



## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**VariKwick Powder**  
**Article number 20-3596-xxx**

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

#### 1.2.1 Relevant uses

Mounting material for metallographic specimens

#### 1.2.2 Uses advised against

None known.

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

**Company** ITW Test & Measurement GmbH  
In der Steele 2  
40599 Düsseldorf / GERMANY  
Phone 0800 707 6273  
Fax 0800 707 6274  
Homepage [www.buehler-met.de](http://www.buehler-met.de)  
E-mail [info.uk@buehler.com](mailto:info.uk@buehler.com)

#### Address enquiries to

**Technical information** [info.uk@buehler.com](mailto:info.uk@buehler.com)

**Safety Data Sheet** [sdb@chemiebuero.de](mailto:sdb@chemiebuero.de)

### 1.4 Emergency telephone number

**Company** 0800 707 6273 (Only valid if dialled within the UK) +49 (0) 211 974100

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Skin Sens. 1: H317 May cause an allergic skin reaction.

### 2.2 Label elements

The product is classified and required to be labelled in accordance with EC-Directives

#### Hazard pictograms



#### Signal word

WARNING

#### Contains:

Dicyclohexyl phthalate

Dibenzoyl peroxide

Methyl methacrylate

#### Hazard statements

H317 May cause an allergic skin reaction.

#### Precautionary statements

P280 Wear protective gloves.

P333+P313 If skin irritation or rash occurs: Get medical advice / attention.

P363 Wash contaminated clothing before reuse.

P501 Dispose of contents / container to in accordance with local / regional / national / international regulation.

### 2.3 Other hazards

#### Physico-chemical hazards

Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.

#### Environmental hazards

Does not contain any PBT or vPvB substances.

#### Other hazards

Further hazards were not determined with the current level of knowledge.



### SECTION 3: Composition / Information on ingredients

#### Product-type:

The product is a mixture.

Range [%]	Substance
1 - < 2,5	Dicyclohexyl phthalate
	CAS: 84-61-7, EINECS/ELINCS: 201-545-9
	GHS/CLP: Repr. 2: H361fd - Skin Sens. 1: H317 - Aquatic Chronic 3: H412
1 - < 2,5	Dibenzoyl peroxide
	CAS: 94-36-0, EINECS/ELINCS: 202-327-6, EU-INDEX: 617-008-00-0, Reg-No.: 01-2119511472-50-XXXX
	GHS/CLP: Org. Perox. B: H241 - Eye Irrit. 2: H319 - Skin Sens. 1: H317 - Aquatic Acute 1: H400, M = 10
0,1 - < 0,2	Methyl methacrylate
	CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6
	GHS/CLP: Flam. Liq. 2: H225 - STOT SE 3: H335 - Skin Irrit. 2: H315 - Skin Sens. 1: H317

#### Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.  
For full text of H-statements: see SECTION 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General information

Take off contaminated clothing and wash before reuse.

##### Inhalation

Ensure supply of fresh air.  
Seek medical advice immediately.

##### Skin contact

In case of contact with skin wash off immediately with soap and water.  
Consult a doctor if skin irritation persists.

##### Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

##### Ingestion

Get medical advice.  
Rinse out mouth and give plenty of water to drink.

#### 4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Fire-fighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Foam.  
Dry powder.  
Water spray jet.  
Carbon dioxide.

##### Extinguishing media that must not be used

Full water jet.

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

Risk of formation of toxic pyrolysis products.

#### 5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.



## SECTION 6: Accidental release measures

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

Avoid dust formation.  
Ensure adequate ventilation.  
Use personal protective clothing.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

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

Take up mechanically.  
Avoid raising dust.  
Dispose of absorbed material in accordance within the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid the formation and deposition of dust.  
Provide vacuuming if dust raised.  
Use only in well-ventilated areas.

Do not eat, drink, smoke or take drugs at work.  
Wash hands before breaks and after work.  
Use barrier skin cream.

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

Keep only in original container.  
Prevent penetration into the ground.  
Do not store together with food and animal food/diet.  
Keep container tightly closed.  
Store in a dry place.  
Do not keep at temperatures above 30 °C.

### 7.3 Specific end use(s)

See product use, SECTION 1.2



## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

#### Ingredients with occupational exposure limits to be monitored (GB)

Range [%]	Substance
1 - < 2,5	Dicyclohexyl phthalate
	CAS: 84-61-7, EINECS/ELINCS: 201-545-9
	Long-term exposure: 5 mg/m <sup>3</sup>
1 - < 2,5	Dibenzoyl peroxide
	CAS: 94-36-0, EINECS/ELINCS: 202-327-6, EU-INDEX: 617-008-00-0, Reg-No.: 01-2119511472-50-XXXX
	Long-term exposure: 5 mg/m <sup>3</sup>
0,1 - < 0,2	Methyl methacrylate
	CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6
	Long-term exposure: 50 ppm, 208 mg/m <sup>3</sup>
	Short-term exposure (15-minute): 100 ppm, 416 mg/m <sup>3</sup>

#### Ingredients with occupational exposure limits to be monitored (EU)

Range [%]	Substance / EC LIMIT VALUES
0,1 - < 0,2	Methyl methacrylate
	CAS: 80-62-6, EINECS/ELINCS: 201-297-1, EU-INDEX: 607-035-00-6
	Eight hours: 50 ppm
	Short-term (15-minute): 100 ppm

#### DNEL

Range [%]	Substance
1 - < 2,5	Dibenzoyl peroxide, CAS: 94-36-0
	Industrial, dermal, Long-term - systemic effects: 6,6 mg/kg bw/d.
	Industrial, inhalative, Long-term - systemic effects: 11,75 mg/m <sup>3</sup> .
	general population, oral, Long-term - systemic effects: 1,65 mg/kg bw/d.
	general population, dermal, Long-term - systemic effects: 3,3 mg/kg bw/d.
	general population, inhalative, Long-term - systemic effects: 2,9 mg/m <sup>3</sup> .

#### PNEC

Range [%]	Substance
1 - < 2,5	Dibenzoyl peroxide, CAS: 94-36-0
	oral (food), 6,67 mg/kg dw.
	soil, 0,0758 mg/kg dw.
	sediment (freshwater), 0,338 mg/kg dw.
	sewage treatment plants (STP), 0,35 mg/l.
	freshwater, 0,000602 mg/l.
	seawater, 0,000602 mg/l.



## 8.2 Exposure controls

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation.
<b>Eye protection</b>	Safety glasses. (EN 166:2001)
<b>Hand protection</b>	0,7mm: Butyl rubber, >480 min (EN 374). The details concerned are recommendations. Please contact the glove supplier for further information.
<b>Skin protection</b>	light protective clothing
<b>Other</b>	Avoid contact with eyes and skin. Do not inhale dust. It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
<b>Respiratory protection</b>	Breathing apparatus in the event of high concentrations. Short term: filter apparatus, filter P2. (DIN EN 143)
<b>Thermal hazards</b>	none
<b>Delimitation and monitoring of the environmental exposition</b>	Comply with applicable environmental regulations limiting discharge to air, water and soil.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Form</b>	powder
<b>Color</b>	blue
<b>Odor</b>	characteristic
<b>Odour threshold</b>	No information available.
<b>pH-value</b>	not applicable
<b>pH-value [1%]</b>	not applicable
<b>Boiling point [°C]</b>	No information available.
<b>Flash point [°C]</b>	not applicable
<b>Flammability (solid, gas) [°C]</b>	No information available.
<b>Lower explosion limit</b>	No information available.
<b>Upper explosion limit</b>	No information available.
<b>Oxidizing properties</b>	no
<b>Vapour pressure/gas pressure [kPa]</b>	No information available.
<b>Density [g/ml]</b>	1,16 (20 °C / 68,0 °F)
<b>Bulk density [kg/m³]</b>	700-750 (20°C)
<b>Solubility in water</b>	insoluble
<b>Partition coefficient [n-octanol/water]</b>	No information available.
<b>Viscosity</b>	not applicable
<b>Relative vapour density determined in air</b>	not applicable
<b>Evaporation speed</b>	not applicable
<b>Melting point [°C]</b>	110
<b>Autoignition temperature [°C]</b>	not self-igniting
<b>Decomposition temperature [°C]</b>	> 30

### 9.2 Other information

Ignition Temperature: > 400

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reactions known if used as directed.

**10.2 Chemical stability**

Stable under normal ambient conditions (ambient temperature).

**10.3 Possibility of hazardous reactions**

Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.

**10.4 Conditions to avoid**

See SECTION 7

**10.5 Incompatible materials**

No information available.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**

Range [%]	Substance
0,1 - < 0,2	Methyl methacrylate, CAS: 80-62-6
	LD50, oral, Rat: 7872 mg/kg (RTECS).
	LD50, dermal, Rabbit: > 5000 mg/kg (RTECS).
	LC50, inhalative, Rat: 7093 ppm/4h (Lit.).
	LC50, inhalative, Rat: 78000 mg/m <sup>3</sup> (4 h) (RTECS).
1 - < 2,5	Dibenzoyl peroxide, CAS: 94-36-0
	LD50, oral, Rat: >5000 mg/kg.

**Serious eye damage/irritation**

Toxicological data of complete product are not available.  
Based on available data, the classification criteria are not met.

**Skin corrosion/irritation**

Toxicological data of complete product are not available.  
Based on available data, the classification criteria are not met.

**Respiratory or skin sensitisation**

Toxicological data of complete product are not available.  
Sensitizing.  
Calculation method

**Specific target organ toxicity — single exposure**

Toxicological data of complete product are not available.  
Based on available data, the classification criteria are not met.

**Specific target organ toxicity — repeated exposure**

Toxicological data of complete product are not available.  
Based on available data, the classification criteria are not met.

**Mutagenicity**

Toxicological data of complete product are not available.  
Based on available data, the classification criteria are not met.

**Reproduction toxicity**

Toxicological data of complete product are not available.  
This product contains one or more substance(s) of categorie Repr. 2 (CLP).  
Based on available data, the classification criteria are not met.

**Carcinogenicity**

Toxicological data of complete product are not available.  
Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on the available information, the classification criteria are not fulfilled.

**General remarks**

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.



## SECTION 12: Ecological information

### 12.1 Toxicity

Range [%]	Substance
0,1 - < 0,2	Methyl methacrylate, CAS: 80-62-6
	LC50, (96h), fish: 191 mg/l (IUCLID).
	EC50, (48h), Daphnia magna: 69 mg/l (IUCLID).
	IC50, Pseudokirchneriella subcapitata: 170 mg/l (4 d) (OECD 201).
1 - < 2,5	Dibenzoyl peroxide, CAS: 94-36-0
	LC50, (96h), Oncorhynchus mykiss: 0,0602 mg/l (OECD 203).
	LC50, (96h), fish: 1,7-2,4 mg/l (OECD 203).
	EC50, (48h), Daphnia magna: 2,91 mg/l (OECD 202).
	EC50, (48h), Daphnia magna: 0,11 mg/l (OECD 202).
	EC50, (72h), Pseudokirchneriella subcapitata: 0,0711 mg/l (OECD 201).
	NOEC, (48h), Daphnia magna: 1,99 mg/l.

### 12.2 Persistence and degradability

<b>Behaviour in environment compartments</b>	No information available.
<b>Behaviour in sewage plant</b>	No information available.
<b>Biological degradability</b>	No information available.

### 12.3 Bioaccumulative potential

Accumulation in organisms is not expected.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

### 12.6 Other adverse effects

Ecological data of complete product are not available.

No classification on the basis of the calculation procedure of the preparation directive.

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

#### Product

Disposal in an incineration plant in accordance with the regulations of the local authorities.

#### Waste no. (recommended)

070214\*

#### Contaminated packaging

Untaminated packaging may be taken for recycling.

#### Waste no. (recommended)

150110\*  
150101  
150102  
150104



## SECTION 14: Transport information

### 14.1 UN number

See SECTION 14.2 in accordance with UN shipping name

### 14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

### 14.3 Transport hazard class(es)

See SECTION 14.2 in accordance with UN shipping name

### 14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name

### 14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

not applicable

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EEC-REGULATIONS 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC; (EU) 2015/830

TRANSPORT-REGULATIONS DOT-Classification, ADR (2015); IMDG-Code (2015, 37. Amdt.); IATA-DGR (2015).

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011). CHIP 3/ CHIP 4

- Observe employment restrictions for people Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.

- VOC (1999/13/CE) 0 %

### 15.2 Chemical safety assessment

For this product a chemical safety assessment has not been carried out.





## SECTION 16: Other information

### 16.1 Hazard statements (SECTION 3)

H315 Causes skin irritation.  
 H335 May cause respiratory irritation.  
 H225 Highly flammable liquid and vapour.  
 H400 Very toxic to aquatic life.  
 H319 Causes serious eye irritation.  
 H241 Heating may cause a fire or explosion.  
 H412 Harmful to aquatic life with long lasting effects.  
 H317 May cause an allergic skin reaction.  
 H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

### 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
 CAS = Chemical Abstracts Service  
 CLP = Classification, Labelling and Packaging  
 DMEL = Derived Minimum Effect Level  
 DNEL = Derived No Effect Level  
 EC50 = Median effective concentration  
 ECB = European Chemicals Bureau  
 EEC = European Economic Community  
 EINECS = European Inventory of Existing Commercial Chemical Substances  
 ELINCS = European List of Notified Chemical Substances  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
 IC50 = Inhibition concentration, 50%  
 IMDG = International Maritime Code for Dangerous Goods  
 IUCLID = International Uniform Chemical Information Database  
 LC50 = Lethal concentration, 50%  
 LD50 = Median lethal dose  
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
 PBT = Persistent, Bioaccumulative and Toxic substance  
 PNEC = Predicted No-Effect Concentration  
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
 TLV@/TWA = Threshold limit value – time-weighted average  
 TLV@STEL = Threshold limit value – short-time exposure limit  
 VOC = Volatile Organic Compounds  
 vPvB = very Persistent and very Bioaccumulative

### 16.3 Other information

#### Classification procedure

Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)



**Modified position**

SECTION 3 been added: Dicyclohexyl phthalate

SECTION 8 been added: Butyl rubber, >480 min (EN 374).

SECTION 8 deleted: Butyl rubber, >120 min (EN 374).

SECTION 8 been added: It is essential for pregnant women to avoid inhaling the product and not to let it come in contact with the skin.

SECTION 9 deleted: No information available.

SECTION 9 deleted: No information available.

SECTION 11 been added: Based on the available information, the classification criteria are not fulfilled.

SECTION 11 been added: Toxicological data of complete product are not available.

SECTION 11 been added: Toxicological data of complete product are not available.

SECTION 11 been added: Calculation method

SECTION 11 been added: This product contains one or more substance(s) of categorie Repr. 2 (CLP).

SECTION 11 deleted: The product was classified on the basis of the calculation procedure of the preparation directive.

SECTION 11 been added: Toxicological data of complete product are not available.

SECTION 15 been added: -

SECTION 15 deleted: not applicable

SECTION 15 been added: For this product a chemical safety assessment has not been carried out.



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