from heat and direct sunlight.
- **Storage class 11**
- **Classification according to "Betriebssicherheitsverordnung (BetrSichV)":** -
- **Specific end use(s)** Rock anchor for stabilizing tunnels, galleries and the like.

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:**

100-42-5 styrene (10-25%)

AGW (Germany)	86 mg/m ³ , 20 ppm
	2(II);DFG, Y

- **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 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

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- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.
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.

- **Eye protection:**



Tightly sealed safety glasses.

Face protection

- **Body protection:**



Protective work clothing.

9 Physical and chemical properties

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

- **General Information**

- **Appearance:**

Form: Self drilling anchor – integrated dual foil pack inside

Colour: foil package

Polyester resin paste: dark green

Dibenzoyl peroxide paste: white

- **Odour:**

Aromatic

- **pH-value:**

Not applicable

- **Change in condition**

Melting point/Melting range: Not determined

Boiling point/Boiling range: Not determined

- **Flash point:**

34 °C (DIN 53213)

- **Inflammability (solid, gaseous)**

Not determined

- **Ignition temperature:**

480 °C (Styrene)

- **Decomposition temperature:**

Not determined

- **Self-inflammability:**

Product is not selfigniting.

- **Danger of explosion:**

Product is not explosive.

- **Critical values for explosion:**

Lower: 1,7 Vol % (Styrene)

Upper: 8,2 Vol % (Styrene)

- **Vapour pressure at 20 °C:**

7,1 hPa (Styrene)

- **Density**

Not determined

- **Relative density**

Not determined

- **Vapour density**

Not determined

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· 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 applicable
kinematic:	Not applicable
· Solvent separation test	Not applicable
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
Non-observance of the specified storage conditions (see section 7) will lead to gradual decomposition of the dibenzoylperoxide. This will make the product unusable.
To avoid thermal decomposition do not overheat.
No decomposition if used and stored 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:**
- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effect known.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** None

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:**
Water hazard class (WGK): article, not applicable
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.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Unusable anchors must be collected separately. For disposal, local regulations issued by the authorities must be observed.
Consult the manufacturer if necessary.
For disposal, local regulations issued by the authorities must be observed.
- **Uncleaned packagings:**
- **Recommendation:**
Non contaminated packagings can be reused.
Dispose of packaging according to regulations on the disposal of packagings.

14 Transport information

· UN-Number	Void
· ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	Void
· ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· ADR, ADN, IMDG, IATA	
· Class	Void
· Packing group	
· ADR, IMDG, IATA	Void
· Environmental hazards:	Not applicable.
· 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. OneStep-Anchor: Assessment BAM Nr. II.2-1061 2/02 and Nr. II.2-324/03
· ADR	
· Remarks:	Not classified as dangerous goods in terms of the ADR
· IMDG	
· Remarks:	Not classified as dangerous goods as per above regulation.
· IATA	
· Remarks:	Not classified as dangerous goods as per above regulation.
· UN "Model Regulation":	-

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Information about limitation of use:** Employment restrictions concerning young persons must be observed.
- **Classification according to "Betriebsicherheitsverordnung (BetrSichV)":** -
- **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**
H226 Flammable liquid and vapour.
H241 Heating may cause a fire or explosion.

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H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

· **Department issuing data specification sheet:**

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· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organization
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
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
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)

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