[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended

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

1.1 Product identifier

ECOSMAR - DVCH

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

<u>Relevant identified uses:</u> for the lubrication of molds used in the production of long wall panels, ceiling blocks of cellular concrete limestone and other products made of concrete, for coating a metal mold surface, wood or veneer and formwork in order to facilitate separation of the concrete and the mold material and securing molds and formwork from corrosion.

Uses advises against: not determined.

1.3 Details of the supplier of the safety data sheet

Manufacturer:MDD Bel Ltd.Address:Agias Fylaxeos & Zinonos Rossidi 2, 1st floor, Limassol, Cyprus 3082Tel/fax:+375 33 370 2000 (CEO assistant)

E-mail address for a competent person responsible for sds: biuro@theta-doradztwo.pl

1.4 Emergency telephone number

112 or +375 33 3707104 (Head of laboratory Pavel Gurin)

Section 2: Hazards identification

- 2.1 Classification of the substance or mixture <u>Classification acc. EC 1272/2008</u> Acute Tox. 4 H302, Eye Irrit. 2 H319, Carc. 1B H350 Harmful if swallowed. Causes serious eye irritation. May cause cancer.
- 2.2 Label elements Hazard pictograms and signal words



DANGER

Name of the componets, which influence on classification

Contains: lubricating oils, lubricating oils (petroleum), C17-32, solvent-extd., dewaxed, hydrogenated, sodium nitrite.

Hazard statements	
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H350	May cause cancer.
Precautionary statements	
P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection.
P301+P312	IF SWALLOWED: 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.

P308+P313	IF exposed or concerned: Get medical advice/ attention.
P405	Store locked up.
P501	Dispose of contents/container remove to properly labeled containers for the selective
	collection of waste emptied by an authorized company.

Additional information

Restricted to professional users.

2.3 Other hazards

There is no information about fullfiling by ingredients criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

CAS No: 74869-22-0	lubricating oils, baseoil – unspecified	
EINECS No: 278-012-2	Carc. 1B H350	
INDEX No: 649-484-00-0		15-60%
REACH registration No:		
01-2119495601-36-XXXX		
CAS No: 10043-52-4	calcium chloride ¹	
EINECS No: 233-140-8	Eye Irrit. 2 H319	
INDEX No: 017-013-00-2		0,25-25%
REACH registration No:		
01-2119494219-28-XXXX		
CAS No: 7632-00-0	sodium nitrite	
EINECS No: 231-555-9	Ox. Sol. 3 H272, Acute Tox. 3 H301, Eye Irrit. 2 H319, Aquatic Acute 1	
INDEX No: 007-010-00-4	H400 (M=1)	0,25-10%
REACH registration No:		
01-2119471836-27-XXXX		
CAS No: 91696-73-0	benzenesulfonic acid, C14-44-branched and linear alkyl derivs.,	
EINECS No: 294-232-1	calcium salts	
INDEX No: -	STOT SE 3 H335, Aquatic Chronic 3 H412	< 1,5%
REACH registration No:		
substance is pre-registered		
CAS No: 101316-70-5	lubricating oils (petroleum), C17-32, solvent-extd., dewaxed,	
EINECS No: 309-875-6	hydrogenated/baseoil - unspecified	
INDEX No: 649-528-00-9	Carc. 1B H350	< 1,5%
REACH registration No:		
-		
CAS No: 1305-62-0	calcium hydroxide ²	
EINECS No: 215-137-3	Skin Corr. 1B H314	
INDEX No: -		< 1%
REACH registration No:		
substance exempted from		
registration		

CAS No: 68140-00-1	amides, C8-18 (even numbered) and C18-unsatd., N-(hydroxyethyl)	
EINECS No: 931-330-1	Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Chronic 2 H411	
INDEX No: -		< 1%
REACH registration No:		
01-2119490101-51-XXXX		
CAS No: 1310-73-2	sodium hydroxide	
EINECS No: 215-185-5	Met. Corr. 1 H290, Skin Corr. 1A H314	
INDEX No: 011-002-00-6		< 1%
REACH registration No:		
01-2119457892-27-XXXX		

1) calcium chloride dihydrate [CAS 10035-04-8], calcium chloride tetrahydrate [CAS 25094-02-4], calcium chloride hexahydrate [CAS 7774-34-7] are used interchangeably. In the REACH registration of substance the different hydrates in the product are regarded as the same substance as anhydrous. Hydrates are exempted from registration if anhydrous form is registered (annex V REACH regulation).

2) substance is an impurity of calcium chloride

Full text of each relevant H phrases is given in section 16 of SDS.

Section 4: First aid measures

4.1 Description of first aid measures

<u>Skin contact</u>: take off contaminated clothes. Wash skin with plenty of water and soap. Do not use solvents. Consult a doctor, if worrisome symptoms occur.

<u>Eye contact</u>: remove any contact lenses. Immediately wash out an eye with plenty of water with the eyelid hold wide open, for 10-15 min. Protect non-eye. Consult a doctor, if worrisome symptoms occur.

Ingestion: do not induce vomiting. Rinse mouth with water. Call a doctor immediately, show the container or label.

Inhalation: remove the victim to fresh air. Keep warm and calm. Consult a doctor, if disturbing symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: repeated and prolonged exposure may lead to irritation, redness and dryness of skin.

Eye contact: may cause redness, lacrymation, irritation.

Ingestion: abdominal pain, nausea and vomiting.

Inhalation: high concentration of vaours may cause respiratory tract irritation, headache, dizziness, malaise, vomiting.

Effects of exposure: the product may cause cancer.

4.3 Indication of any immediate medical attention and special treatment needed Physician makes a decision regarding further medical treatment after thoroughly examination of the injured.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: alcohol resistant foam, dry powder, CO₂, sand. Unsuitable extinguishing media: water jet.

5.2 Special hazards arising from the substance or mixture During combustion harmful gases may be produced carbon oxides, sulphur oxides and other dangerous compounds. Do not inhale combustion products, it may cause health risk.

5.3 Advice for firefighters

Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. Warning! Danger of slipping on spilled product. Cool containers exposed to flames from a safe distance to prevent explosions. Do not let extinguishing media to reach drainage system.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. Ensure that effects of the breakdown are removed only by qualified personnel. In case of large spills isolate affected area. Use personal protective equipment. Avoid eyes and skin contamination. Do not inhale vapours. Ensure adequate ventilation. Use of instruments and materials that do not produce sparks. Use sprayed water

to settle down (dissipate, isolate) vapours. Warning! Danger of slipping on spilled product.

6.2 Environmental precautions

Do not empty into drains, surface water and groundwater. In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify relevant emergency services.

6.3 Methods and material for containment and cleaning up

Large spill: isolate affected area, collected liquid drain the water.

<u>Small spill:</u> collect with incombustible materials (e.g. sand, earth) and place it in containers for waste. Treat collected material as a waste. Clean contaminated place.

6.4 Reference to other sections

Appropriate conduct with waste product – section 13. Personal protection equipment – section 8.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices only in a well ventilated place far away from the sources of heat and flame. Before break and after work wash hands with water and soap. Use personal protective equipment. Use personal protection. Avoid eyes and skin contamination. Do not inhale vapours. Ground all operating equipment near the work place, prevent from electrostatic discharge. Empty containers can still contain remains of product and his vapours - do not squeeze, cut, weld, solder, drill, grind, or expose to fire, heat, high temperature, sparks, etc. - risk of explosion.

7.2 Conditions for safe storage, including any incompatibilities

Store in original containers in dry and well ventilated place. Keep away from food, foodstuffs and feed for animal. Use of open fire in rooms designed for storage is prohibited. Protect from direct sunlight. Do not store with explosives, compressed, liquefied and dissolved under pressure gases, easily flammable liquids, easily flammable solids, organic peroxides and other oxidizers, substances which in contact with water emit flammable gases, corrosive substances.

7.3 Specific end use(s)

No information about uses other than mentioned in subsection 1.2.

Section 8: Exposure controls/personal protection

8.1 Control parameters

For substances contained in the product are not defined any occupational exposure limit values at working place (Legal Basis: Commission Directive 2006/15/EC, 2000/39/EC, 2009/161/EC).

Please check any national occupational exposure limit values in your country.

8.2 Exposure controls

Observe good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Before break and after work wash hands carefully. Ensure adequate ventilation. Avoid eyes and skin contamination. Take off contaminated clothes immediately.

<u>Hand:</u> use protective gloves. In case of short-term contact use protective gloves on the level of effectiveness of 2 or higher (breakthrough time > 30 min). In case of long term contact use gloves with a level of effectiveness 6 (breakthrough time > 480 min). Material for gloves should be chosen individually at the workplace.

The material that the gloves are made of must be impenetrable and resistant to the product's effects. The selection of material must be performed with consideration of breakthrough time, penetration speed and degradation. Moreover, the selection of proper gloves depends not only on the material, but also on other quality features and changes depending on the manufacturer. The producer should provide detailed information regarding the exact breakthrough time. This information should be followed.

Eye protection: use tightly safety glasses or face protection if there is a risk of eyes contamination.

Skin protection: use protective clothes and oil resistant boots.

<u>Respiratory protection</u>: in the case vapors and aerosols used absorbent equipment or filtering appropriate protective class (Class 1 / protect against gases or vapors volume concentration in the air not exceeding 0.1%; Class 2 / protection against gases or vapors with a concentration in the air not exceeding 0.5%; Class 3 / protection against gases or vapors with a volume concentration in air to 1%). In cases where the oxygen concentration is \leq 17% and / or maximum concentration of a toxic substance in the air is \geq 1.0 vol%. isolating equipment should be used.

Personal protective equipment must meet requirements of directive 89/686/CE. Employer is obliged to ensure equipment adequate to activities carried out, with quality demands, cleaning and maintenance.

Environmental exposure controls

Avoid environment contamination, do not empty into drains. Possible emissions from the ventilation systems and processing equipment should be controlled in order to determinate their compatibility with environmental protection regulations.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

physical state:	liquid
colour:	white
odour:	characteristic
odour threshold:	not determined
pH:	not applicable
melting point/freezing point:	not determined
initial boiling point and boiling range:	not determined
flash point:	190°C (open cup)
evaporation rate:	not determined
flammability (solid, gas):	not applicable
upper/lower flammability or explosive limits:	not determined
vapour pressure:	not determined

vapour density (air = 1): density (20°C): solubility(ies): partition coefficient: n-octanol/water: auto-ignition temperature: decomposition temperature: explosive properties: oxidising properties: viscosity (40°C): Other information not determined 1,06 g/cm³ insoluble in water, soluble in organic solvents not determined not determined not determined not determined not display 40 mm²/s

Additional information in technical data sheet.

Section 10: Stability and reactivity

- 10.1 Reactivity The product does not undergo hazardous polimerization. See also subsections 10.3 - 10.5
- 10.2 Chemical stability

9.2

The product is stable under normal conditions of handling and storage.

- 10.3 Possibility of hazardous reactions Hazardous reactions are not known.
- 10.4 Conditions to avoid Avoid direct sunlight, high temperature and sources of fire.
- 10.5 Incompatible materials Explosives, compressed, liquefied and dissolved under pressure gases, easily flammable liquids; easily flammable solids, organic peroxides and other oxidizers, substances which in contact with water emit flammable gases, corrosive substances.
- 10.6 Hazardous decomposition products Not known.

Section 11: Toxicological information

11.1 Information on toxicological effects

Toxicity of components Iubricating oils, baseoil – unspecified [CAS 74869-22-0]

	unspecifica (0/10 / 100/ 22 0)
LD ₅₀ (oral)	2 000 - < 5 000 mg/kg
LD ₅₀ (skin)	2 000 - < 5 000 mg/kg

sodium nitrite [CAS 7632-00-0]

180 mg/kg

calcium chloride [CAS 10043-52-4]

LD ₅₀ (oral, rat)	2 301 mg/kg
LD ₅₀ (skin)	> 5 000 mg/kg

amides, C8-18 (even numbered) and C18-unsatd., N-(hydroxyethyl) [CAS 68140-00-1]

LD ₅₀ (oral, rat)	> 5 000 mg/kg
LD ₅₀ (skin, rabbit)	> 2 000 mg/kg

Toylolty of militure	
Toxicity of mixture	
Acute toxicity	
ATEmix (oral) 180)0 mg/kg
Harmful if swallowed.	
Skin corrosion/irritation	
Based on available data, the classificatio	n criteria are not met.
Serious eye damage/irritation	
Causes serious eye irritation.	
Respiratory or skin sensitization	
Based on available data, the classificatio	n criteria are not met.
Germ cell mutagenicity	
Based on available data, the classificatio	n criteria are not met.
<u>Carcinogenicity</u>	
May cause cancer.	
Reproductive toxicity	
Based on available data, the classificatio	n criteria are not met.
STOT-single exposure	
Based on available data, the classificatio	n criteria are not met.
STOT-repeated exposure	
Based on available data, the classificatio	n criteria are not met.
Aspiration hazard	
Based on available data, the classificatio	n criteria are not met.

Section 12: Ecological information

12.1 Toxicity

Toxicity of components	
lubricating oils, baseoil – unspecified [CAS	74869-22-0]
acute toxicity for fish LC_{50} acute toxicity for daphnia LC_{50} acute toxicity for algae EC_{50} acute toxicity for bacteria EC_{50} sodium nitrite [CAS 7632-00-0]	 > 5 000 mg/l/96h > 1 000 mg/l/48h/Daphnia magna > 1 000 mg/l/72h/Scenedesmus subspicatus > 1 000 mg/l/6h/Pseudomonas fluorescens
acute toxicity for fish LC ₅₀ acute toxicity for daphnia EC ₅₀ acute toxicity for algae EC ₅₀ <u>amides, C8-18 (even numbered) and C18-u</u>	0,54-26,3 mg/l/96h/ <i>Oncorhynchus mykiss</i> 4,93 mg/l/48h/ <i>Cherax quadricarinatus</i> > 100 mg/l/ <i>Scenedesmus subspicatus</i> nsatd_N-(bydroxyethyl) [CAS 68140-00-1]
acute toxicity for fish LC_{50} acute toxicity for daphnia EC_{50} acute toxicity for algae EC_{50} calcium chloride [CAS 10043-52-4]	 > 3 mg/l/96h/Oncorhynchus mykiss 3 mg/l/48h/Daphnia magna > 3,9 mg/l/72h/Scenedesmus subspicatus
acute toxicity for fish LC_{50} acute toxicity for daphnia EC_{50} acute toxicity for algae EC_{50}	4 630 mg/l/96h/ <i>Pimephales promelas</i> 2 400 mg/l/48h/ <i>Daphnia magna</i> 2 900 mg/l/72h/ <i>Selenastrum capricornutum</i>

Toxicity of mixture

Product is not classified as hazardous for the environment.

- 12.2 Persistence and degradability
 - No data for the mixture.

Data for components

lubricating oils, baseoil - unspecified [CAS 74869-22-0]: degradation 6-12% of substance in 28 days

calcium chloride [CAS 10043-52-4]: biodegradability test does not need to be conducted for inorganic substance (annex VII of REACH regulation)

sodium nitrite [CAS 7632-00-0]: biodegradability test does not need to be conducted for inorganic substance (annex VII of REACH regulation)

<u>amides, C8-18 (even numbered) and C18-unsatd.</u>, N-(hydroxyethyl) [CAS 68140-00-1]: complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

12.3 Bioaccumulative potential

No data for the mixture.

Data for components

lubricating oils, baseoil – unspecified [CAS 74869-22-0]: log Pow = 3,9 – 6; BCF > 2 000

sodium nitrite [CAS 7632-00-0]: low bioaccumulative potential

calcium chloride [CAS 10043-52-4]: no bioaccumulation is expected

amides, C8-18 (even numbered) and C18-unsatd., N-(hydroxyethyl) [CAS 68140-00-1]: does not bioaccumulate

12.4 Mobility in soil

The mobility of the mixture components depends on the hydrophilic and hydrophobic properties and conditions of abiotic and biotic soil, including its structure, the climatic and soil organisms (mainly bacteria, fungi, algae, invertebrates).

12.5 Results of PBT and vPvB assessment

Not determined.

12.6 Other adverse effects

Product is not classified as hazardous to the ozone layer. Consider other harmful effects of individual components of the mixture on the environment (eg, endocrine disrupting potential, global warming potential).

Section 13: Disposal considerations

13.1 Waste treatment methods

<u>Disposal methods for the mixture</u>: disposal in accordance with the applicable legislation. Do not deposit with household waste. Residues store in original containers Waste code should be assigned in place of formation. <u>Disposal methods for used packing</u>: single-use packaging utilize in accordance with applicable regulations. Reusable packaging can be reused after cleaning. Only completely emptied packaging can be recycled. Legal basis: Directive 2008/98/EC, 94/62/EC.

Section 14: Transport information

14.1 UN number

Not applicable. The product is not dangerous in transport.

14.2 UN proper shipping name

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

- 14.4 Packing group Not applicable.
- 14.5 Environmental hazards Not applicable.
- 14.6 Special precautions for user Not applicable.

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

Comission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance) as amended.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

15.2 Chemical safety assessment

There is no information about the chemical safety assessment of components in the mixture.

Full text of indic	ated H phrases mentioned in section 3
H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H350	May cause cancer.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

H412	Harmful to aquatic life with long lasting effects.
Abbreviations and acronyms	
PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	very Persistent, very Bioaccumulative substance
Skin Corr. 1A, 1B	Skin corrosion category 1A, 1B
Skin Irrit. 2	Skin irritation category 2
Eye Dam. 1	Serious eye damage category 1
Eye Irrit. 2	Serious eye irritation category 2
STOT SE 3	Specific target organ toxicity — single exposure category 3
Ox. Sol. 3	Oxidising solid category 3
Carc. 1B	Carcinogenicity category 1B
Met. Corr. 1	Substance or mixture corrosive to metals category 1
Acute Tox. 3	Acute toxicity category 3

<u>Trainings</u>

Before commencing work with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training

Other data

Classification was based on physico-chemical data and data on hazardous substances based on calculation method according to the guidelines of Regulation 1272/2008 / EC (CLP) as amended.

Composed by:mgr inż. Kinga Wasilewska (on the basis of producer's data).Safety Data Sheet made by:"THETA" Technical Consulting

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.