



Safety Data Sheet Herculite XRV Ultra Flow

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

1.1. Product identifier

Product name : Herculite XRV Ultra Flow

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

Relevant identified uses

Main use category : Professional use

Use of the substance/mixture : Preparation intended for dental medical use

Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

KERRHAWE S.A.
Via Strecce n°4
6934 Bioggio (Switzerland)
T +41916100505

Manufacturer

Kerr Corporation
1717 West Collins Avenue
92867 Orange – CALIFORNIA (U.S.A.)
T +41916100505

Contact person : safety@kerrhawe.com - tel. +41916100505 (08.00-17.00)

1.4. Emergency telephone number

Emergency number : CHEMTREC® Emergency Call Center. Emergency Telephone Number (for USA only) 001-800-424-9300 International and Maritime Telephone Number +1 (703) 527-3887

Country	Organisation/Company	Address	Emergency number
Gibraltar	GHA Call Centre Zone 2, Level3, St Bernard's Hospital	Harbour Views Road	+350 200 79700 +350 200 72266
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD Msida	+356 2545 6504
United Kingdom	National Poisons Information Service (Newcastle Unit)	Claremont Place Newcastle-upon-Tyne, Newcastle	+44 191 2606182/+44 191 2606180 24H

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2 H315
Eye Irrit. 2 H319
Skin Sens. 1 H317
STOT SE 3 H335

Full text of H statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)	:	
		GHS07
Signal word (CLP)	:	Warning
Hazardous ingredients	:	ethoxylated Bisphenol A-dimethacrylate; 2,2'-ethylenedioxydiethyl dimethacrylate; 3-Methacryloxypropyltrimethoxysilane; Ytterbium trifluorid
Hazard statements (CLP)	:	H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.
Precautionary statements (CLP)	:	P261 - Avoid breathing vapours, mist, spray. P264 - Wash hands thoroughly after handling. P280 - Wear eye protection, protective gloves. P302+P352 - IF ON SKIN: Wash with plenty of water/... P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 - Call a POISON CENTER/doctor if you feel unwell. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P501 - Dispose of contents/container to an approved waste disposal plant
Extra phrases	:	The product is seen as a medical device and therefore not subject to labelling (EU-regulation 1272/2008, article 1, paragraph 5d). A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2,2'-ethylenedioxydiethyl dimethacrylate	(CAS-No.) 109-16-0 (EC-No.) 203-652-6 (REACH-no) 01-2119969287-21	< 50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
3-Methacryloxypropyltrimethoxysilane	(CAS-No.) 2530-85-0 (EC-No.) 219-785-8 (REACH-no) 01-2119513216-50	< 50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	(CAS-No.) 1565-94-2 (EC-No.) 216-367-7 (REACH-no) N/A	< 50	Skin Irrit. 2, H315 Eye Irrit. 2, H319
silicon dioxide substance with national workplace exposure limit(s) (GB, IE)	(CAS-No.) 7631-86-9 (EC-No.) 231-545-4 (REACH-no) 01-2119379499-16	< 50	Not classified
Ytterbium trifluorid	(CAS-No.) 13760-80-0 (EC-No.) 237-354-2 (REACH-no) N/A	< 50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
ethoxylated Bisphenol A-dimethacrylate	(CAS-No.) 41637-38-1 (EC-No.) 609-946-4 (REACH-no) 01-2119980659-17	< 25	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
- First-aid measures after skin contact : Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- First-aid measures after 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.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell.

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

- Symptoms/effects after inhalation : May cause respiratory irritation.
- Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction.
- Symptoms/effects after eye contact : Causes serious eye irritation.

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

Treat symptomatically. In all cases of doubt, or when symptoms persist, seek medical attention.

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media**

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Non flammable.
- Explosion hazard : Product is not explosive.
- Hazardous decomposition products in case of fire : Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper personal protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

- General measures : Avoid all eye and skin contact and do not breathe vapour and mist.

For non-emergency personnel

- Protective equipment : See Heading 8.
- Emergency procedures : Evacuate unnecessary personnel.

For emergency responders

- Protective equipment : Equip cleanup and emergency crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Collect all waste in suitable and labelled containers and dispose according to local legislation.
- Methods for cleaning up : Large spills: scoop solid spill into closing containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials.

6.4. Reference to other sections

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

- Precautions for safe handling : Do not eat, drink or smoke when using this product. Provide good ventilation in process area to prevent formation of vapour. Avoid breathing vapours, mist. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in a dry place.
 Incompatible products : Oxidizing agent.
 Incompatible materials : Sources of ignition. Direct sunlight.
 Storage temperature : 2 - 8 °C
 Storage area : Store in a well-ventilated place.

7.3. Specific end use(s)

No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

silicon dioxide (7631-86-9)		
Ireland	OEL (8 hours ref) (mg/m ³)	2.4 mg/m ³
United Kingdom	Local name	Silica, amorphous : respirable dust
United Kingdom	WEL TWA (mg/m ³)	2.4 mg/m ³

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station. Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

Personal protective equipment : Avoid all unnecessary exposure. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

Hand protection : Wear protective gloves. Nitrile rubber gloves. Layer thickness : 0,11 mm. Breakthrough time : 6 (> 480 minutes). STANDARD EN 374.

Eye protection : Use splash goggles when eye contact due to splashing is possible. STANDARD EN 166.

Skin and body protection : Wear suitable protective clothing

Respiratory protection : No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation

Other information : Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state : Liquid
 Appearance : Paste.
 Colour : Various.
 Odour : Fruity. Ester.
 Odour threshold : Not determined.
 pH : Not determined.
 Relative evaporation rate (butylacetate=1) : Not determined.
 Melting point : Not determined.
 Freezing point : Not determined.
 Boiling point : Not determined.
 Flash point : Not determined.
 Auto-ignition temperature : Not determined.
 Decomposition temperature : Not determined.
 Flammability (solid, gas) : Non flammable.
 Vapour pressure : Not determined.
 Relative vapour density at 20 °C : Not determined.
 Relative density : Not determined.
 Solubility : Material insoluble in water.
 Log Pow : Not determined.
 Viscosity, kinematic : Not determined.
 Viscosity, dynamic : Not determined.
 Explosive properties : Product is not explosive.

Oxidising properties : Non flammable.
 Explosive limits : Not determined.

9.2. Other information

No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Oxidizing agent. Bases. alkalis.

10.6. Hazardous decomposition products

No decomposition if stored and used normally.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity : Not classified

2,2'-ethylenedioxydiethyl dimethacrylate (109-16-0)	
LD50 oral rat	10837 mg/kg

3-Methacryloxypropyltrimethoxysilane (2530-85-0)	
LD50 oral rat	> 30000 mg/kg
LD50 dermal rabbit	> 15000 mg/kg

silicon dioxide (7631-86-9)	
LD50 oral rat	> 15000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation : Causes skin irritation.
 pH: Not determined.

Serious eye damage/irritation : Causes serious eye irritation.
 pH: Not determined.

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified
 Based on available data, the classification criteria are not met

Carcinogenicity : Not classified
 Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified
 Based on available data, the classification criteria are not met

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified
 Based on available data, the classification criteria are not met

Aspiration hazard : Not classified
 Based on available data, the classification criteria are not met

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

silicon dioxide (7631-86-9)	
LC50 fish 1	5000 mg/l (96 hours - Brachydanio rerio, zebra-fish)
EC50 Daphnia 1	7600 mg/l (48 hours - Ceriodaphnia dubia)
IC50 algae	440 mg/l (IC50, 72 hours - Selenastrum capricornutum)

12.2. Persistence and degradability

Herculite XRV Ultra Flow	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Herculite XRV Ultra Flow	
Log Pow	Not determined.
Bioaccumulative potential	Not established.

2,2'-ethylenedioxydiethyl dimethacrylate (109-16-0)	
Bioconcentration factor (BCF REACH)	5.62
Log Pow	1.88

3-Methacryloxypropyltrimethoxysilane (2530-85-0)	
Log Pow	0.75

(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate (1565-94-2)	
Bioconcentration factor (BCF REACH)	2.46
Log Pow	4.94

12.4. Mobility in soil

Herculite XRV Ultra Flow	
Ecology - soil	Slightly soluble.

12.5. Results of PBT and vPvB assessment

Herculite XRV Ultra Flow	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Regional legislation (waste)	: Dispose as hazardous waste.
Waste treatment methods	: Do not discharge into drains.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to a hazardous or special waste collection point.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 18 01 06* - chemicals consisting of or containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number	Not regulated for transport
14.2. UN proper shipping name	
14.3. Transport hazard class(es)	
14.4. Packing group	
14.5. Environmental hazards	
No supplementary information available	

14.6. Special precautions for user**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU-Regulations**

Contains no REACH substances with Annex XVII restrictions
 Contains no substance on the REACH candidate list
 Contains no REACH Annex XIV substances

National regulations

EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Indication of changes:

2.2	Precautionary statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
8.2	Hand protection	Modified	

Data sources : EC-regulation 2015/830 /EC, 1907/2006/EC (REACH), 1272/2008/EC (CLP), 790/2009/EC. Transport of dangerous goods (ADR/RID, IMDG, IATA/ICAO). Workplace exposure limits.

Other information : None.

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Version : 3.0

Signature : A. Åsebø Murel

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

The information in this safety data sheet is based on information from the manufacturer/supplier, present european and national legislation, and presupposes that the product is used within the specified area of application.