



## SAFETY DATA SHEET of: BIOMEX HDI

Revision date: Thursday, June 22, 2017

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

#### 1.1 Product identifier:

BIOMEX HDI

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

/

Concentration in use: /

#### 1.3 Details of the supplier of the safety data sheet:

**BioDiamond Sp z o.o.**

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#### 1.4 Emergency telephone number:

+48601088785

### 2 SECTION 2: Hazards identification:

#### 2.1 Classification of the substance or mixture:

Classification of the substance or mixture in accordance with regulation (EU) 1272/2008:

**H318 Eye Dam. 1**

#### 2.2 Label elements:

Pictograms:



Signal word:

Danger

#### Hazard statements:

**H318 Eye Dam. 1:** Causes serious eye damage.

#### Precautionary statements:

**P280:** Wear protective gloves, protective clothing, eye protection, face protection.

**P305+P351+P338:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**P310:** Immediately call a POISON CENTER or doctor.

#### Contains:

Cocoalkylamine ethoxylate Disodium metasilicate

#### 2.3 Other hazards:

none

### 3 SECTION 3: Composition/information on ingredients:

Fattyalcohol C9-11, ethoxylated EO(10-20)	< 5%	CAS number: 68439-46-3 EINECS: REACH Registration number: CLP Classification: <b>H319 Eye Irrit. 2</b>
2-(2-butoxyethoxy)ethanol	< 5%	CAS number: 112-34-5 EINECS: 203-961-6 REACH Registration number: 01-2119475104-44 CLP Classification: <b>H319 Eye Irrit. 2</b>
Quaternary C12-C14 alkylmethylamine ethoxylate, methylchloride	< 5%	CAS number: 1554325-20-0 EINECS: Polymer REACH Registration number: CLP Classification: <b>H302 Acute tox. 4 H315 Skin Irrit. 2 H318 Eye Dam. 1</b>
Disodium metasilicate	< 5%	CAS number: 6834-92-0, 13517-24-3 EINECS: 229-912-9 REACH Registration number: 01-2119449811-37 CLP Classification: <b>H290 Met. Corr. 1 H314 Skin Corr. 1B H335 STOT SE 3</b>

For the full text of the H & R phrases mentioned in this section, see section 16.

### 4 SECTION 4: First aid measures:

#### 4.1 Description of first aid measures:

Always ask medical advice as soon as possible should serious or continuous disturbances occur.

**Skin contact:** remove contaminated clothing, rinse with plenty of water, if necessary seek medical attention.

**Eye contact:** first prolonged rinsing with water (contact lenses to be removed if this is easily done) then take to physician.

**Ingestion:** rinse mouth, do not induce vomiting, take to hospital immediately.  
**Inhalation:** let sit upright, fresh air, rest and take to hospital.

#### 4.2 Most important symptoms and effects, both acute and delayed:

**Skin contact:** redness, pain  
**Eye contact:** caustic, redness, bad looking, pain  
**Ingestion:** diarrhoea, headache, abdominal cramps, sleepiness, vomiting  
**Inhalation:** none

#### 4.3 Indication of any immediate medical attention and special treatment needed:

none

## 5 SECTION 5: Fire-fighting measures:

### 5.1 Extinguishing media:

CO2, foam, powder, sprayed water

### 5.2 Special hazards arising from the substance or mixture:

none

### 5.3 Advice for firefighters:

**Extinguishing agents to be avoided:** none

## 6 SECTION 6: Accidental release measures:

### 6.1 Personal precautions, protective equipment and emergency procedures:

Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind. Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

### 6.2 Environmental precautions:

do not allow to flow into sewers or open water.

### 6.3 Methods and material for containment and cleaning up:

Contain released substance, store into suitable containers. If possible remove by using absorbent material.

### 6.4 Reference to other sections:

for further information check sections 8 & 13.

## 7 SECTION 7: Handling and storage:

### 7.1 Precautions for safe handling:

handle with care to avoid spillage.

## 7.2 Conditions for safe storage, including any incompatibilities:

keep in a sealed container in a closed, frost-free, ventilated room.

## 7.3 Specific end use(s):

/





# 8 SECTION 8: Exposure controls/personal protection:

## 8.1 Control parameters:

Listing of the hazardous ingredients in section 3, of which the TLV value is known

2-(2-butoxyethoxy)ethanol 67.5 mg/m<sup>3</sup>

## 8.2 Exposure controls:

<b>Inhalation protection:</b>	use with sufficient exhaust ventilation. If necessary, use an air-purifying face mask in case of respiratory hazards. Use the ABEK type as protection against these troublesome levels.	
<b>Skin protection:</b>	handling with nitril-gloves (EN 374). Breakthrough time: >480' Material thickness: 0,35 mm. Thoroughly check gloves before use. Take of the gloves properly without touching the outside with your bare hands. The manufacturer of the protective gloves has to be consulted about the suitability for a specific work station. Wash and dry your hands.	
<b>Eye protection:</b>	keep an eye-rinse bottle within reach. Tight-fitting safety goggles. Wear a face shield and protective suit in case of exceptional processing problems.	
<b>Other protection:</b>	impermeable clothing. The type of protective equipment depends on the concentration and amount of hazardous substances at the work station in question.	

# 9 SECTION 9: Physical and chemical properties:

## 9.1 Information on basic physical and chemical properties:

<b>Melting point/melting range:</b>	0 °C
<b>Boiling point/Boiling range:</b>	100 °C
<b>pH:</b>	12.5
<b>pH 1% diluted in water:</b>	/
<b>Vapour pressure/20°C,:</b>	2 332 Pa
<b>Vapour density:</b>	not applicable
<b>Relative density, 20°C:</b>	1.0310 kg/l
<b>Appearance/20°C:</b>	liquid
<b>Flash point:</b>	/
<b>Flammability (solid, gas):</b>	not applicable
<b>Auto-ignition temperature:</b>	/
<b>Upper flammability or explosive limit, (Vol %):</b>	/
<b>Lower flammability or explosive limit, (Vol %):</b>	/
<b>Explosive properties:</b>	not applicable
<b>Oxidising properties:</b>	not applicable
<b>Decomposition temperature:</b>	/
<b>Solubility in water:</b>	completely soluble

<b>Partition coefficient: n-octanol/water:</b>	not applicable
<b>Odour:</b>	characteristic
<b>Odour threshold:</b>	not applicable
<b>Dynamic viscosity, 20°C:</b>	1 mPa.s
<b>Kinematic viscosity, 40°C:</b>	1 mm²/s
<b>Evaporation rate (n-BuAc = 1):</b>	0.300

## 9.2 Other information:

**Volatile organic component (VOC):** /

**Volatile organic component (VOC):** 24.744 g/l

## 10 SECTION 10: Stability and reactivity:

### 10.1 Reactivity:

stable under normal conditions.

### 10.2 Chemical stability:

extremely high or low temperatures.

### 10.3 Possibility of hazardous reactions:

none

### 10.4 Conditions to avoid:

protect from sunlight and do not expose to temperatures exceeding + 50°C.

### 10.5 Incompatible materials:

keep away from acids

### 10.6 Hazardous decomposition products:

doesn't decompose with normal use

## 11 SECTION 11: Toxicological information:

### 11.1 Information on toxicological effects:

**H318 Eye Dam. 1:** Causes serious eye damage.

**Calculated acute toxicity, ATE oral:** /

**Calculated acute toxicity, ATE dermal:** /

Fattyalcohol C9-11, ethoxylated EO(10-20)	LD50 oral, rat:	500 mg/kg
	LD50 dermal, rabbit:	≥ 5,000 mg/kg
	LC50, Inhalation, rat, 4h:	≥ 50 mg/l
2-(2-butoxyethoxy)ethanol	LD50 oral, rat:	3,305 mg/kg
	LD50 dermal, rabbit:	2,764 mg/kg
	LC50, Inhalation, rat, 4h:	≥ 50 mg/l

Quaternary C12-C14 alkylmethylamine ethoxylate, methylchloride	LD50 oral, rat: 300 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l
Disodium metasilicate	LD50 oral, rat: 1,152 mg/kg LD50 dermal, rabbit: ≥ 5,000 mg/kg LC50, Inhalation, rat, 4h: ≥ 50 mg/l

## 12 SECTION 12: Ecological information:

### 12.1 Toxicity:

2-(2-butoxyethoxy)ethanol	LC50 (Fish): 1300 mg/l, 96h (Lepomis microlophus) EC50 (Daphnia): >100 mg/l, 48h EC50 (Algae): ErC50 > 100 mg/l EC50 (soil microorganisms): 255 mg/l
Quaternary C12-C14 alkylmethylamine ethoxylate, methylchloride	LC50 (Fish): >10 - 100 mg/l, 96h EC50 (Daphnia): > 1 - 10 mg/l, 48h EC50 (Algae): > 1 - 10 mg/l, 72h
Disodium metasilicate	LC50 (Fish): 210 mg/l, 96h, (Brachydanio rerio) EC50 (Daphnia): 1700 mg/l, 48h EC50 (Algae): 207 mg/l, 72h

### 12.2 Persistence and degradability:

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

### 12.3 Bioaccumulative potential:

No additional data available

### 12.4 Mobility in soil:

**Water hazard class, WGK:** 2  
**Solubility in water:** completely soluble

### 12.5 Results of PBT and vPvB assessment:

No additional data available

### 12.6 Other adverse effects:

No additional data available

## 13 SECTION 13: Disposal considerations:

### 13.1 Waste treatment methods:

The product may be discharged in the indicated percentages of utilization, provided it is neutralised to pH 7. Possible restrictive regulations by local authority should always be adhered to.

## 14 SECTION 14: Transport information:

### 14.1 UN number:

not applicable

### 14.2 UN proper shipping name:

ADR, IMDG, ICAO/IATA not applicable

### 14.3 Transport hazard class(es):

Class(es):	not applicable
Identification number of the hazard:	not applicable

### 14.4 Packing group:

not applicable

### 14.5 Environmental hazards:

not dangerous to the environment

### 14.6 Special precautions for user:

Hazard characteristics:	not applicable
Additional guidance:	not applicable

## 15 SECTION 15: Regulatory information:

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

Water hazard class, WGK:	2
Volatile organic component (VOC):	/
Volatile organic component (VOC):	24.744 g/l
Composition by regulation (EC) 648/2004:	Nonionic surfactants < 5%, Cationic surfactants < 5%

### 15.2 Chemical Safety Assessment:

No data available

## 16 SECTION 16: Other information:

### Legend to abbreviations used in the safety data sheet:

ADR:	The European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF:	Bioconcentration factor
CAS:	Chemical Abstracts Service
CLP:	Classification, Labelling and Packaging of chemicals
EINECS:	European INventory of Existing Commercial chemical Substances
Nr.:	number
PTB:	persistent, toxic, bioaccumulative
TLV:	Threshold Limit Value

<b>vPvB:</b>	very persistent and very bioaccumulative substances
<b>WGK:</b>	Water hazard class
<b>WGK 1:</b>	slightly hazardous for water
<b>WGK 2:</b>	hazardous for water
<b>WGK 3:</b>	extremely hazardous for water

**Legend to the R & H Phrases used in the safety data sheet:**

**H290 Met. Corr. 1:** May be corrosive to metals. **H302 Acute tox. 4:** Harmful if swallowed.  
**H314 Skin Corr. 1B:** Causes severe skin burns and eye damage. **H315 Skin Irrit. 2:** Causes skin irritation.  
**H318 Eye Dam. 1:** Causes serious eye damage. **H319 Eye Irrit. 2:** Causes serious eye irritation.  
**H335 STOT SE 3:** May cause respiratory irritation.

**Reason of revision, changes of following items:**

Section: 2.2

**MSDS reference number:**

ECM-107144,00

*This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 2015/830. Classification has been calculated in accordance with European regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned. To use this preparation for an experiment or a new application, the user must carry out a material suitability and safety study himself.*