MATERIAL SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

3892015

Reviewed on: 11/09/2023
Printing date: 11/09/2023

SECTION 01: Identification of the substance/mixture and of the company undertaking

- ***1.1 Product identifier***

- *Trade name:*
  MOTIVO ENDURO 2090

- Article number / Safety Data Sheet:
  259000
- *1.2 Relevant identified uses of the substance or mixture and uses advised against*
- Application of the substance / the preparation
  Coating material

- ***1.3 Details of the supplier of the safety data sheet***
- *Manufacturer/Supplier:*
  Teknos AG
  Industriestrasse 7
  LI-9487 Gamprin-Bendern
  T +423 375 94 00
  F +423 375 94 99

- *Further information obtainable from:*
  Product safety department. e-mail address: li-sdb@teknos.com
- *1.4 Emergency telephone number:*
  Swiss Toxicological Information Centre, CH-8032 Zürich Emergency telephone: +41 (0)44 251 51 51 (International)

SECTION 02: Hazards identification

- *2.1 Classification of the substance or mixture*
- Classification according to Regulation (EC) No 1272/2008
  Void
- *2.2 Label elements*
- Labelling according to Regulation (EC) No 1272/2008
- Hazard pictograms
  Void
- Signal word
  Void
- Hazard statements

* EUH208 Contains 1,2-benzisothiazol-3(2H)-one, reaction mass of: 5- chloro-2-methyl-4- isothiazolin-3-one [EC no. 247-500-7] and2- methyl- 2H-isothiazol-3-one [EC no. 220-239-6] (3: 1). May produce an allergic reaction.

* EUH210 Safety data sheet available on request.

- ***2.3 Other hazards***
- *Results of PBT and vPvB assessment*
- PBT:
  Not applicable.
- vPvB:
  Not applicable.

SECTION 03: Composition/information on ingredients

- ***3.2 Chemical characterization: Mixtures***
- *Description:*
  Mixture of substances listed below with nonhazardous additions.

- *Dangerous components:*

CAS Number		%
55965-84-9	**reaction mass of: 5-chloro-2-methyl-4-** isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3: 1) Skin Corr. 1C - H314, Eye Dam. 1 -	**0,00-0,0015**

(continued on page 2)

3892015

Reviewed on: 11/09/2023
Printing date: 11/09/2023

PRODUCT : MOTIVO ENDURO 2090

(continued of page 1)

	H318; Acute Tox. 3 - H301, Acute Tox. 2 - H310, Acute Tox. 2 - H330; Skin Sens. 1A - H317; Aquatic Acute 1 - H400 (M=100), Aquatic Chronic 1 - H410 (M=100); Skin Corr. 1C; H314: C >= 0,6 %, Skin Irrit. 2; H315: 0,06 <= C < 0,6 %, Eye Dam. 1; H318: C >= 0,6 %, Eye Irrit. 2; H319: 0,06 <= C < 0,6 %, Skin Sens. 1A; H317: C >= 0, 0015 %	
2634-33-5	**1,2-benzisothiazol-3(2H)-one** EC number: 220-120-9 Eye Dam. 1 - H318; Acute Tox. 4 - H302, Skin Irrit. 2 - H315, Skin Sens. 1 - H317; Aquatic Acute 1 - H400; Skin Sens. 1; H317: C >= 0,05 %	**0,0015- 0,50**
111-76-2	**2-butoxyethanol** EC number: 203-905-0 Record number 01-2119475108-36 Acute Tox. 3 - H311; Acute Tox. 4 - H302, Acute Tox. 4 - H332, Skin Irrit. 2 - H315, Eye Irrit. 2 - H319	**1,00- 5,00**
34590-94-8	**Dipropylene glycol monomethyl ether** EC number: 252-104-2 Record number 01-2119450011-60 substance with a Community workplace exposure limit.	**1,00- 5,00**
57-55-6	**Propylene glycol** EC number: 200-338-0 Record number 01-2119456809-23 Acute Tox. 4 - H302	**0,0015- 0,50**

- *Additional information:*
  For the wording of the listed risk phrases refer to section 16.

SECTION 04: First aid measures

- *4.1 Description of first aid measures*
- ***After inhalation:***
  Supply fresh air; consult doctor in case of complaints.
- ***After skin contact:***
  Immediately wash with water and soap and rinse thoroughly.
- ***After eye contact:***
  Rinse opened eye for several minutes under running water.
- ***After swallowing:***
  Do not induce vomiting; call for medical help immediately.
- ***Information for doctor:***
- *4.2 Most important symptoms and effects, both acute and delayed*
  No further relevant information available.
- *4.3 Indication of any immediate medical attention and special treatment needed*

(continued on page 3)

3892015

Reviewed on: 11/09/2023
Printing date: 11/09/2023

PRODUCT : MOTIVO ENDURO 2090

(continued of page 2)

No further relevant information available.

SECTION 05: Firefighting measures

- ***5.1 Extinguishing media***
- ***Suitable extinguishing agents:***
  CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- ***5.2 Special hazards arising from the substance or mixture***
  Formation of toxic gases is possible during heating or in case of fire.
- ***5.3 Advice for firefighters***
- *Protective equipment:*
  Mouth respiratory protective device.
  Do not inhale explosion gases or combustion gases.
- ***Additional information***
  Cool endangered receptacles with water spray.
  Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 06: Accidental release measures

- ***6.1 Personal precautions, protective equipment and emergency procedures***
  Wear protective equipment. Keep unprotected persons away.
  Ensure adequate ventilation
- ***6.2 Environmental precautions:***
  Do not allow product to reach sewage system or any water course.
  Inform respective authorities in case of seepage into water course or sewage system.
  In case of seepage into the ground inform responsible authorities.
  Dilute with plenty of water.
  In case of gas release or seepage into the ground inform responsible authorities.
  Do not allow to enter sewers/ surface or ground water.
- ***6.3 Methods and material for containment and cleaning up:***
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- ***6.4 Reference to other sections***
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

SECTION 07: Handling and storage

- ***Handling:***
- *7.1 Precautions for safe handling*
  Open and handle receptacle with care.
- *Information about fire - and explosion protection:*
  Prevent impact and friction.

- *7.2 Conditions for safe storage, including any incompatibilities*
- ***Storage:***
- *Requirements to be met by storerooms and receptacles:*
  Store only in the original receptacle.
- *Information about storage in one common storage facility:*
  Not required.
- *Further information about storage conditions:*
  Protect from frost.
  Store in cool, dry conditions in well sealed receptacles.
  Protect from heat and direct sunlight.
- ***7.3 Specific end use(s)***
  No further relevant information available.

(continued on page 4)

3892015

Reviewed on: 11/09/2023
Printing date: 11/09/2023

PRODUCT : MOTIVO ENDURO 2090

(continued of page 3)

SECTION 08: Exposure controls/personal protection

- *8.1 Control parameters*
- ***Ingredients with limit values that require monitoring at the workplace:***

111-76-2 2-butoxyethanol

WEL

Short-term value	**246**	**mg/m3**
	50	**ppm**
Long-term value	**123**	**mg/m3**
	25	**ppm**

Sk, BMGV

34590-94-8 Dipropylene glycol monomethyl ether

WEL

Long-term value	**308**	**mg/m3**
	50	**ppm**

Sk

57-55-6 Propylene glycol

WEL

Long-term value	**474* 10****	**mg/m3**
	150*	**ppm**

***total vapour and particulates **particulates**

- Ingredients with biological limit values:

111-76-2 2-butoxyethanol

BMGV

240 mmol/mol creatinine

Medium: urine

Sampling time: post shift

Parameter: butoxyacetic acid

- *Additional information:*
  The lists valid during the making were used as basis.

- *8.2 Exposure controls*
- ***Personal protective equipment:***
- *General protective and hygienic measures:*
  The usual precautionary measures are to be adhered to when handling chemicals.
  Do not eat or drink while working.
  Be sure to clean skin thoroughly after work and before breaks.
- *Respiratory protection: Suitable respiratory protective device recommended.*
- *Protection of hands: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation Impervious gloves*
- Material of gloves
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
- *Eye protection: Safety glasses*
- *Body protection: Protective work clothing*

(continued on page 5)

3892015

Reviewed on: 11/09/2023
Printing date: 11/09/2023

PRODUCT : MOTIVO ENDURO 2090

(continued of page 4)

SECTION 09: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
Appearance	
Appearance:	
Form:	Liquid
Colour:	According to product specifica
Odour:	Characteristic Characteristic
Odour threshold:	Not determined.
pH-value:	at 20 °C 7,8 - 8,3
Change in condition	
Melting point/freezing point:	0 °C
* **Initial boiling point and boiling range:**	100 °C
Flash point:	Not applicable.
Flammability (solid, gas):	Not applicable.
Ignition temperature:	Undetermined.
Decomposition temperature:	Not determined.
Auto-ignition temperature:	Not determined.
Explosive properties:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	at 20 °C 23,0000 mbar
Density:	1,0100 g/cm3
Solubility in / Miscibility with	
water:	Not determined.
Viscosity:	
.	Not determined.
* .	53 - 59 s DIN 4 mm
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- *10.1 Reactivity*
  No further relevant information available.
- *10.2 Chemical stability*
- ***Thermal decomposition / conditions to be avoided:***
  No decomposition if used according to specifications.
- *10.3 Possibility of hazardous reactions*
  No dangerous reactions known.
- *10.4 Conditions to avoid*
  No further relevant information available.
- ***10.5 Incompatible materials:***
  No further relevant information available.
- ***10.6 Hazardous decomposition products:***
  No dangerous decomposition products known.

(continued on page 6)

3892015

Reviewed on: 11/09/2023
Printing date: 11/09/2023

PRODUCT : MOTIVO ENDURO 2090

(continued of page 5)

SECTION 11: Toxicological information

- ***11.1 Information on toxicological effects***
- ***Acute toxicity***
- *LD/LC50 values relevant for classification:*

108-65-6 2-methoxy-1-methylethyl acetate
Oral, LD50: 8532 mg/kg (rat)
Inhalative, LC50/4h: 35,7 mg/l (rat)

107-98-2 1-methoxy-2-propanol
Oral, LD50: 5660 mg/kg (rat)
Dermal, LD50: 13000 mg/kg (Rabbit)
Inhalative, LC50/4h: 6 mg/l (rat)

111-76-2 2-butoxyethanol
Oral, LD50: 1746 mg/kg (rat)
Oral, LD50: 1414 mg/kg (guinea Pig)
Dermal, LD50: 2000 mg/kg (rat)
Dermal, LD50: 1000 mg/kg (Rabbit)
Dermal, LD50: 2000 mg/kg (guinea Pig)

7447-41-8 lithium chloride
Oral, LD50: 526 mg/kg (rat)

57-13-6 urea
Oral, LD50: 8471 mg/kg (rat)

67-68-5 dimethyl sulfoxide
Oral, LD50: 14500 mg/kg (rat)

111-90-0 Diethylene glycol monoethyl ether
Oral, LD50: 5500 mg/kg (rat)
Dermal, LD50: 8500 mg/kg (Rabbit)

34590-94-8 Dipropylene glycol monomethyl ether
Oral, LD50: 5135 mg/kg (rat)
Dermal, LD50: >19000 mg/kg (Rabbit)

52-51-7 bronopol (INN)
Oral, LD50: 305 mg/kg (rat)

7631-86-9 silicon dioxide, chemically prepared
Oral, LD50: 10000 mg/kg (rat)

112-34-5 2-(2-butoxyethoxy)ethanol
Oral, LD50: 5660 mg/kg (rat)
Dermal, LD50: 4000 mg/kg (Rabbit)

57-55-6 Propylene glycol
Oral, LD50: 2000 mg/kg (rat)
Dermal, LD50: 20800 mg/kg (Rabbit)

- *Primary irritant effect:*
- Skin corrosion/irritation
  No irritant effect.
- Serious eye damage/irritation
  No irritating effect.
- *Respiratory or skin sensitisation*
  No sensitising effects known.
- ***Additional toxicological information:***
  The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
- ***11.2 Information on other hazards***
- *Endocrine disrupting properties*

* None of the ingredients is listed.

(continued on page 7)

3892015

Reviewed on: 11/09/2023
Printing date: 11/09/2023

PRODUCT : MOTIVO ENDURO 2090

(continued of page 6)

SECTION 12: Ecological information

- *12.1 Toxicity*
- Aquatic toxicity:
  No further relevant information available.
- ***12.2 Persistence and degradability***
  No further relevant information available.
- ***Behaviour in environmental systems:***
- *12.3 Bioaccumulative potential*
  No further relevant information available.
- 12.4 Mobility in soil
  No further relevant information available.
- ***Additional ecological information:***
- *General notes:*
  Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- ***12.5 Results of PBT and vPvB assessment***
- *PBT:*
  Not applicable.
- *vPvB:*
  Not applicable.
- ***12.6 Other adverse effects***
  No further relevant information available.

SECTION 13: Disposal considerations

- ***13.1 Waste treatment methods***
- *European and swiss waste code*

08
WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01
wastes from MFSU and removal of paint and varnish
08 01 19
aqueous suspensions containing paint or varnish containing organic solvents or other hazardous substances

- ***Uncleaned packaging:***
- *Recommendation:*
  Disposal must be made according to official regulations.
- *Recommended cleansing agents:*
  Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- ***14.1 UN-Number***

ADR	Void
IMDG	Void
IATA	Void

- ***14.2 UN proper shipping name***

ADR	Void
IMDG	Void
IATA	Void

- ***14.3 Transport hazard class(es)***

ADR	
Class	Void
IMDG	
Class	Void

(continued on page 8)

3892015

Reviewed on: 11/09/2023
Printing date: 11/09/2023

PRODUCT : MOTIVO ENDURO 2090

(continued of page 7)

IATA

Class Void

- ***14.4 Packing group***

ADR Void

IMDG Void

IATA Void

- ***14.5 Environmental hazards:***
  Not applicable.
- ***14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code***
  Not applicable.

- ***Transport/Additional information:***
  Not applicable.

SECTION 15: Regulatory information

- ***15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture***
- DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment - Annex II

* None of the ingredients is listed.

- REGULATION (EU) 2019/1148
- Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

* None of the ingredients is listed.

- Annex II - REPORTABLE EXPLOSIVES PRECURSORS

* None of the ingredients is listed.

- ***National regulations:***

- *Technical instructions (air):*
- Class Share in %

I	4,53
III	0,29

- *Waterhazard class:*
  Water hazard class 1 (Self-assessment): slightly hazardous for water.
- ***15.2 Chemical safety assessment:***
  A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases

*	H301	Toxic if swallowed.
*	H302	Harmful if swallowed.
*	H310	Fatal in contact with skin.
*	H311	Toxic 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.
*	H330	Fatal if inhaled.
*	H332	Harmful if inhaled.
*	H400	Very toxic to aquatic life.
*	H410	Very toxic to aquatic life with long lasting effects.

- ***Department issuing MSDS:***
  Environment protection department.

(continued on page 9)

MATERIAL SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

3892015

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Printing date: 11/09/2023

PRODUCT : MOTIVO ENDURO 2090

(continued of page 8)

- *Abbreviations and acronyms:*
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  ICAO: International Civil Aviation Organisation
  GHS: Globally Harmonised 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)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
- ** Data compared to the previous version altered.*