

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 13/05/2015 Revision date: 06/09/2022 Supersedes version of: 08/10/2018 Version: 4.3

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

1.1. Product identifier

Product form	:	Mixture
Name	:	VBA 100 Synthetic 2St.MO
Product code	:	560
Article number	:	56000

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

1.2.1. Relevant identified uses

Main use category
Industrial/Professional use spec

Industrial use,Professional use,Consumer use
 Non-dispersive use
 Used in closed systems

Function or use category

: Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

BARDAHL NL - OCD NEDERLAND BV Maxwellstraat 41 3316 GP Dordrecht Nederland T 0031 78 651 2322 - F 0031 78 617 4848 mjkooijman@bardahl.nl - www.bardahl.nl

1.4. Emergency telephone number

Emergency number

: +31 (0) 6 54924171 During office hours: 8.30 t/m 17:00 h

Country	Official advisory body	Address	Emergency number	Comment
	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	0870 243 2241	
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified

Adverse physicochemical, human health and environmental effects

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2.2. Label elements	
Labelling according to Regulation (EC) No. 12	72/2008 [CLP]
EUH-statements	: EUH208 - Contains reaction mass of: dicalcium (bis(2-hydroxy-5-tetra- propenylphenylmethyl)methylamine)dihydroxide; tri-calcium (tris(2-hydroxy-5-tetra- propenylphenylmethyl)methylamine)tri-hydroxide; poly[calcium ((2-hydroxy-5-tetra-propenyl- phenylmethyl)methylamine)hydroxide]. May produce an allergic reaction. EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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]
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics	EC-No.: 918-481-9 REACH-no: 01-2119457273- 39	1 – 9.99	Asp. Tox. 1, H304
reaction mass of: dicalcium (bis(2-hydroxy-5-tetra- propenylphenylmethyl)methylamine)dihydroxide; tri- calcium (tris(2-hydroxy-5-tetra- propenylphenylmethyl)methylamine)tri-hydroxide; poly[calcium ((2-hydroxy-5-tetra-propenyl- phenylmethyl)methylamine)hydroxide]	EC-No.: 420-470-4 EC Index-No.: 020-003-00-0	0.1 – 0.24	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317

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

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion	 No special measures required. Wash skin thoroughly with mild soap and water. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Do NOT induce vomiting. Rinse mouth. Obtain emergency medical attention.
4.2. Most important symptoms and effects,	both acute and delayed
Symptoms/effects after inhalation	: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/effects after eye contact	: Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

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

No additional information available

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media Unsuitable extinguishing media	Water haze. Foam. Powder. Dry chemical.Do not use a heavy water stream.
5.2. Special hazards arising from the sub	stance or mixture
No additional information available	
5.3. Advice for firefighters	
Precautionary measures fire Firefighting instructions Protection during firefighting	 Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release	neasures		
6.1. Personal precautions, protective equipment and emergency procedures			
6.1.1. For non-emergency personnel Protective equipment	: Wear suitable protective clothing and gloves.		
6.1.2. For emergency responders Protective equipment	: Wear suitable protective clothing and gloves.		
6.2. Environmental precautions			
Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.			
6.3. Methods and material for conta	nment and cleaning up		

For containment	: Impound and recover large spill by mixing it with inert granular solids.
Methods for cleaning up	: Detergent. Take up liquid spill into absorbent material sand, saw dust, kieselguhr.
Other information	: May be dangerously slippery if spilled. Use suitable disposal containers.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	 Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required.
Handling temperature	: <40 °C
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
7.2. Conditions for safe storage, including	g any incompatibilities
Storage conditions Storage temperature	 Store in dry, cool, well-ventilated area. < 40 °C
7.3. Specific end use(s)	

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Protective goggles. Gloves.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses			

8.2.2.2. Skin protection

Skin and body protection:

No special clothing/skin protection equipment is recommended under normal conditions of use.

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Safety gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	>0.35		

8.2.2.3. Respiratory protection

Respiratory protection:

No special protection required where adequate ventilation is maintained.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

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SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Colour	: Yellow-brown.	
Appearance	: Oily liquid.	
Odour	: characteristic.	
Odour threshold	: Not available	
Melting point	: Not available	
Freezing point	: Not available	
Boiling point	: Not available	
Flammability	: Not available	
Lower explosion limit	: Not available	
Upper explosion limit	: Not available	
Flash point	: > 100 °C ASTM D92	
Auto-ignition temperature	: Not available	
Decomposition temperature	: Not available	
рН	: Not available	
Viscosity, kinematic	: 78 mm²/s (40°C)	
Solubility	: Slightly soluble, the product remains on the water surface.	
Partition coefficient n-octanol/water (Log Kow)	: Not available	
Vapour pressure	: Not available	
Vapour pressure at 50°C	: Not available	
Density	: 883 kg/m³ (15°C)	
Relative density	: Not available	
Relative vapour density at 20°C	: Not available	
Particle characteristics	: Not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong oxidizers. Acids. Bases.

10.6. Hazardous decomposition products

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SECTION 11: Toxicological information		
11.1. Information on hazard classes as o	efined in Regulation (EC) No 1272/2008	
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	: Not classified : Not classified : Not classified	
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics		
LD50 oral rat	5000 mg/kg	
LD50 dermal rat	> 5000 mg/kg	
LC50 Inhalation - Rat	> 4900 mg/m ³	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Additional information	: <3% DMSO (IP346)	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
VBA 100 Synthetic 2St.MO		
Viscosity, kinematic	78 mm²/s (40°C)	
11.2. Information on other hazards		

No additional information available

SECTION 12: Ecological information		
12.1. Toxicity		
Hazardous to the aquatic environment, short-term : Not classified (acute) Hazardous to the aquatic environment, long-term : Not classified (chronic)		
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics		
LC50 - Fish [1]	2 mg/l (4 days)	
EC50 - Crustacea [1]	3 mg/l (aquatic invertebrates)	
EC50 72h - Algae [1]	1.1 mg/l	
12.2. Persistence and degradability		
VBA 100 Synthetic 2St.MO		
Persistence and degradability	Not soluble in water, so only minimally biodegradable.	
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <2% aromatics		
Biodegradation	80 % (28 days)	
12.3. Bioaccumulative potential		

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12.4. Mobility in soil
No additional information available
12.5. Results of PBT and vPvB assessment
No additional information available
12.6. Endocrine disrupting properties
No additional information available
12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations				
13.1. Waste treatment m	ethods			
Product/Packaging disposal re	ecommendations : Dis	pose in a safe manner in acco	rdance with local/national reg	julations.
SECTION 14: Transpo	rt information			
In accordance with / / / ADR	/ IMDG / IATA / ADN / RID			
ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID n	umber			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippin	g name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard o	class(es)			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

No supplementary information available

14.6. Special precautions for user

Overland transport Not applicable

Transport by sea Not applicable

Air transport Not applicable

Inland waterway transport Not applicable

Rail transport Not applicable

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14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
1.2	Function or use category	Modified	
8.2	Eye protection	Added	
8.2	Hand protection	Modified	

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Abbreviations and acronyms:	
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	RID: Regulations Concerning the International Transport of Dangerous Goods by Rail
	ICAO: International Civil Aviation Organization
	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
	IMDG: International Maritime Code for Dangerous Goods
	IATA: International Air Transport Association
	GHS: Globally Harmonized System of Classification and labelling of Chemicals
	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)
	VOC: Volatile Organic Compounds (USA, EU)
	LC50: Lethal concentration, 50 percent
	LD50: Lethal dose, 50 percent

Full text of H- and EUH-statements:	
Asp. Tox. 1	Aspiration hazard, Category 1
EUH208	Contains reaction mass of: dicalcium (bis(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)dihydroxide; tri- calcium (tris(2-hydroxy-5-tetra-propenylphenylmethyl)methylamine)tri-hydroxide; poly[calcium ((2-hydroxy-5-tetra- propenyl-phenylmethyl)methylamine)hydroxide]. May produce an allergic reaction.
EUH210	Safety data sheet available on request.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.