

# Safety Data Sheet Nexus Universal and Nexus Universal Chroma (all colors) according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 06/08/2019 Version: 1.0

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

#### **1.1. Product identifier** Product name

: Nexus Universal and Nexus Universal Chroma (all colors)

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

## Relevant identified uses

Main use category Use of the substance/mixture : Professional use

: 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 safety@kavokerr.com

### Manufacturer Kerr Italia S.r.I. Via Passanti, 332 84018 Scafati (SA) - Italy

T +39-081-850-8311 safety@kavokerr.com

## 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	Official advisory body	Address	Emergency number	Comment
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	Hours of operation: 24hrs

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]		
Skin corrosion/irritation, Category 2	H315	
Serious eye damage/eye irritation, Category 2	H319	
Skin sensitisation, Category 1	H317	
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335	
Full text of LL statements is a section 40		

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects No additional information available

## 2.2. Label elements

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

GHS07

Signal word (CLP)



Nexus Universal and Nexus Universal Chroma (all colors) according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hazardous ingredients	: 2-hydroxyethyl methacrylate; Propylidynetrimethanol, ethoxylated, esters with acrylic acid; Peppermint Oil; 7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane- 1,16-diyl bismethacrylate; 2,2'-ethylenedioxydiethyl dimethacrylate
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)	<ul> <li>P261 - Avoid breathing spray, vapours, mist.</li> <li>P264 - Wash hands thoroughly after handling.</li> <li>P280 - Wear protective gloves.</li> <li>P302+P352 - IF ON SKIN: Wash with plenty of water/</li> <li>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.</li> <li>P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.</li> <li>P312 - Call a POISON CENTER/doctor if you feel unwell.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention.</li> <li>P362+P364 - Take off contaminated clothing and wash it before reuse.</li> <li>P403+P233 - Store in a well-ventilated place. Keep container tightly closed.</li> <li>P405 - Store locked up.</li> <li>P501 - Dispose of contents/container to an approved waste disposal plant.</li> </ul>

#### 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	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
(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	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319
2-hydroxy-1,3-propanediyl bismethacrylate	(CAS-No.) 1830-78-0 (EC-No.) 217-388-4 (REACH-no) N/A	5 - 10	Eye Irrit. 2, H319 Skin Irrit. 2, H315 STOT SE 3, H335
2-hydroxyethyl methacrylate (Note D)	(CAS-No.) 868-77-9 (EC-No.) 212-782-2 (EC Index-No.) 607-124-00-X (REACH-no) 01-2119490169-29	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica substance with a Community workplace exposure limit substance with national workplace exposure limit(s) (GB)	(CAS-No.) 68909-20-6 (EC-No.) 272-697-1 (REACH-no) n/a	1 - 5	Not classified
2,2'-ethylenedioxydiethyl dimethacrylate	(CAS-No.) 109-16-0 (EC-No.) 203-652-6 (REACH-no) 01-2119969287-21	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
Ytterbium trifluorid	(CAS-No.) 13760-80-0 (EC-No.) 237-354-2 (REACH-no) N/A	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	(CAS-No.) 28961-43-5 (EC-No.) 500-066-5 (REACH-no) 01-2119489900-30	1 - 3	Eye Irrit. 2, H319 Skin Sens. 1, H317
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12- diazahexadecane-1,16-diyl bismethacrylate	(CAS-No.) 72869-86-4 (EC-No.) 276-957-5 (REACH-no) 01-2119408252-52	1 - 3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
ethoxylated Bisphenol A-dimethacrylate	(CAS-No.) 41637-38-1 (EC-No.) 609-946-4 (REACH-no) 01-2119980659-17	1 - 3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Peppermint Oil	(CAS-No.) 68917-18-0	< 1	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411



Note D : Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'. Full text of H-statements: see section 16

## SECTION 4: First aid measures

Symptoms/effects after eye contact

Symptoms/effects after ingestion

4.1. Description of first aid measures	
First-aid measures general	: If medical advice is needed, have product container or label at hand. 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	: Allow affected person to breathe fresh air. Allow the patient to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. 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	: May cause an allergic skin reaction. Causes skin irritation.

: Causes serious eye irritation.

: May cause a light irritation of the linings of the mouth, throat, and gastrointestinal tract.

## 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.		
Unsuitable extinguishing media	: Do not use a heavy water stream.		
5.2. Special hazards arising from the substance of Fire hazard	or mixture : Non-flammable.		
Explosion hazard	: Product is not explosive.		
Hazardous decomposition products in case of fire	: Carbon dioxide. Carbon monoxide. Acrylates.		
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 contact with skin and eyes. Use personal protective equipment as required.		
	Concerning personal protective equipment to use, see section 8. Provide good ventilation in process area to prevent formation of vapour.	
6.1.1. For non-emergency personnel Protective equipment	: See Heading 8.	
Emergency procedures	: Evacuate unnecessary personnel.	
6.1.2. 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. Prevent entry to sewers and public waters. 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	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. 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	: Provide good ventilation in process area to prevent formation of vapour. Avoid breathing mist, spray, vapours. Avoid contact with skin and eyes. Wear personal protective equipment.		
Hygiene measures	: 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 original container. Keep cool. Store in a dry place. Keep container closed when not in use.		
Incompatible materials	: Oxidizing substances. Heat.		

: Store in a well-ventilated place.

Storage area

## 7.3. Specific end use(s)

No additional information available

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

Silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica (68909-20-6)		
EU	Local name Respirable crystalline silica dust	
EU	IOELV TWA (mg/m³)	0.1 mg/m <sup>3</sup> Respirable fraction
EU	Regulatory reference	DIRECTIVE (EU) 2017/2398; DIRECTIVE (EU) 2019/130
United Kingdom	Local name	Silica, amorphous
United Kingdom	WEL TWA (mg/m³)	6 mg/m³ inhalable dust 2.4 mg/m³ respirable dust
United Kingdom	Regulatory reference	EH40/2005 (Third edition, 2018). HSE

#### 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.

#### Hand protection:

Wear protective gloves. Butylrubber protective gloves. Layer thickness : 0,2 - 0,4 mm. Breakthrough time : >480 min. 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:**

Not required. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust. Standard EN 141.

#### Other information:

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke during use.



Nexus Universal and Nexus Universal Chroma (all colors)

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

## **SECTION 9: Physical and chemical properties**

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

Physical state	: Liquid
Appearance	: Paste.
Colour	: Various.
Odour	: Acrylates.
Odour threshold	: Not determined.
рН	: 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	: 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

Heat.

## 10.5. Incompatible materials

oxidizing materials. reducing materials. Acids.

#### 10.6. Hazardous decomposition products

No hazardous decomposition products known at room temperature.

SECTION 11: Toxicological information		
<b>11.1. Information on toxicological effects</b> Acute toxicity (oral)       : Not classified		
Acute toxicity (dermal)	Not classified	
Acute toxicity (inhalation)	Not classified	
2-hydroxyethyl methacrylate (868-77-9)		
LD50 oral rat	5050 mg/kg	
LD50 dermal rabbit	> 3000 mg/kg	

Nexus Universal and Nexus Universal Chroma (all colors) according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2,2'-ethylenedioxydiethyl dimethacrylate (109-16-0)		
LD50 oral rat	10837 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	
Additional information	: Based on available data, the classification criteria are not met	
Carcinogenicity	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
Reproductive toxicity	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
STOT-single exposure	: May cause respiratory irritation.	
STOT-repeated exposure	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
Aspiration hazard	: Not classified	
Additional information	: Based on available data, the classification criteria are not met	
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.	

# **SECTION 12: Ecological information**

12.1. Toxicity	Not allocated			
	Not classified Not classified			
· ·				
2-hydroxyethyl methacrylate (868-77-9)				
LC50 fish 1	227 mg/l (96 hours - Pimephales promelas)			
EC50 Daphnia 1	> 280 mg/l Daphnia magna, 48 hours			
12.2. Persistence and degradability				
Nexus Universal and Nexus Universal Chroma (all colors)				
Persistence and degradability	Not established.			
2-hydroxyethyl methacrylate (868-77-9)				
Biodegradation	84 % (OECD 301D method)			
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahe	xadecane-1,16-diyl bismethacrylate (72869-86-4)			
Biodegradation	22 % (OECD 301F method)			
12.3. Bioaccumulative potential				
Nexus Universal and Nexus Universal Chroma (all colors)				
Log Pow	Not determined.			
Bioaccumulative potential	Not established.			
2-hydroxyethyl methacrylate (868-77-9)				
	12.15			
Bioconcentration factor (BCF REACH)	1,3 - 1,5			
Log Pow	0.47			
7,7,9(or 7,9,9)-trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate (72869-86-4)				
Bioconcentration factor (BCF REACH)	1.91			
Log Pow	4.69			

Nexus Universal and Nexus Universal Chroma (all colors) according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy- Bioconcentration factor (BCF REACH)	2.46	
Log Pow	4.94	
<u> </u>		
12.4. Mobility in soil Nexus Universal and Nexus Universal Chroma (all col	lara	
	Material insoluble in water.	
Ecology - soil		
12.5. Results of PBT and vPvB assessment		
Nexus Universal and Nexus Universal Chroma (all co	lors)	
This substance/mixture does not meet the PBT criteria of	REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria o	of REACH regulation, annex XIII	
12.6. Other adverse effects Other adverse effects	: None to our knowledge.	
Additional information	: No other effects known. Avoid release to the environment.	
SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
Regional legislation (waste)	: Dispose as hazardous waste.	
Naste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions. 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 hazardous or special waste collection point, in accordance with loca regional, national and/or international regulation.	
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

ADR	IMDG	ΙΑΤΑ	ADN	RID		
14.1. UN number	14.1. UN number					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated		
14.2. UN proper shipping name						
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated		
14.3. Transport hazard class(es)						
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated		
14.4. Packing group						
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated		
14.5. Environmental hazards						
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated		
No supplementary information available						

14.6. Special precautions for user Overland transport Not regulated Transport by sea Not regulated Air transport Not regulated Inland waterway transport Not regulated

### Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol 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

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

#### 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

SDS ID	: 304503
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.
Full text of H- and EUH-statements:	

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2	
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	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	
H411	Toxic to aquatic life with long lasting effects.	