

Printing date 02.08.2013 Version number 2 Revision: 02.08.2013

#### 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:

143 441, Moscow

69th km of Moscow Ring Road, Building 3 Business Park Company "Greenwood"

JSC "Hilti Distribution Ltd."

Mailing address:

Moscow 125047 p / o 117 Phone: A single toll-free number

8 (800) 700 52 52 Fax: 8 (800) 700 52 53

- · Informing department: see section 16
- · Emergency telephone number:

Schweizerisches Toxikologisches Informationszentrum - 24 h Service

Tel.: 0041 / 44 251 51 51 (international)

JSC "Hilti Distribution Ltd." Phone: 8 (800) 700 52 52 Fax: 8 (800) 700 52 53

#### 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

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

· 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 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.
- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- $\cdot$  Indication of any immediate medical attention and special treatment needed

No further relevant information available.

#### 5 Firefighting measures

- · Extinguishing media
- $\cdot \ Suitable \ extinguishing \ agents$

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 (NOx)

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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

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#### 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.

- $\cdot \, \textbf{Storage class} \,\, 11 \\$
- · 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.
- $\cdot \ Control \ parameters$

· Components with limit values that require monitoring at the workplace:

100-42-5 styrene

AGW (Germany) 86 mg/m³, 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

· Breathing equipment: Not required.

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· Protection of hands:

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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.

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· 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 Not determined 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

 $\begin{array}{ll} \cdot \ \textbf{Density} & \text{Not determined} \\ \cdot \ \textbf{Relative density} & \text{Not determined} \end{array}$ 

Vapour densityEvaporation rateNot determinedNot determined

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· Solubility in / Miscibility with
Water:
Not miscible or difficult to mix

· Partition coefficient (n-octanol/water): Not determined

· Viscosity:

dynamic:Not applicablekinematic:Not applicable· Solvent separation testNot 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 (carcinogenity, 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

- $\cdot \ \textbf{General notes:} \ The \ product \ does \ not \ contain \ organically \ bounded \ halogens \ (AOX-free).$
- $\cdot \ Results \ of \ PBT \ and \ vPvB \ assessment$
- · PBT: Not applicable.
- · **vPvB**: Not applicable.
- · Other adverse effects No further relevant information available.

#### 13 Disposal considerations

- · Waste treatment methods
- Recommendation

Unusable anchors must be collected separately. For disposal, local regulations issued by the authorities must be observed.

Consult the manufacturer if necessary.

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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.

cable.				
Not applicable.				
cable.				
erous according to the above specifications.  Anchor: Assessment BAM Nr. II.2-1061 2/02 and Nr. II.2-				
fied as dangerous goods in terms of the ADR				
fied as dangerous goods as per above regulation.				
fied as dangerous goods as per above 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.
- · 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.

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.

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H412 Harmful to aquatic life with long lasting effects.

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#### · 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 · 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.

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