

according to Regulation (EC) No 1907/2006

MD-UV Kleber

Revision date: 28.07.2023

Product code: MUV

Page 1 of 11

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

1.1. Product identifier

MD-UV Kleber

UFI:

SW5W-99UA-H00Y-FR3E

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

Use of the substance/mixture

Adhesives and sealants

1.3. Details of the supplier of the safety data sheet

Company name:	Marston-Domsel GmbH	
Street:	Bergheimer Str. 15	
Place:	53909 Zülpich	
Telephone:	+49 (0) 22 52 94 15 - 0	Telefax:+49 (0) 22 52 17 44
e-mail:	info@marston-domsel.de	
Contact person:	Qualitäsmanagement	
e-mail:	QM@marston-domsel.de	
Internet:	www.marston-domsel.de	
1.4. Emergency telephone	Emergency CONTACT (24-Hour-N	umber): GBK GmbH +49 (0)6132-84463
number:		

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

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

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Isobornyl methacrylate methacrylic acid, monoester with propane-1,2-diol 2,2'-ethylenedioxydiethyl dimethacrylate

Warning

Signal word:

Pictograms:



Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statements

P101	If medical advice is needed, have preduct container or label at hand
PIUI	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P271	1
P2/1	Use only outdoors or in a well-ventilated area.



Page 2 of 11

according to Regulation (EC) No 1907/2006

MD-UV Kleber Product code: MUV

Revision date: 28.07.2023

Wear protective gloves/protective clothing/eye protection/face protection. Store locked up.

Dispose of contents/container to an appropriate recycling or disposal facility.

P501 2.3. Other hazards

P280 P405

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this mixture. Warning: Reaction with: UV-radiation/sunlight

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification (Regulation (EC) N	o 1272/2008)			
7534-94-3	Isobornyl methacrylate			10 - < 25 %	
	231-403-1		01-2119886505-27		
	Skin Irrit. 2, Eye Irrit. 2, STOT SE	3, Aquatic Chronic 3; H3	15 H319 H335 H412		
27813-02-1	methacrylic acid, monoester with	propane-1,2-diol		10 - < 25 %	
	248-666-3		01-2119490226-37		
	Eye Irrit. 2, Skin Sens. 1; H319 H	1317			
109-16-0	2,2'-ethylenedioxydiethyl dimetha	acrylate		< 5 %	
	203-652-6		01-2119969287-21		
	Skin Sens. 1B; H317				
79-10-7	acrylic acid; prop-2-enoic acid			< 1 %	
	201-177-9	607-061-00-8	01-2119452449-31		
	Flam. Liq. 3, Acute Tox. 4, Acute Acute 1; H226 H332 H312 H302		n Corr. 1A, Eye Dam. 1, STOT SE 3, Aquatic		

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc.	Limits, M-factors and ATE	
109-16-0	203-652-6	2,2'-ethylenedioxydiethyl dimethacrylate	< 5 %
	dermal: LD50) = > 2000 mg/kg; oral: LD50 = > 2000 - 5000 mg/kg	
79-10-7	201-177-9	acrylic acid; prop-2-enoic acid	< 1 %
		E = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ATE = 1100 ATE = 500 mg/kg STOT SE 3; H335: >= 1 - 100	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Take off immediately all contaminated clothing and wash it before reuse.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If unconscious but breathing normally, place in recovery position and seek medical advice. If experiencing respiratory symptoms: Call a doctor.

After contact with skin

Take off contaminated clothing and wash it before reuse. Gently wash with plenty of soap and water. In case of



according to Regulation (EC) No 1907/2006

MD-UV Kleber

Revision date: 28.07.2023

Product code: MUV

Page 3 of 11

skin reactions, consult a physician.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Protect uninjured eye.

After ingestion

Rinse mouth thoroughly with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. Get medical advice/attention if you feel unwell.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, Carbon dioxide (CO2), Dry extinguishing powder Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Pyrolysis products, toxic (Carbon monoxide, Carbon dioxide (CO2))

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

For non-emergency personnel

Provide adequate ventilation. Use personal protection equipment.

For emergency responders

Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment.

6.3. Methods and material for containment and cleaning up

For containment

Stop leak if safe to do so. Cover drains.

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Clean contaminated articles and floor according to the environmental legislation. Warning: Reaction with: UV-radiation/sunlight



according to Regulation (EC) No 1907/2006

MD-UV Kleber

Revision date: 28.07.2023

Product code: MUV

Page 4 of 11

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Keep away from: Food and feedingstuffs Protect from direct sunlight. Warning: Reaction with: UV-radiation/sunlight Do not store together with: Oxidizing agent, Acids

Further information on storage conditions

storage temperature: < 25°C

7.3. Specific end use(s)

Adhesives and sealants

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values

CAS No	Name of agent	ppm	mg/m³	fib/cm ³	Category	Origin
79-10-7	Acrylic acid; Prop-2-enoic acid	10	29		TWA (8 h)	
		20	59		STEL (1 min)	



according to Regulation (EC) No 1907/2006

MD-UV Kleber

Revision date: 28.07.2023

Product code: MUV

Page 5 of 11

DNEL/DMEL values

CAS No	Name of agent			
DNEL type		Exposure route	Effect	Value
7534-94-3	Isobornyl methacrylate			
Worker DNEL,	long-term	dermal	systemic	1,04 mg/kg bw/day
109-16-0	2,2'-ethylenedioxydiethyl dimethacrylate			
Worker DNEL,	long-term	inhalation	systemic	48,5 mg/m³
Worker DNEL,	long-term	dermal	systemic	13,9 mg/kg bw/day
Consumer DN	EL, long-term	oral	systemic	8,33 mg/kg bw/day
Consumer DN	EL, long-term	dermal	systemic	8,33 mg/kg bw/day
Consumer DN	EL, long-term	inhalation	systemic	14,5 mg/m³

PNEC values

CAS No	Name of agent	
Environmer	tal compartment	Value
7534-94-3	Isobornyl methacrylate	
Freshwater		0,00466 mg/l
Marine wate	er	0,000466 mg/l
Freshwater	sediment	0,604 mg/kg
Marine sedi	ment	0,06 mg/kg
Micro-orgar	isms in sewage treatment plants (STP)	2,45 mg/l
Soil		0,118 mg/kg
109-16-0	2,2'-ethylenedioxydiethyl dimethacrylate	
Freshwater		0,016 mg/l
Marine wate	er	0,002 mg/l
Freshwater	sediment	0,185 mg/kg
Marine sedi	ment	0,018 mg/kg
Micro-organ	isms in sewage treatment plants (STP)	1,7 mg/l
Soil		0,027 mg/kg

8.2. Exposure controls









Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. (EN 166)

Hand protection

Wear suitable gloves. (EN ISO 374)

By long-term hand contact



according to Regulation (EC) No 1907/2006

MD-UV Kleber

Revision date: 28.07.2023

Product code: MUV

Page 6 of 11

Suitable material: Butyl caoutchouc (butyl rubber) Thickness of the glove material: > 0,5mm Permeation time (maximum wear duration): > 480 min.

By short-term hand contact Suitable material: NBR (Nitrile rubber) Thickness of the glove material: > 0,5mm Permeation time (maximum wear duration): > 480 min.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. (EN 14387) Filter type: A

Thermal hazards

No information available.

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Colour:	Liquid (viscous) clear	
Odour:	characteristic	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and		> 35 °C
boiling range:		
Flammability:		Non-flammable.
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		> 93 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value:		not determined
Viscosity / kinematic:		approx. 1500 mm ² /s
(at 25 [°] C)		
Water solubility:		partially soluble
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		not determined
Density:		not determined
Relative vapour density:		not determined
Particle characteristics:		not determined
9.2. Other information		

No information available.



according to Regulation (EC) No 1907/2006

MD-UV Kleber

Revision date: 28.07.2023

Product code: MUV

Page 7 of 11

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Warning: Reaction with: UV-radiation/sunlight

10.4. Conditions to avoid

Protect against: Heat, Frost

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

In case of fire may be liberated: Pyrolysis products, toxic (Carbon monoxide Carbon dioxide (CO2))

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
109-16-0	2,2'-ethylenedioxydiethy	l dimethacrylate			
	oral	LD50 > 2000 - 5000 mg/kg	Rat	Manufacturer	
	dermal	LD50 > 2000 mg/kg	Mouse	Manufacturer	
79-10-7	acrylic acid; prop-2-enoi	c acid			
	oral	ATE 500 mg/kg	3		
	dermal	ATE 1100 mg/kg			
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (methacrylic acid, monoester with propane-1,2-diol; 2,2'-ethylenedioxydiethyl dimethacrylate)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation. (Isobornyl methacrylate)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.



according to Regulation (EC) No 1907/2006

MD-UV Kleber

Revision date: 28.07.2023

Product code: MUV

Page 8 of 11

Information on likely routes of exposure oral, dermal, inhalative, Eye contact

<u>11.2. Information on other hazards</u>

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
7534-94-3	Isobornyl methacrylate						
	Acute fish toxicity	LC50	1,79 mg/l	96 h	Danio rerio (zebrafish)	Manufacturer	
	Acute algae toxicity	ErC50	2,28 mg/l	. –	Pseudokirchneriella subcapitata	Manufacturer	
	Acute crustacea toxicity	EC50 mg/l	> 2,57	48 h	Daphnia magna (Big water flea)	Manufacturer	
	Crustacea toxicity	NOEC mg/l	0,233		Daphnia magna (Big water flea)	Manufacturer	
109-16-0	2,2'-ethylenedioxydiethyl	dimethacry	ylate				
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Pseudokirchneriella subcapitata	Manufacturer	

12.2. Persistence and degradability

No information available.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
7534-94-3	Isobornyl methacrylate			
7534-94-3	Isobornyl methacrylate Biodegradation	70 %	28	Manufacturer

12.3. Bioaccumulative potential

No information available.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
79-10-7	acrylic acid; prop-2-enoic acid	0,46

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Avoid release to the environment.



according to Regulation (EC) No 1907/2006

MD-UV Kleber

Revision date: 28.07.2023

Product code: MUV

Page 9 of 11

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

Lanu transport (ADR/RID)				
<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.			
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.			
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.			
14.4. Packing group:	No dangerous good in sense of this transport regulation.			
Inland waterways transport (ADN)				
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.			
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.			
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.			
14.4. Packing group:	No dangerous good in sense of this transport regulation.			
Marine transport (IMDG)				
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.			
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.			
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.			
14.4. Packing group:	No dangerous good in sense of this transport regulation.			
Air transport (ICAO-TI/IATA-DGR)				
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.			
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.			
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.			
14.4. Packing group:	No dangerous good in sense of this transport regulation.			
14.5. Environmental hazards				
ENVIRONMENTALLY HAZARDOUS:	No			
14.6. Special precautions for user Warning: Reaction with: UV-radiation/sunlight				
14.7. Maritime transport in bulk according to IMO instruments not applicable				



according to Regulation (EC) No 1907/2006

MD-UV Kleber

Revision date: 28.07.2023

Product code: MUV

Page 10 of 11

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVI Entry 3	I):				
2010/75/EU (VOC):	< 30 %				
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)				
National regulatory information					
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing				

mothers.

1 - slightly hazardous to water

Water hazard class (D): Additional information

Observe in addition any national regulations!

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging REACH: Registration, Evaluation and Authorization of Chemicals GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals **UN: United Nations** CAS: Chemical Abstracts Service **DNEL: Derived No Effect Level** DMEL: Derived Minimal Effect Level PNEC: Predicted No Effect Concentration ATE: Acute toxicity estimate LC50: Lethal concentration. 50% LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50% EC50: Effective Concentration 50% ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration BCF: Bio-concentration factor PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative MARPOL: International Convention for the Prevention of Marine Pollution from Ships IBC: Intermediate Bulk Container VOC: Volatile Organic Compounds SVHC: Substance of Very High Concern ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) RID: Regulations concerning the international carriage of dangerous goods by rail ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods



according to Regulation (EC) No 1907/2006

MD-UV Kleber

Revision date: 28.07.2023

Product code: MUV

Page 11 of 11

EmS: Emergency Schedules MFAG: Medical First Aid Guide IATA: International Air Transport Association ICAO: International Civil Aviation Organization For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

	· · · · · · · · · · · · · · · · · · ·
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)