

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

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

#### 1.1 Product identifier

Trade name	:	VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)
Product code	:	089260202
Unique Formula Identifier (UFI)	:	MM01-E0S5-X004-83W0

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

Use of the Sub-stance/Mixture	:	Hardener Professional use product
Recommended restrictions on use	:	Not applicable

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

Company	:	Adolf Wuerth GmbH & Co. KG Reinhold-Würth-Str. 12-17 74653 Künzelsau
Telephone	:	+49 794015 0
Telefax	:	+49 794015 10 00
E-mail address of person responsible for the SDS	:	isi@wuerth.com

#### 1.4 Emergency telephone number

+49 (0)6132 – 84463

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Organic peroxides, Type E	H242: Heating may cause a fire.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Eye irritation, Category 2	H319: Causes serious eye irritation.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version 13.0	Revision Date: 21.09.2023	SDS Number: 10644671-00016	Date of last issue: 15.05.2023 Date of first issue: 01.06.2012
-----------------	------------------------------	-------------------------------	---

Short-term (acute) aquatic hazard, Category 1

H400: Very toxic to aquatic life.

Long-term (chronic) aquatic hazard, Category 1

H410: Very toxic to aquatic life with long lasting effects.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements :  
H242 Heating may cause a fire.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P391 Collect spillage.

#### Hazardous components which must be listed on the label:

Dibenzoyl peroxide

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version 13.0      Revision Date: 21.09.2023      SDS Number: 10644671-00016      Date of last issue: 15.05.2023  
Date of first issue: 01.06.2012

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

##### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Dibenzoyl peroxide	94-36-0 202-327-6 617-008-00-0	Org. Perox. B; H241 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	>= 30 - < 50

For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
When symptoms persist or in all cases of doubt seek medical advice.
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
- If inhaled : If inhaled, remove to fresh air.  
Get medical attention if symptoms occur.
- In case of skin contact : In case of contact, immediately flush skin with soap and plenty of water.  
Remove contaminated clothing and shoes.  
Get medical attention.  
Wash clothing before reuse.  
Thoroughly clean shoes before reuse.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.  
If easy to do, remove contact lens, if worn.  
Get medical attention.

If swallowed : If swallowed, DO NOT induce vomiting.  
Get medical attention if symptoms occur.  
Rinse mouth thoroughly with water.

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

Risks : May cause an allergic skin reaction.  
Causes serious eye irritation.

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

Treatment : Treat symptomatically and supportively.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Water spray  
Alcohol-resistant foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical

Unsuitable extinguishing media : High volume water jet

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

Specific hazards during fire-fighting : The product burns violently.  
Exposure to combustion products may be a hazard to health.

Hazardous combustion products : Carbon oxides  
Silicon oxides

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Use water spray to cool unopened containers.  
Remove undamaged containers from fire area if it is safe to do so.  
Evacuate area.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

### SECTION 6: Accidental release measures

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

Personal precautions : Remove all sources of ignition.  
Use personal protective equipment.  
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

#### 6.2 Environmental precautions

Environmental precautions : Avoid release to the environment.  
Prevent further leakage or spillage if safe to do so.  
Retain and dispose of contaminated wash water.  
Local authorities should be advised if significant spillages cannot be contained.

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

Methods for cleaning up : Clear spills immediately.  
Do not clean-up or dispose of, except under supervision of a specialist.  
Take any precaution to avoid mixing with combustibles.  
Keep substance wet using water spray.  
Soak up with inert absorbent material.  
Remove mechanically and with care (e.g. with clean polyethylene plastic shovel).  
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.  
Clean up remaining materials from spill with suitable absorbent.  
Keep waste moist, cool and well-ventilated.  
Isolate waste and do not reuse.  
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.  
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

#### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

Local/Total ventilation : Use only with adequate ventilation.  
If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventilation.

Advice on safe handling : Do not breathe decomposition products.

Do not get on skin or clothing.  
Avoid breathing dust, fume, gas, mist, vapours or spray.  
Do not swallow.  
Do not get in eyes.  
Wash skin thoroughly after handling.  
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment  
Non-sparking tools should be used.  
Prevent pressure build-up. Confinement can rapidly increase rate of decomposition.  
Protect from contamination.  
Keep cool.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Keep away from clothing and other combustible materials.  
Take precautionary measures against static discharges.  
Keep only in original packaging.  
Take care to prevent spills, waste and minimize release to the environment.

Hygiene measures : If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace.  
Wash contaminated clothing before re-use.

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

Requirements for storage areas and containers : Keep in properly labelled containers. Keep in a dry, cool and well-ventilated place. Protect from sunlight. Adhere to recommended storage temperature. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition.

Store in original container.

Advice on common storage : Store away from other materials.

Storage class (TRGS 510) : 5.2

Recommended storage temperature : 25 °C

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version 13.0      Revision Date: 21.09.2023      SDS Number: 10644671-00016      Date of last issue: 15.05.2023  
Date of first issue: 01.06.2012

### 7.3 Specific end use(s)

Specific use(s) : No data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Dibenzoyl peroxide	94-36-0	AGW (Inhalable fraction)	5 mg/m <sup>3</sup>	DE TRGS 900
Peak-limit: excursion factor (category): 1;(I)				

#### Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Benzoic acid	65-85-0	AGW (Vapour and aerosols)	0,1 ppm 0,5 mg/m <sup>3</sup>	DE TRGS 900
Peak-limit: excursion factor (category): 4;(II)				
Further information: Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child				
Benzene	71-43-2	TWA	1 ppm 3,25 mg/m <sup>3</sup>	2004/37/EC
Further information: Skin, Carcinogens or mutagens				
		Tolerable concentration	0,6 ppm 1,9 mg/m <sup>3</sup>	DE TRGS 910
Peak-limit: excursion factor (category): 8 - Excursion factor according to Number 3.2.6				
Further information: Skin-resorptive				
		Acceptable concentration	0,06 ppm 0,2 mg/m <sup>3</sup>	DE TRGS 910
Further information: Skin-resorptive				

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Dibenzoyl peroxide	Workers	Inhalation	Long-term systemic effects	39 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	13,3 mg/kg bw/day
	Workers	Skin contact	Long-term local effects	0,034 mg/cm <sup>2</sup>
	Consumers	Ingestion	Long-term systemic effects	2 mg/kg bw/day
Dimethyl phthalate	Workers	Inhalation	Long-term systemic effects	66,1 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic	135 mg/kg

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version 13.0      Revision Date: 21.09.2023      SDS Number: 10644671-00016      Date of last issue: 15.05.2023  
Date of first issue: 01.06.2012

			effects	bw/day
	Consumers	Inhalation	Long-term systemic effects	16,3 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	67,5 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	9,4 mg/kg bw/day

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Dibenzoyl peroxide	Fresh water	0,02 µg/l
	Marine water	0,002 µg/l
	Intermittent use/release	0,602 µg/l
	Sewage treatment plant	0,35 mg/l
	Fresh water sediment	0,013 mg/kg
Dimethyl phthalate	Marine sediment	0,001 mg/kg
	Soil	0,003 mg/kg
	Fresh water	0,192 mg/l
	Freshwater - intermittent	0,39 mg/l
	Marine water	0,019 mg/l
	Sewage treatment plant	4 mg/l
	Fresh water sediment	1,3 mg/kg dry weight (d.w.)
	Marine sediment	0,13 mg/kg dry weight (d.w.)
	Soil	3,16 mg/kg dry weight (d.w.)

## 8.2 Exposure controls

### Engineering measures

Processing may form hazardous compounds (see section 10).

Ensure adequate ventilation, especially in confined areas.

Minimize workplace exposure concentrations.

If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventilation.

### Personal protective equipment

Eye/face protection : Wear the following personal protective equipment:  
Safety goggles  
Equipment should conform to DIN EN 166

### Hand protection

Material : Chloroprene  
Break through time : >= 480 min  
Glove thickness : >= 0,6 mm  
Directive : Equipment should conform to DIN EN 374  
Protective index : Class 6

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous sub-



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version 13.0	Revision Date: 21.09.2023	SDS Number: 10644671-00016	Date of last issue: 15.05.2023 Date of first issue: 01.06.2012
-----------------	------------------------------	-------------------------------	---

- stance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.
- Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.  
Wear the following personal protective equipment:  
If assessment demonstrates that there is a risk of explosive atmospheres or flash fires, use flame retardant antistatic protective clothing.  
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
- Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.  
Equipment should conform to DIN EN 14387
- Filter type : Combined particulates and organic vapour type (A-P)

### SECTION 9: Physical and chemical properties

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

- Physical state : paste
- Colour : coloured
- Odour : characteristic
- Odour Threshold : No data available
- Melting point/freezing point : > 3.000 °C
- Initial boiling point and boiling range : 100 °C
- Flammability (solid, gas) : Not classified as a flammability hazard
- Upper explosion limit / Upper flammability limit : Not applicable

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version 13.0	Revision Date: 21.09.2023	SDS Number: 10644671-00016	Date of last issue: 15.05.2023 Date of first issue: 01.06.2012
-----------------	------------------------------	-------------------------------	---

Lower explosion limit / Lower  
flammability limit : Not applicable

Flash point : Not applicable

Auto-ignition temperature : 555 °C  
Method: DIN 51794

Decomposition temperature : 50 °C

pH : Solvent mixture; pH value determination not possible, no  
aqueous solution

Viscosity  
Viscosity, dynamic : 10.000 mPa.s (20 °C)

Viscosity, kinematic : Not applicable

Solubility(ies)  
Water solubility : insoluble

Partition coefficient: n-  
octanol/water : Not applicable

Vapour pressure : 23 hPa (20 °C)

Density : 1,1 g/cm<sup>3</sup> (20 °C)  
Method: DIN 53217

Bulk density : 20 - 200 kg/m<sup>3</sup> (20 °C)

Relative vapour density : Not applicable

Particle characteristics  
Particle size : No data available

### 9.2 Other information

Explosives : Not explosive

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Evaporation rate : Not applicable

Available oxygen content : 3,3 %

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

Heating may cause a fire.

#### 10.2 Chemical stability

Stable if used as directed. Follow precautionary advice and avoid incompatible materials and conditions.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Oxidizing material can cause a reaction.  
Hazardous decomposition products will be formed at elevated temperatures.

#### 10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.  
Protect from contamination.  
Temperatures greater than recommended storage temperature.  
Contact with incompatible substances can cause decomposition at or below SADT.

#### 10.5 Incompatible materials

Materials to avoid : Oxidizing agents  
Avoid impurities (e.g. rust, dust, ash), risk of decomposition.  
Flammable materials

#### 10.6 Hazardous decomposition products

Thermal decomposition : Benzoic acid  
Benzene  
Phenyl benzoate  
Biphenyl

### SECTION 11: Toxicological information

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of : Skin contact

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

exposure

Ingestion  
Eye contact

### Acute toxicity

Not classified based on available information.

### Components:

#### Dibenzoyl peroxide:

Acute oral toxicity	: LD50 (Mouse): > 2.000 mg/kg Method: OECD Test Guideline 401 Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	: LC0 (Rat): 24,3 mg/l Exposure time: 4 h Test atmosphere: dust/mist

### Skin corrosion/irritation

Not classified based on available information.

### Components:

#### Dibenzoyl peroxide:

Species	: Rabbit
Result	: No skin irritation

### Serious eye damage/eye irritation

Causes serious eye irritation.

### Components:

#### Dibenzoyl peroxide:

Species	: Rabbit
Result	: Irritation to eyes, reversing within 21 days
Remarks	: Based on national or regional regulation.

### Respiratory or skin sensitisation

#### Skin sensitisation

May cause an allergic skin reaction.

#### Respiratory sensitisation

Not classified based on available information.

### Components:

#### Dibenzoyl peroxide:

Test Type	: Local lymph node assay (LLNA)
Exposure routes	: Skin contact
Species	: Mouse

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

Result : positive

Assessment : Probability or evidence of skin sensitisation in humans

### Germ cell mutagenicity

Not classified based on available information.

#### Components:

##### Dibenzoyl peroxide:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative

Test Type: In vitro mammalian cell gene mutation test  
Method: OECD Test Guideline 476  
Result: negative

Test Type: Chromosome aberration test in vitro  
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo  
cytogenetic assay)  
Species: Mouse  
Application Route: Intraperitoneal injection  
Method: OECD Test Guideline 474  
Result: negative

### Carcinogenicity

Not classified based on available information.

#### Components:

##### Dibenzoyl peroxide:

Species : Rat  
Application Route : Skin contact  
Exposure time : 104 weeks  
Result : negative

### Reproductive toxicity

Not classified based on available information.

#### Components:

##### Dibenzoyl peroxide:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the  
reproduction/developmental toxicity screening test  
Species: Rat  
Application Route: Ingestion  
Method: OECD Test Guideline 422  
Result: negative

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

Effects on foetal development : Test Type: Embryo-foetal development  
Species: Rat  
Application Route: Ingestion  
Method: OECD Test Guideline 414  
Result: negative

### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

Not classified based on available information.

### Repeated dose toxicity

#### Components:

#### Dibenzoyl peroxide:

Species	: Rat
NOAEL	: 500 mg/kg
Application Route	: Ingestion
Exposure time	: 54 Days
Method	: OECD Test Guideline 422

### Aspiration toxicity

Not classified based on available information.

## 11.2 Information on other hazards

### Endocrine disrupting properties

#### Product:

Assessment	: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
------------	---

---

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

#### Dibenzoyl peroxide:

Toxicity to fish	: LC50 (Oncorhynchus mykiss (rainbow trout)): 0,0602 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0,11 mg/l Exposure time: 48 h

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0,0711 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,02 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 10

Toxicity to microorganisms : EC50 : 35 mg/l  
Exposure time: 0,5 h  
Method: OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10: 0,001 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 10

### 12.2 Persistence and degradability

#### Components:

##### **Dibenzoyl peroxide:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 71 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301D

### 12.3 Bioaccumulative potential

#### Components:

##### **Dibenzoyl peroxide:**

Partition coefficient: n-octanol/water : log Pow: 3,2

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

#### Product:

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

#### Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.  
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.  
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.  
Do not dispose of waste into sewer.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
If not otherwise specified: Dispose of as unused product.

Waste Code : The following Waste Codes are only suggestions:

unused product, used product  
08 01 11, waste paint and varnish containing organic solvents or other hazardous substances  
08 04 99, wastes not otherwise specified

uncleaned packagings  
15 01 10, packaging containing residues of or contaminated by hazardous substances

Acc. Packaging Act properly emptied packaging:  
Properly emptied, non-contaminated packaging of non-hazardous products can be supplied to a system for the collection of sales packaging.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

### SECTION 14: Transport information

#### 14.1 UN number or ID number

ADN	:	UN 3108
ADR	:	UN 3108
RID	:	UN 3108
IMDG	:	UN 3108
IATA	:	UN 3108

#### 14.2 UN proper shipping name

ADN	:	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
ADR	:	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
RID	:	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
IMDG	:	ORGANIC PEROXIDE TYPE E, SOLID (DIBENZOYL PEROXIDE)
IATA	:	Organic peroxide type E, solid (Dibenzoyl peroxide)

#### 14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADN	: 5.2	
ADR	: 5.2	
RID	: 5.2	
IMDG	: 5.2	
IATA	: 5.2	HEAT

#### 14.4 Packing group

<b>ADN</b>	
Packing group	: Not assigned by regulation
Classification Code	: P1
Labels	: 5.2
<b>ADR</b>	
Packing group	: Not assigned by regulation
Classification Code	: P1
Labels	: 5.2
Tunnel restriction code	: (D)
<b>RID</b>	
Packing group	: Not assigned by regulation
Classification Code	: P1

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

Hazard Identification Number : 539  
Labels : 5.2

### IMDG

Packing group : Not assigned by regulation  
Labels : 5.2  
EmS Code : F-J, S-R

### IATA (Cargo)

Packing instruction (cargo aircraft) : 570  
Packing group : Not assigned by regulation  
Labels : Organic Peroxides, Keep Away From Heat

### IATA (Passenger)

Packing instruction (passenger aircraft) : 570  
Packing group : Not assigned by regulation  
Labels : Organic Peroxides, Keep Away From Heat

## 14.5 Environmental hazards

### ADN

Environmentally hazardous : yes

### ADR

Environmentally hazardous : yes

### RID

Environmentally hazardous : yes

### IMDG

Marine pollutant : yes

## 14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## 14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	: Conditions of restriction for the following entries should be considered: Number on list 75 If you intend to use this product as tattoo ink, please contact your vendor.
--	--

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version 13.0	Revision Date: 21.09.2023	SDS Number: 10644671-00016	Date of last issue: 15.05.2023 Date of first issue: 01.06.2012
-----------------	------------------------------	-------------------------------	---

		Substance(s) or mixture(s) are listed here according to their appearance in the regulation, irrespective of their use/purpose or the conditions of the restriction. Please refer to the conditions in corresponding Regulation to determine whether an entry is applicable to the placing on the market or not.	
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).		:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer		:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)		:	Not applicable
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals		:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)		:	Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.			
P6b	SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES	Quantity 1 50 t	Quantity 2 200 t
E1	ENVIRONMENTAL HAZARDS	100 t	200 t
Water hazard class (Germany)	:	WGK 2 obviously hazardous to water Classification according to AwSV, Annex 1 (5.2)	
TA Luft List (Germany)	:	5.2.1: Total dust: Not applicable 5.2.2: Inorganic substances in powdered form: Not applicable 5.2.4: Inorganic substances in gaseous form: Not applicable 5.2.5: Organic Substances: Class 1: 50 % Dibenzoyl peroxide 5.2.7.1.1: Carcinogenic substance: Not applicable 5.2.7.1.1: Quartz fine dust PM4: Not applicable 5.2.7.1.1: Formaldehyde:	

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

Not applicable  
5.2.7.1.1: fibres:  
Not applicable  
5.2.7.1.2: Germ cell mutagens:  
Not applicable  
5.2.7.1.3: Substances toxic to reproduction:  
Not applicable  
5.2.7.2: Poorly degradable, easily enrichable and highly toxic  
organic substances:  
Not applicable

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial  
emissions (integrated pollution prevention and control)  
Volatile organic compounds (VOC) content: 0 %, 0 g/l

### Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national  
regulations, where applicable.

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemi-  
cals.

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

Other information : Items where changes have been made to the previous version  
are highlighted in the body of this document by two vertical  
lines.

### Full text of H-Statements

H241 : Heating may cause a fire or explosion.  
H317 : May cause an allergic skin reaction.  
H319 : Causes serious eye irritation.  
H400 : Very toxic to aquatic life.  
H410 : Very toxic to aquatic life with long lasting effects.

### Full text of other abbreviations

Aquatic Acute : Short-term (acute) aquatic hazard  
Aquatic Chronic : Long-term (chronic) aquatic hazard  
Eye Irrit. : Eye irritation  
Org. Perox. : Organic peroxides  
Skin Sens. : Skin sensitisation  
2004/37/EC : Europe. Directive 2004/37/EC on the protection of workers  
from the risks related to exposure to carcinogens or mutagens  
at work  
DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version	Revision Date:	SDS Number:	Date of last issue: 15.05.2023
13.0	21.09.2023	10644671-00016	Date of first issue: 01.06.2012

DE TRGS 910 : Germany. TRGS 910 - Substance-specific acceptable and tolerable concentrations and equivalence values for carcinogenic hazardous substances.

2004/37/EC / TWA : Long term exposure limit

DE TRGS 900 / AGW : Time Weighted Average

DE TRGS 910 / Acceptable concentration : Acceptable concentration

DE TRGS 910 / Tolerable concentration : Tolerable concentration

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

### Classification of the mixture:

Org. Perox. E H242

### Classification procedure:

Based on product data or assessment

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878



## VAKU 20 PRECISION SURFACER - 2000 G (Hardener 40 G)

Version 13.0	Revision Date: 21.09.2023	SDS Number: 10644671-00016	Date of last issue: 15.05.2023 Date of first issue: 01.06.2012
-----------------	------------------------------	-------------------------------	---

Skin Sens. 1	H317	Calculation method
Eye Irrit. 2	H319	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

DE / EN