

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

077056849

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

070423640 070423657 070423665 077056831 077056856 077056864

# MATERIAL SAFETY DATA SHEET

Reference Code  
Revision Date  
Revision Number  
Material / Trade Name

VPDR8025F (29 Cut) & VPDR8024F (53 Cut)  
Reviewed Aug. 2014  
5  
Velopex AquaCut 29 Cut & Velopex AquaCut 53 Cut

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## 1 – SUBSTANCE IDENTIFICATION

Material / Trade Name Velopex AquaCut 29 Cut & Velopex AquaCut 53 Cut  
Material Type Cutting Agent (Aluminium Oxide)  
Company Medivance Instruments Limited  
Address Barretts Green Road  
Harlesden London  
NW10 7AP  
Telephone 020 8965 2913  
Fax 020 8963 1270  
Email [enquiries@velopex.com](mailto:enquiries@velopex.com)

## 2 – COMPOSITION

Substance	% Wt.	Cas Number	EC (EINECS) Number
Aluminium Oxide	>90	1344-28-1	215-691-6

## 3 – HAZARD IDENTIFICATION

a – Hazard Symbols Not Applicable  
b – Risk & Safety Do not breath dust  
Avoid contact with eyes

## 4 – FIRST-AID MEASURES

a – Inhalation No toxic effects  
Classified as nuisance material  
b – Eyes Irrigate with water for at least 15 minutes  
If irritation persists, contact doctor  
c – Skin No harmful effects  
Remove contaminated clothing  
Wash with soap and clean with plenty of water  
d – Ingestion No toxic effects. Treat symptomatically. Seek medical attention as necessary

# MATERIAL SAFETY DATA SHEET

Reference Code  
Revision Date  
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Material / Trade Name

IPDR8025F (29 Cut) & IPDR8024F (53 Cut)  
Reviewed Aug. 2014  
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Velopex AquaCut 29 Cut & Velopex AquaCut 53 Cut

## 5 – FIRE FIGHTING MEASURES

- a – Suitable Extinguishers Not applicable. Non flammable material
- b – Unsuitable Extinguishers Not applicable. Non flammable material
- c – Hazardous Decomposition Not applicable
- d – Special Procedures None

## 6 – ACCIDENTAL RELEASE MEASURES

- a – Exposure Controls Isolate the spillage  
Clean as appropriate. Use vacuum to remove fine dust
- b – Personal Protection If eye contact is possible wear eye protection
- c – Disposal Considerations Scoop up and plastic container to await transfer  
Dispose of in accordance with Local Authority regulations

## 7 – HANDLING AND STORAGE

- a – Handling Avoid creating dust  
Avoid eye contact  
Wear suitable protective clothing
- b – Storage Store in tightly closed labelled containers

## 8 – EXPOSURE CONTROL

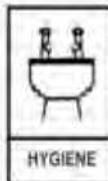
Occupational Exposure Limit 8hr TWA 10mg/m<sup>3</sup> total dust 4mg/m<sup>3</sup> respirable dust  
Biological Exposure Limit Not assigned  
Protective Equipment Wear appropriate eye and respiratory protection



Wear Nitrile rubber gloves



Use in well ventilated areas



If skin is contaminated wash off immediately



Keep skin covered



If splashing is likely

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## 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White solid
Odour	n/a
Ph	n/a
Boiling Point / range	>3000°C
Melting Point / range	2050°C
Flash Point	n/a
Flammability	Non flammable
Auto Flammability	n/a
Explosive Properties	n/a
Oxidising Properties	None
Vapour Pressure	n/a
Relative Density	3.95 g/cm <sup>3</sup>
Solubility	Insoluble
Partition Coefficient	n/a
Miscibility	n/a
Vapour Density	n/a
Evaporation Rate	n/a
Viscosity	n/a

*n/a = not applicable*

## 10 – STABILITY AND REACTIVITY

Stability	Stable and inert
Hazardous Polymerisation	Will not occur
Conditions to Avoid	n/a
Materials to Avoid	n/a
Hazardous Decomposition Products	None known

## 11 – TOXICOLOGICAL INFORMATION

Rat intra-pleural	TD LO 90 mg/kg
Health Effects	(Classified as non toxic) Irritating to eyes
Acute Effects	None known
Chronic Effects	None known

## 12 – ECOLOGICAL INFORMATION

No adverse environmental effects foreseen

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## 13 – DISPOSAL CONSIDERATIONS

Dispose of in accordance with Local Authority regulations

## 14 – TRANSPORT INFORMATION

UN/SI Number	n/e		
IMO	n/e		
IATA/ICAO	n/e	Packing Group	n/e
ADR/RID	n/e	Packing Group	n/e
Transport Name	Road – Non hazardous	Item	n/e
Hazchem/Kemler Code	n/e		
Marine Pollutant	No		

*n/e = none established*

## 15 – REGULATORY INFORMATION

a – Hazard Symbols Not applicable  
b – Risk and Safety Not applicable  
c – Other Regulations Health and Safety at Work Act 1974  
Control of Substances Hazardous to Health Regulations 1999  
Environmental Protection Act 1990

### d – Transport Information

UN/SI Number	n/e		
IMO	n/e		
IATA/ICAO	n/e	Packing Group	n/e
ADR/RID	n/e	Packing Group	n/e
Transport Name	Road – Non hazardous	Item	n/e
Hazchem/Kemler Code	n/e		
Marine Pollutant	No		

*n/e = none established*

## 16 – OTHER INFORMATION

The Aluminium Oxide used in the Velopex 29 cut and 53 cut contains no free Silica and is classified as a nuisance material. Dust exposure limits are given in EH/40 published by the Health and Safety Executive.

This data sheet is compiled to be of assistance but is without guarantee. Users are responsible for safe working.

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

Product Name I/PDR 8025F (29 Cut) Aluminium Oxide  
I/PDR 8024F (53 cut) Aluminium Oxide  
Synonyms PROCUT, PROCUT+, Alumina

### 1.2 Uses of the product

Identified Uses Dental abrasive for professional use  
Uses Advised Against None known

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

Supplier Medivance Instruments Ltd.  
Barretts Green Road  
Harlesden  
London  
NW10 7AP  
T +44 (0) 20 8965 2913  
F +44 (0) 20 8963 1270  
enquiries@velopex.com

### 1.4 Emergency telephone number

020 8965 2913

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification

Not applicable

### 2.2 Label elements

Does not require labeling under the CLP Regulation (EC) No. 1272/2008. But please take note of this product information. No risk of silicosis during application.

Safety Instructions Possible dust exposure due to fine dust particles.  
Do not breathe dust.  
Avoid contact with eyes.

### 2.3 Other hazards

Not known

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Mean Values
Alumina (Al <sub>2</sub> O <sub>3</sub> )	99.69%
Titanium dioxide (TiO <sub>2</sub> )	-/-

Chemical Characterisation	EINECS	CAS No.	(1) REACH Registration No. (2) CLP Notification No.	Classification according to CLP Regulation EC No. 1272 / 2008	
				Hazard classes / Hazard categories	Hazard statements
Alumina (Al <sub>2</sub> O <sub>3</sub> )	215-691-6	1344-28-1	(1) 01-2119529248-35-0010 (2) 02-2119709295-38-0000	-/-	-/-
Titanium dioxide (TiO <sub>2</sub> )	236-675-5	13463-67-7	(2) 02-2119879066-28-0000	-/-	-/-

#### Hazardous substances

No dangerous ingredients

#### Substances with prescribed EC exposure limits

Does not contain substances with EC exposure limits

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General Information

Consult a doctor in case of health disorders.

#### After Inhalation

Provide the affected person with fresh air. Consult a doctor in case of irritation of the respiratory tract.

#### After eye contact

Remove contact lenses and Irrigate with water for at least 15 minutes. If irritation persists, then consult doctor

#### After skin contact

No harmful effects  
Remove contaminated clothing  
Wash with soap and plenty of water

#### After swallowing

Rinse mouth and drink plenty of water. Do not induce vomiting. If you feel unwell, seek medical advice.

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

Not known

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

Treat symptomatically

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Product does not burn. Match extinguishing measures to ambient situation.

#### Unsuitable extinguishing media

Not known

### 5.2 Special hazards arising from the product

Not known

### 5.3 Advice for firefighters

Match the firefighting measures to the environmental conditions.

#### Additional information

Not known

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 personal precautions

Avoid dust formation

### 6.2 Environmental protection precautions

Not known

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

Pick up mechanically and dispose of properly.

### 6.4 References to other sections

Refer to protective measures in sections 7 and 8.

### Additional Information

Not known

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### Information on safe handling

Avoid dust formation

#### Information on fire and explosion protection

No special fire protection measures are necessary

#### Additional Information

Not known

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

#### Information on storage conditions

Always store product in dry conditions.

#### Requirements for storage rooms and containers

No special requirements needed.

#### Storage class VCI

LGK 13 (non-combustible solids)

### 7.3 Specific end use(s)

Dental air abrasion powder for cutting, caries removal and cavity preparation.

## SECTION 8: LIMITATION AND MONITORING OF EXPOSURE/PERSONAL PROTECTICE EQUIPMENT

### 8.1 Control parameters

#### Occupational exposure limit values in the workplace and/or biological limit values

Occupational Exposure Limits (OEL) in Germany for dusts

Inhalable fraction (E)	10 mg/m <sup>3</sup>
Respirable fraction (A)	1.25 mg /m <sup>3</sup>
with exceeding factor 2 each, ref. TRGS 900	

#### Community exposure limits

Country specific. Please inquire in individual cases.



## 8.2 Exposure Controls

### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over the use of personal protective equipment. Provide adequate ventilation. This can be achieved by local suction or general air extraction.

Aluminium Oxide is not a hazardous substance, thus only the general dust limit value applies.

Suitable assessment methods to verify the effectiveness of the protective measures taken include metrological and non-metrological determination methods as described in the Technical Rules for hazardous Substances (TRGS) 4021 and BS EN 14042 "Workplace areas, Guidelines for the implementation and application of processes for assessment of exposure to chemical and biological agents".

### Personal protective equipment

The use of personal protective equipment is dependent on the concentrations and quantity of hazardous substances and their use in specific workplaces.

### Respiratory protection

Normally, no personal respiratory protective equipment is necessary. In case of insufficient ventilation or exceeded workplace limits, a protective breathing mask should be worn (FFP filtering half mask depending on the existing concentration).

### Hand protection

Wear appropriate gloves

### Eye protection

Tight-sealing protective eyewear (dust-protection goggles) in accordance with EN 166:2001.

### Body protection

With normal use, no body protection by half or full-body coverall and boots is required.

### Information on industrial hygiene

Minimum standards for protective measure when handling Working materials are listed in TRGS 500.

Do not eat, drink, smoke or take drugs while using this product.

Avoid contact with skin, eyes and clothing.

Remove soiled or soaked clothing immediately.

Wash hands before breaks and at end of work.

Protect skin by using skin creams.

### Environmental protection measures

See sections 6 and 7; no further action is required

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

Appearance	Angular
Physical state	Solid
Colour	White
Odour	Odourless

#### Safety data

Explosion hazard	The product itself is not explosive; however, formation of explosive air/dust mixtures is possible.
Lower explosion limit	Not known
Upper explosion limit	Not known
Vapour pressure	Not relevant
Specific gravity	approx. 3.9 to 4.1g/cm <sup>3</sup>
Flow time	Not relevant
Water solubility	Insoluble in water
pH value	Not applicable
Boiling point/range	>3000 °C
Flash point	Not determined as product is not flammable
Melting point	approx. 2000 °C
Ignition temperature	Not determined as product is not flammable

### 9.2 Other Information

None

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

Alumina is non-reactive and does not change with proper handling and storage.

### 10.2 Chemical stability

Alumina is chemically stable and does not change with proper handling and storage.

### 10.3 Possibility of hazard reactions

No hazardous reactions known.

### 10.4 Conditions to avoid

None.

### 10.5 Incompatible materials

No hazardous reactions known.

### 10.6 Hazardous decomposition products

No known hazardous decomposition products.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

According to current IFA reports the product contains no silicosis-inducing, toxic or carcinogenic components. The indications given in section 8 of this product information must be observed.

Acute Toxicity	No data on the product available
Irritation	No data on the product available
Corrosivity	No data on the product available
Sensitisation	No data on the product available
Repeated dose toxicity	No known toxicity of Alumina
CMR effects (carinogenic, mutagenic and toxic to reproduction)	No carcinogenic effect according to IFA reports
Summarised evaluation of the CMR properties	No known CMR properties
Practical experience (relevant for classification and other observations)	No data on the product available
Carcinogenicity	No known carcinogenicity of Alumina
Mutagenicity	No data on the product available
Reproductive toxicity	No data on the product available
Other information	Not known

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

No known effects

### Ecotoxicity

For Aluminium Oxide no environmental problems are to be expected when handled and used properly.

### Fish toxicity

Harmful effects for aquatic organisms are not expected.

### Aquatic invertebrates

Harmful effects for aquatic organisms are not expected.

### Water plants

Harmful effects for aquatic organisms are not expected.

## 12.2 Persistence and degradability

Based on current experience, this product is inert and not degradable.

## 12.3 Bioaccumulative potential

No data available. Accumulation in biological materials is rather unlikely, as it is inert and insoluble.

## 12.4 Mobility in soil

Potential not known

## 12.5 Results of PBT and vPvB assessment

Not relevant. The substances in this product do not meet the criteria for classification as PBT or vPvB.

## 12.6 Other harmful effects

None known.

# SECTION 13: DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

### **Product**

Alumina. If recycling is not possible, waste must be disposed of in compliance with national and local regulations. Confirm the exact waste code with the disposer.

## 13.2 Packaging

National and local regulations must be followed.

### Contaminated packaging

Packaging with Aluminium Oxide residues can be recycled.

### Cleaned packaging

Packaging can be reused after being cleaned or recycled.

# SECTION 14: TRANSPORT INFORMATION

Alumina is not dangerous goods.

# SECTION 15: REGULATORY INFORMATION

## 15.1 Safety, health and environmental regulations/legislations specific for the product

### **EU Legislation**

Not known

### **National regulations**

#### Water hazard class

Not hazardous to water; classification according to VwVwS, Annex 4.

#### Technical instruction on air quality (TA-Luft)

Substances not mentioned by name.

#### Hazardous Incident Ordinance (12. BImSchV [German Federal Immission Control Regulation])

Substances not mentioned by name.

#### Chemicals Prohibition Ordinance

Substances not mentioned by name.

#### Relevant Technical Rules for Hazardous Substances

Contains no hazardous substances.

#### Employment Restrictions

Not known

## Miscellaneous

Aluminium Oxide is not subject to the VOC Regulation.

## International regulations

All Aluminium Oxide ingredients are listed with TSCA, A1CS, DSL (NDSL), NEPA and PICCS and registered with MITI / ENCS under 1-23

## 15.2 Chemical Safety Assessment

Not relevant

## **SECTION 16: OTHER INFORMATION**

### Further applicable EC directives

Not known

### Restrictions on use recommended by the manufacturer

For Dental application only.

### Literature and data sources

#### Regulations

REACH Regulation (EC) No. 1907/2006  
CLP Regulation (EC) No. 1272/2008  
Hazardous Substances Ordinance (GefStoffV)  
Commission Decision 2000/532/EC (AVV)  
Transport Regulations according to ADR, RID and IATA  
TRGS 900  
VOC Regulation (ChemVOCFarbV)

### Hazard statements, referred to in section 2 and 3 according to Regulation (EC) No. 1272/2008:

None

### Legend

ADR	European agreement concerning the international carriage of dangerous goods by road
AVV/EWC	European Waste Catalogue
BImSchV	Regulation on the Implementation of the (German) Federal Immission Control Ordinance
CAS	Chemical Abstracts Service
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association-Dangerous Goods Regulations
PBT	persistent, bioaccumulative, toxic
RID	Regulations concerning the International Carriage of Dangerous Goods
TRGS	Technical Rules For hazardous Substances
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds (VOCs)
vPvB	very persistent and very bioaccumulative
VwVwS	Administrative Regulation on Substances Hazardous to Water

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Revision	GHS1

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