

**1. Identification of Substance & Company****Company Details:**

Hilti (New Zealand) Ltd  
 Unit 1/B, 525 Great South Rd  
 Penrose  
 Auckland, 1061  
 PO Box 112- 030, Penrose  
 Ph 09 526 7783 (between 7-30 AM and 6-30 PM)  
 EMERGENCY TELEPHONE NUMBER  
 0800 623 000 (National Poisons Centre)

**Product**

<b>Product name</b>	Hilti HIT-HY 200-R
<b>Other names</b>	Hilti HIT-HY 200-R
<b>HSNO approval</b>	HSR002544 for part A, HSR002629 for Part B
<b>Approval description</b>	Construction Products (Subsidiary Hazard) Group Standard 2006 for Part A Organic Peroxides Group Standard 2006 for Part B
<b>UN number</b>	NA
<b>Proper Shipping Name</b>	Not regulated
<b>Packaging group</b>	NA
<b>Hazchem code</b>	1T (recommended)
<b>Uses</b>	Adhesive mortar for anchor fastening in concrete

**2. Hazard Identification****Approval**

This product has been approved under the Hazardous Substances and New Organisms Act (HSNO, Approval: HSR002544, Construction Products (Subsidiary Hazard) Group Standard 2006, for Part A, HSR002629, Organic Peroxides Group Standard 2006 for Part B, and is classified as follows:

**Classes**

Component A:  
 6.3B  
 6.4A  
 6.5B

Component B:  
 6.4A  
 6.5B  
 5.2G

**Hazard Statements**

Causes mild skin irritation.  
 Causes eye irritation.  
 May cause an allergic skin reaction.

Causes eye irritation.  
 May cause an allergic skin reaction.  
 Organic peroxide, desensitized, SADT>60°C

**SYMBOLS****WARNING****Other Classifications**

Mixture contains acrylates.

This substance (component B) does contain dibenzoyl peroxide which is an oxidiser and may increase the intensity of a fire.  
 This substance is a paste.

### Precautionary Statements

Read label before use.  
 Avoid breathing vapours.  
 Contaminated work clothing should not be allowed out of the workplace.  
 Wear protective gloves/eye protection/face protection.  
 Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Use personal protective equipment as required.

Further precautionary statements can be found in Section 4 – First Aid.

### 3. Composition / Information on Ingredients

Component A - ingredients	CAS/ Identification	Class for ingredient(s)	Conc (%)
Urethane methacrylate oligomer	NA	6.3B, 6.4A	10-20%
Methacrylic acid, monoester with propane-1,2-diol	27813-02-1	6.5B	5-10%
Components not contributing to HSNO classes	Proprietary	-	balance

Component B - ingredients	CAS/ Identification	Class for ingredient(s)	Conc (%)
Dibenzoyl peroxide, phlegmatized	94-36-0	5.2B, 6.4A, 6.5B (contact), 9.1D (fish), 9.1D (crustacean)	10-15%
Components not contributing to HSNO classes	Proprietary	-	balance

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

### 4. First Aid

#### General Information

You should call the National Poisons Centre if you feel that you may have been harmed or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service). If medical advice is needed, have product container or label at hand. IF exposed or concerned: Get medical advice.

**Recommended first aid facilities** Ready access to running water is recommended. Accessible eyewash is recommended.

#### Exposure

<b>Swallowed</b>	Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor.
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.
<b>Skin contact</b>	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>Inhaled</b>	Generally, inhalation of fumes is unlikely to result in adverse health effects. If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

#### Advice to Doctor

Treat symptomatically

### 5. Firefighting Measures

<b>Fire and explosion hazards:</b>	There are no specific risks for fire/explosion for this chemical. This substance (component B) does contain dibenzoyl peroxide which is an oxidiser and may increase the intensity of a fire.
<b>Suitable extinguishing substances:</b>	Carbon dioxide, extinguishing powder, foam, fog sprays, water spray.
<b>Unsuitable extinguishing substances:</b>	Unknown.
<b>Products of combustion:</b>	Carbon dioxide, and if combustion is incomplete, carbon monoxide, oxides of nitrogen and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.
<b>Protective equipment:</b>	No special measures are required.
<b>Hazchem code:</b>	1T (recommended)

## 6. Accidental Release Measures

<b>Containment</b>	If greater than 1000kg is stored, secondary containment and emergency plans to manage any potential spills must be in place.
<b>Emergency procedures</b>	In the event of spillage alert the fire brigade to location and give brief description of hazard. Stop the source of the leak, if safe to do so. Shut off all possible sources of ignition. Wear protective equipment to prevent skin, eye and respiratory exposure. Clear area of any unprotected personnel. Contain using sand, earth or vermiculite. Do not use sawdust on concentrate. Prevent by whatever means possible any spillage from entering drains, sewers, or water courses. (If this occurs contact your regional council immediately).
<b>Clean-up method</b>	Collect material and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.
<b>Disposal</b>	Mop up and collect recoverable material into labelled containers for recycling or salvage. Recycle containers wherever possible. This material may be suitable for approved landfill. Dispose of only in accord with all regulations.
<b>Precautions</b>	Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation.

## 7. Storage & Handling

<b>Storage</b>	Avoid storage of harmful substances with food. Keep in a cool, dry and dark place; 5°C to 25°C. Store out of reach of children. Containers should be kept closed in order to minimise contamination. Protect from heat and direct sunlight. Keep away from ignition sources. Avoid contact with incompatible substances as listed in Section 10.
<b>Handling</b>	Keep exposure to a minimum, and minimise the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of vapour. Do not smoke. Persons with sensitivity or previous allergic response to acrylates should not handle this material.

## 8. Exposure Controls / Personal Protective Equipment

### Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by the NZ Ministry of Business, Innovation & Employment (MBIE) for this product. There is a general limit of 10mg/m<sup>3</sup> for dusts and mists when limits have not otherwise been established.

NZ Workplace Exposure Stds (2013)	Ingredient	WES-TWA	WES-STEL
	methacrylic acid, monoester with propane-1,2-diol	no data	no data
	methacrylic acid	20ppm, 70mg/m <sup>3</sup>	no data
	dibenzoyl peroxide	50ppm, 242 mg/m <sup>3</sup>	100ppm, 483mg/m <sup>3</sup>

### Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety in Employment Act 1992 (HSE). Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

### Personal Protective Equipment

<b>Eyes</b>	Protective eyewear is not normally necessary when using this product. However, it is always prudent to use protective eyewear if splashes are likely.
<b>Skin</b>	Avoid repeated or prolonged skin contact. Wear overalls, rubber boots and impervious gloves. Nitrile or NBR gloves are recommended. Leather and natural rubber gloves are not suitable. Replace gloves frequently. Gloves should be checked for tears or holes before use. Remove protective clothing and wash exposed areas with soap and water prior to eating, drinking or smoking. Wash hands after handling.
<b>Respiratory</b>	A respirator when airborne concentrations approach the WES (section 8). Use a organic vapour cartridge with a dust/mist filter. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order.

**WES Additional Information**

Not applicable

**9. Physical & Chemical Properties**

<b>Appearance</b>	Component A; grey paste, Component B: white paste
<b>Odour</b>	Ester like
<b>pH</b>	~7 (component B)
<b>Vapour pressure</b>	<0.1 hPa
<b>Viscosity</b>	~60 Pa.s (dynamic at 20°C). >20s (kinematic at 20°C)
<b>Boiling point</b>	240°C
<b>Volatile materials</b>	Component B: 20% water.
<b>Freezing / melting point</b>	Not determined
<b>Solubility</b>	Insoluble in water
<b>Specific gravity / density</b>	1.8g/ml at 20°C
<b>Flash point</b>	110°C (component A)
<b>Danger of explosion</b>	No data
<b>Decomposition temperature</b>	Component A: not relevant, Component B: SADT 65°C (UN test H4)
<b>Upper &amp; lower flammable limits</b>	No data
<b>Corrosiveness</b>	Non corrosive

**10. Stability & Reactivity**

<b>Stability</b>	Stable
<b>Conditions to be avoided</b>	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
<b>Incompatible groups</b>	Flammable substances (Component B)
<b>Hazardous decomposition products</b>	None known
<b>Hazardous reactions</b>	None known

**11. Toxicological Information****Summary**

This product is irritating to the eyes. Sensitisation is possible by skin contact.

Where available, toxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following toxicity:

**Supporting Data**

<b>Acute</b>	<b>Oral</b>	Using LD <sub>50</sub> 's for ingredients, the calculated LD <sub>50</sub> (oral, rat) for the mixture is >5,000 mg/kg. Data considered includes: dibenzoyl peroxide 1072mg/kg (mouse), 2255mg/kg (rat).
	<b>Dermal</b>	No evidence of dermal toxicity.
	<b>Inhaled</b>	No evidence of inhalation toxicity.
<b>Chronic</b>	<b>Eye</b>	The mixture is considered to be an eye irritant, because some of the ingredients present are considered eye irritants in more concentrated form. (methacrylates – component A, dibenzoyl peroxide – component B)
	<b>Skin</b>	The mixture is considered to be a mild skin irritant. (component A)
	<b>Sensitisation</b>	The mixture is considered to be a contact sensitizer, because some of the ingredients present in greater than 0.1% (methacrylic acid, monoester with propane-1,2-diol and dibenzoyl peroxide), is known to be a contact sensitizer. Acrylate is considered a relatively weak sensitizer, however persons sensitized to similar chemicals (acrylates) may also be sensitive to this product.
	<b>Mutagenicity</b>	No ingredient present at concentrations > 0.1% is considered a mutagen.
	<b>Carcinogenicity</b>	No ingredient present in >0.1% is considered a carcinogen.
<b>Reproductive / Developmental</b>	<b>Systemic</b>	No ingredient present at concentrations >0.1% is considered a reproductive/developmental toxicant.
	<b>Aggravation of existing conditions</b>	No ingredient present in >1% is considered a systemic toxicant.
		None known.

## 12. Ecological Data

### Summary

No specific data is available for this product. Where available, ecotoxicological data has been researched and data for the mixture calculated. The results of these calculations are presented below. The product is considered to have the following ecotoxicity groups:

### Supporting Data

<b>Aquatic</b>	No evidence of aquatic ecotoxicity.
<b>Bioaccumulation</b>	No data
<b>Degradability</b>	Readily biodegradable
<b>Soil</b>	No data available for the mixture.
<b>Terrestrial vertebrate</b>	This product is not considered harmful to terrestrial vertebrates. No LC <sub>50</sub> (diet) data for ingredients are available and the classification is based on the LD <sub>50</sub> (oral) – see section 11 – oral toxicity.
<b>Terrestrial invertebrate</b>	The mixture is not considered harmful to terrestrial invertebrates.
<b>Biocidal</b>	Not applicable
<b>Environmental effect levels</b>	No EELs are available for this mixture or ingredients

## 13. Disposal Considerations

<b>Restrictions</b>	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
<b>Disposal method</b>	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.
<b>Contaminated packaging</b>	The cartridges are a disposable injection system and therefore cannot be recycled. Send to landfill or similar.

## 14. Transport Information

There are no specific restrictions for this product (not a dangerous good).

<b>UN number:</b>	Not regulated	<b>Proper shipping name:</b>	NA
<b>Class(es)</b>	NA	<b>Packing group:</b>	NA
<b>Precautions:</b>	NA	<b>Hazchem code:</b>	1T (recommended)

## 15. Regulatory Information

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO). Approval: HSR002544, Construction Products (Subsidiary Hazard) Group Standard 2006, for Part A, HSR002629, Organic Peroxides Group Standard 2006 for Part B.

### Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Key workplace requirements are:

MSDS	To be available within 10 minutes in workplaces storing > any quantity.
Labelling	No removal of labels and/or decanting of product into other containers can occur.
Emergency plan	Required if > 1000L is stored.
Approved handler	Not required.
Tracking	Not required.
Bunding & secondary containment	Required if > 1000L is stored.
Signage	Not required.
Location test certificate	Not required.
Flammable zone	Not required.
Fire extinguisher	Not required.

### Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health, Safety in Employment Act and Regulations, local Council Rules and Regional Council Plans.

**16. Other Information****Abbreviations**

<b>Approval Code</b>	Approval: HSR002544, Construction Products (Subsidiary Hazard) Group Standard 2006, for Part A, HSR002629, Organic Peroxides Group Standard 2006 for Part B, Controls, EPA. <a href="http://www.epa.govt.nz">www.epa.govt.nz</a>
<b>CAS Number</b>	Unique Chemical Abstracts Service Registry Number
<b>Ceiling</b>	Ceiling Exposure Value: The maximum airborne concentration of a biological or chemical agent to which a worker may be exposed at any time.
<b>Controls Matrix</b>	List of default controls linking regulation numbers to Matrix code (e.g. T1, I16).
<b>EC<sub>50</sub></b>	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
<b>ERMA</b>	Environmental Risk Management Authority (now EPA)
<b>EPA</b>	Environmental Protection Agency (previously known as ERMA)
<b>HAZCHEM Code</b>	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
<b>HSNO</b>	Hazardous Substances and New Organisms (Act and Regulations)
<b>IARC</b>	International Agency for Research on Cancer
<b>LEL</b>	Lower Explosive Limit
<b>LD<sub>50</sub></b>	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
<b>LC<sub>50</sub></b>	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
<b>MSDS</b>	Material Safety Data Sheet (or Safety Data Sheet)
<b>MBIE</b>	Ministry of Business, Innovation & Employment (New Zealand)
<b>SADT</b>	Self-Accelerating Decomposition Temperature
<b>STEL</b>	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
<b>TWA</b>	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
<b>UEL</b>	Upper Explosive Limit
<b>UN Number</b>	United Nations Number
<b>WES</b>	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed.

**References**

<b>Data</b>	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID) <a href="http://www.epa.govt.nz/hs/compliance/chemicals.html">http://www.epa.govt.nz/hs/compliance/chemicals.html</a> , for specific chemicals.
<b>EPA Transfer Gazettes</b>	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004)
<b>Controls Matrix</b>	Part of the EPA New Zealand User Guide to the HSNO Control Regulations
<b>WES 2013</b>	The NZ Workplace Exposure Standards Effective from 2013, published by MBIE and available on their web site – <a href="http://www.dol.govt.nz">www.dol.govt.nz</a> .
<b>Other References:</b>	Suppliers MSDS

**Review**

<b>Date</b>	<b>Reason for review</b>
June 2013	NA – new MSDS

**Disclaimer**

This MSDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The MSDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the MSDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications, are based on our experience, EPA Guidelines and international classifications. This MSDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the MSDS author, email [info@datachem.co.nz](mailto:info@datachem.co.nz) or phone: (09) 940 30 80.

