

SAFETY DATA SHEET (EC 1907/2006)**Orion UWX**

Version: **1.5 / GB** Material no. **5317130013**
Revision date: **25.09.2017** Specification **162866**
Issue date: **03.09.2013** VA-Nr **01773834**
replaces version: **1.4**
Page: **1 / 8**

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Trade name Orion UWX
REACH Registration No.: if available listed in Chapter. 3

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

Relevant applications identified For dental use only.

1.3. Details of the supplier of the safety data sheet

Company DeguDent GmbH
Postfach 1364
D-63403 Hanau
Telephone +49 (0)6181/59-5767
Telefax +49 (0)6181/59-5879
Email address SDB.Degudent-DE@dentsplysirona.com

1.4. Emergency telephone number

Emergency information +49 (0)6181/59-50 (This telephone number is available during office hours only.)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Remarks Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2. Label elements**Labelling as per (EU) 1272/2008**

Statutory basis Labelling not required according to EU-CLP Ordinance (1272/2008).

2.3. Other hazards

In case of melting, soldering or grinding:, Dusts and vapors: Do not inhale.
A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

SECTION 3: Composition/information on ingredients**3.1. Substances**

-

3.2. Mixtures**Information on ingredients / Hazardous components as per EU-CLP Regulation (EC) No. 1272/2008**

• Gold	75.0%		
CAS-No.	7440-57-5	EC-No.	231-165-9
• Palladium	18.5%		
CAS-No.	7440-05-3	EC-No.	231-115-6

SAFETY DATA SHEET (EC 1907/2006)

Orion UWX

Version: **1.5 / GB**
Revision date: **25.09.2017**
Issue date: **03.09.2013**
replaces version: **1.4**
Page: **2 / 8**

Material no. **5317130013**
Specification **162866**
VA-Nr **01773834**



• silver	2.5%		
CAS-No.	7440-22-4	EC-No.	231-131-3
• Tin	1.5%		
CAS-No.	7440-31-5	EC-No.	231-141-8
• Iridium	2.4%		
CAS-No.	7439-88-5	EC-No.	231-095-9
• copper	< 1.0%		
CAS-No.	7440-50-8	EC-No.	231-159-6
• Rhenium	< 1.0%		
CAS-No.	7440-15-5	EC-No.	231-124-5
• iron	< 1.0%		
CAS-No.	7439-89-6	EC-No.	231-096-4

Texts of H phrases, see in Chapter 16

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Dusts and vapours:
Remove to fresh air.

Eye contact

Dusts and vapours:
Rinse thoroughly with plenty of water keeping eyelid open.
If eye irritation persists, consult a specialist.

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

Symptoms

No information available.

Hazards

None known

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

If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should not be allowed

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Special powder against metal fire
quenching powder
dry sand
common salt

Unsuitable extinguishing media: Water
Carbon dioxide (CO₂)

5.2. Special hazards arising from the substance or mixture

None known.

5.3. Advice for firefighters

Extinction measures are to be adjusted to the specific location.
The product itself does not burn.
Employ protective equipment commonly used in the event of fire.

SAFETY DATA SHEET (EC 1907/2006)**Orion UWX**

Version:	1.5 / GB	Material no.	5317130013
Revision date:	25.09.2017	Specification	162866
Issue date:	03.09.2013	VA-Nr	01773834
replaces version:	1.4		
Page:	3 / 8		

**SECTION 6: Accidental release measures**

- 6.1. Personal precautions, protective equipment and emergency procedures**
No special measures are required.
- 6.2. Environmental precautions**
No special environmental precautions required.
- 6.3. Methods and material for containment and cleaning up**
Use mechanical handling equipment.
- 6.4. Reference to other sections**
Wear personal protective equipment; see section 8.
Disposal considerations; see section 13.

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling**
In case of melting, soldering or grinding:
Dusts and vapors: Do not inhale.
Local ventilation.
No special measures are necessary if properly handled.
In case of dust or vapor: Wear personal safety equipment
- 7.2. Conditions for safe storage, including any incompatibilities**
Storage
No special storage conditions required.
German storage class
13 - Non Combustible Solids
- 7.3. Specific end use(s)**
We are unaware of any specific end uses which go beyond the data reported in Section 1.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

• silver			
CAS-No.	7440-22-4	EC-No.	231-131-3
Control parameters	0.1 mg/m ³		Time Weighted Average (TWA):(EH40 WEL)
Control parameters	0.1 mg/m ³ Indicative		Time Weighted Average (TWA):(EU ELV)
• Tin			
CAS-No.	7440-31-5	EC-No.	231-141-8
Control parameters	2 mg/m ³ Indicative		Time Weighted Average (TWA):(EU ELV)
• copper			
CAS-No.	7440-50-8	EC-No.	231-159-6
Control parameters	1 mg/m ³		Time Weighted Average (TWA):(EH40 WEL)
type of exposure	Inhalable dusts and mists.		
Control parameters	2 mg/m ³		Short Term Exposure Limit (STEL):(EH40 WEL)
type of exposure	Inhalable dusts and mists.		
Control parameters	0.2 mg/m ³		Time Weighted Average (TWA):(EH40 WEL)
type of exposure	Fume.		

SAFETY DATA SHEET (EC 1907/2006)**Orion UWX**

Version:	1.5 / GB	Material no.	5317130013
Revision date:	25.09.2017	Specification	162866
Issue date:	03.09.2013	VA-Nr	01773834
replaces version:	1.4		
Page:	4 / 8		

**8.2. Exposure controls****Engineering measures**

In case of melting, soldering or grinding:, Adequate exhaustion / ventilation of the work site or machinery must be assured. Vacuuming of objects.

Personal protective equipment**Respiratory protection**

Do not inhale smoke, dust, vapor.

If workplace exposure limit is exceeded apply Dust mask with P2 particle filter.

Hand protection

No special protective equipment required.

Eye/face protection

Safety glasses with side-shields

Skin and body protection

No particular measures required.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice., Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance

Form	solid
Colour	light yellow

Odour	odourless
-------	-----------

Odour threshold:	not applicable
------------------	----------------

pH	not applicable
----	----------------

Melting point/range	1190 - 1220 °C
---------------------	----------------

Boiling point/range	not applicable
---------------------	----------------

Flash point	not applicable
-------------	----------------

Evaporation rate	not applicable
------------------	----------------

Flammability (solid, gas)	not flammable
---------------------------	---------------

Lower explosion limit	not applicable
-----------------------	----------------

Upper explosion limit	not applicable
-----------------------	----------------

Vapour pressure	not applicable
-----------------	----------------

Density	17.5 g/cm ³
---------	------------------------

Water solubility	insoluble
------------------	-----------

Partition coefficient: n-octanol/water	not applicable
--	----------------

Autoinflammability	Not capable of spontaneous combustion or heating.
--------------------	---

SAFETY DATA SHEET (EC 1907/2006)

Orion UWX

Version:	1.5 / GB	Material no.	5317130013
Revision date:	25.09.2017	Specification	162866
Issue date:	03.09.2013	VA-Nr	01773834
replaces version:	1.4		
Page:	5 / 8		



Thermal decomposition	not applicable
Viscosity, dynamic	not applicable
Explosiveness	not applicable
Oxidizing properties	not oxidizing

9.2. Other information

Other information No further physicochemical data were determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

no data available

10.2. Chemical stability

The product is chemically stable.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No dangerous reactions known.

10.4. Conditions to avoid

No limitations

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

Decomposition products occurring when heated above melting temperature
metallic vapors

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity	no data available
Acute inhalation toxicity	no data available
Acute dermal toxicity	no data available
Skin irritation	no data available
Eye irritation	no data available
Sensitization	no data available
Repeated dose toxicity	no data available
Assessment of STOT single exposure	no data available
Assessment of STOT repeat exposure	no data available
Mutagenicity assessment	no data available
Carcinogenicity	No data available
Toxicity to reproduction	No data available

SAFETY DATA SHEET (EC 1907/2006)

Orion UWX

Version:	1.5 / GB	Material no.	5317130013
Revision date:	25.09.2017	Specification	162866
Issue date:	03.09.2013	VA-Nr	01773834
replaces version:	1.4		
Page:	6 / 8		



Further information

No hazardous reactions are known if properly handled and stored.

SECTION 12: Ecological information

12.1. Toxicity

No ecotoxicological data is available for this product.

12.2. Persistence and degradability

Biodegradability no data available

12.3. Bioaccumulative potential

Bioaccumulation no data available

12.4. Mobility in soil

Mobility The product is insoluble in water.
No further information available

12.5. Results of PBT and vPvB assessment

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

12.6. Other adverse effects

Further Information Introduction into soil, natural water bodies or sewerage must be prevented.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product

Can be used after re-conditioning.

SECTION 14: Transport information

Not dangerous according to transport regulations.

14.1. UN number:	--
14.2. UN proper shipping name:	--
14.3. Transport hazard class(es):	--
14.4. Packing group:	--
14.5. Environmental hazards:	--
14.6. Special precautions for user:	No

SECTION 15: Regulatory information

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

National legislation

15.2. Chemical safety assessment

Chemical safety assessment No Chemical Safety Report as per Articles 2(8), 2(9) or 14 of the REACH

SAFETY DATA SHEET (EC 1907/2006)

Orion UWX

Version:	1.5 / GB	Material no.	5317130013
Revision date:	25.09.2017	Specification	162866
Issue date:	03.09.2013	VA-Nr	01773834
replaces version:	1.4		
Page:	7 / 8		



Regulation is required for this product.

SECTION 16: Other information

Classification and applied procedure to derive the classification of mixtures according to EU Regulation (EC) No. 1272/2008 (CLP)

Further information

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Legend

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ASTM	American Society for Testing and Materials
ATP	Adaptation to Technical Progress
BCF	Bioconcentration factor
BetrSichV	German Ordinance on Industrial Safety and Health
c.c.	closed cup
CAS	Chemical Abstract Services
CESIO	European Committee of Organic Surfactants and their Intermediates
ChemG	German Chemicals Act
CMR	carcinogenic-mutagenic-toxic for reproduction
DIN	German Institute for Standardization
DMEL	Derived minimum effect level
DNEL	Derived no effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
EC50	half maximal effective concentration
GefStoffV	German Ordinance on Hazardous Substances
GGVSEB	German ordinance for road, rail and inland waterway transportation of dangerous goods
GGVSee	German ordinance for sea transportation of dangerous goods
GLP	Good Laboratory Practice
GMO	Genetic Modified Organism
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
ISO	International Organization For Standardization
LOAEL	Lowest observed adverse effect level
LOEL	Lowest observed effect level
NOAEL	No observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
o. c.	open cup
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational Exposure Limit
PBT	Persistent, bioaccumulative, toxic

SAFETY DATA SHEET (EC 1907/2006)**Orion UWX**

Version:	1.5 / GB	Material no.	5317130013
Revision date:	25.09.2017	Specification	162866
Issue date:	03.09.2013	VA-Nr	01773834
replaces version:	1.4		
Page:	8 / 8		



PEC	Predicted effect concentration
PNEC	Predicted no effect concentration
REACH	REACH registration
RID	Convention concerning International Carriage by Rail
STOT	Specific Target Organ Toxicity
SVHC	Substances of Very High Concern
TA	Technical Instructions
TPR	Third Party Representative (Art. 4)
TRGS	Technical Rules for Hazardous Substances
VCi	German chemical industry association
vPvB	very persistent, very bioaccumulative
VOC	volatile organic compounds
VwVwS	German Administrative Regulation on the Classification of Substances Hazardous to Waters into Water Hazard Classes
WGK	Water Hazard Class
WHO	World Health Organization