

safety data sheet

to product

Ultradent VALO X Rechargeable Batteries 5437 2pk

1. Identification of the substance / preparation and company

Emergency number:

Tox Info Suisse, Freiestrasse 16, 8032 Zürich; Tox-Info Suisse: 145 (24h-operation); info@toxinfo.ch;
In case of emergency: Tel. 145; (abroad: +41 44 251 51 51); information: +41 44 251 66 66

Company name:



abc dental ag

Gaswerkstrasse 6, 8952 Schlieren
Tel. 044 755 51 00, Fax 044 755 51 01



Condor Dental Research CO Sàrl

Ch. des Ciberles 2, CP 300, 1896 Vouvry
Tel. 024 482 61 61, Fax 024 482 61 69



Curaden AG Dentaldepot

Riedstrasse 12, 8953 Dietikon
Tel. 041 319 45 00, Fax 041 319 45 90



dema dent AG

Furtbachstrasse 16, 8107 Buchs
Tel. 044 838 65 65, Fax 044 838 65 66



Flexdental Services SA

Route de la Corniche 1, 1066 Epalinges
Tel. 0848 336 825, Fax 021 907 67 02



Jordi Röntgentechnik AG

Dammstrasse 70, 4142 Münchenstein
Tel. 061 417 93 93, Fax 061 417 93 94



Kaladent AG

Schachenstrasse 2, 9016 St. Gallen
Tel. 071 282 80 80, Fax 071 282 80 81



Lometral AG

Binzenholzstrasse 20, 5704 Egliswil
Tel. 062 775 05 05, Fax 062 775 33 07



Novadent AG

Sägereistrasse 17, 8152 Glattbrugg
Tel. 044 880 20 20, Fax 044 811 04 40



Smart Dentist AG

Verenastrasse 4b, 8832 Wollerau
Tel. 044 726 20 20, Fax 044 726 20 25

Safety Data Sheet
acc. to OSHA HCS

Printing date 07/07/2022

Reviewed on 06/28/2022

1 Identification

- **Product identifier**
- **Trade name:** VALO™ X Rechargeable Lithium-Ion Battery
- **Article number:** SDS 471-001.01, 5437
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Ultradent Products Inc.
505 W. Ultradent Drive (10200 S)
South Jordan, UT 84095-3942
USA
onlineordersupport@ultradent.com
- **Information department:** Customer Service
- **Emergency telephone number:**
CHEMTREC (NORTH AMERICA) : (800) 424-9300
(INTERNATIONAL) : +(703) 527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

Acute Toxicity - Oral 4 H302 Harmful if swallowed.

- **Label elements**
- **GHS label elements** The product is classified according to the Globally Harmonized System (GHS)
- **Hazard pictograms** GHS07
- **Signal word** Warning
- **Health Hazard-determining components of labeling:**
Lithium Hexafluorophosphate
- **Hazard statements**
H302 Harmful if swallowed.
- **Precautionary statements**
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
P330 Rinse mouth.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 0
Reactivity = 0

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· **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = 2
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

12190-79-3	Lithium Cobaltate	≥0.1-<40%
7782-42-5	Graphite	<40%
21324-40-3	Lithium Hexafluorophosphate	>10-≤25%
7440-50-8	Copper Foil	1-10%
7440-02-0	nickel	≥0.1-<1%

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Immediately call a doctor.
- **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
- **Reference to other sections**
See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** See product labeling.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

7782-42-5 Graphite

PEL	Long-term value: 15 mppcf* mg/m ³ *impinger samples counted by light field techn.
REL	Long-term value: 2.5* mg/m ³ *respirable dust
TLV	Long-term value: 2* mg/m ³ all forms except graphite fibers; *resp. fraction

7440-50-8 Copper Foil

PEL	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
REL	Long-term value: 1* 0.1** mg/m ³ as Cu *dusts and mists **fume
TLV	Long-term value: 1* 0.2** mg/m ³ *dusts and mists; **fume; as Cu

7440-02-0 nickel

PEL	Long-term value: 1 mg/m ³
REL	Long-term value: 0.015 mg/m ³ as Ni; See Pocket Guide App. A
TLV	Long-term value: 1.5* mg/m ³ elemental, *inhalable fraction, A5, BEI

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· **Ingredients with biological limit values:**

7440-02-0 nickel

BEI 5 µg/L
 Medium: urine
 Time: post-shift at end of workweek
 Parameter: Nickel (background)

30 µg/L
 Medium: urine
 Time: post-shift at end of workweek
 Parameter: Nickel (background)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

· **Breathing equipment:** Not required.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material is based on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Not required.

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Solid
Color: According to product specification

· **Odor:** Not Applicable

· **Odor threshold:** Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 2,597 °C

· **Flash point:** Not applicable

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· Flammability (solid, gaseous):	Not determined.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density:	Not determined
· Relative density	Not determined
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Soluble
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Solvent content:	
VOC content:	0.00 %
Solids content:	100.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Oral	LD50	>500 mg/kg
Dermal	LD50	>250 mg/kg

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

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- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:** Harmful
- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

12190-79-3	Lithium Cobaltate	2B
7440-02-0	nickel	2B
9002-86-2	polyvinyl chloride	3
9002-88-4	Polyethylene low density	3

· **NTP (National Toxicology Program)**

7440-02-0	nickel	R
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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
 Water hazard class 2 (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
 Dispose of contents/container in accordance with international, federal, state, and local regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· UN-Number	
· DOT, IMDG, IATA	UN3480
· UN proper shipping name	
· DOT	Lithium ion batteries

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· IMDG, IATA	LITHIUM ION BATTERIES
· Transport hazard class(es)	
· DOT, IMDG, IATA	
	
· Class	9 Miscellaneous dangerous substances and articles
· Label	9A
· Packing group	
· DOT, IMDG, IATA	Not Regulated
· Environmental hazards:	Not Applicable.
· Special precautions for user	Warning: Miscellaneous dangerous substances and articles
· Hazard identification number (Kemler code):	-
· EMS Number:	F-A,S-I
· Stowage Category	A
· Stowage Code	SW19 For batteries transported in accordance with SP 376 or SP 377 Category C, unless transported on a short international voyage.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not Applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: Forbidden On cargo aircraft only: 35 kg
· IMDG	
· Limited quantities (LQ)	0
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 3480 LITHIUM ION BATTERIES

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**

· Section 355 (extremely hazardous substances):
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None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):
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12190-79-3	Lithium Cobaltate
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7440-50-8	Copper Foil
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7440-02-0	nickel
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· TSCA (Toxic Substances Control Act):

12190-79-3	Lithium Cobaltate
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ACTIVE

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7782-42-5	Graphite	ACTIVE
21324-40-3	Lithium Hexafluorophosphate	ACTIVE
7440-50-8	Copper Foil	ACTIVE
7440-02-0	nickel	ACTIVE

· **Hazardous Air Pollutants**

12190-79-3	Lithium Cobaltate
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· **Proposition 65**

· **Chemicals known to cause cancer:**

7440-02-0	nickel
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· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.	
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· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.	
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· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.	
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· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

7440-50-8	Copper Foil	D
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· **ACGIH Carcinogenicity (American Conference of Governmental Industrial Hygienists)**

7440-02-0	nickel	A5
9002-86-2	polyvinyl chloride	A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

7440-02-0	nickel
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· **Chemical safety assessment:** A chemical safety assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environmental, Health, and Safety

· **Contact:** Customer Service

· **Date of preparation / last revision** 07/07/2022 / -

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

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REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Acute Toxicity - Oral 4: Acute toxicity – Category 4

· * Data compared to the previous version altered.

US