

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
Issue date: 22.09.2021 Revision date: 22/09/2021 Supersedes version of: 19/07/2019 Version: 10.00

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

1.1. Product identifier

Trade name : [CAL] [CONTROL +] [CUT OFF] [AG LYO] [CONTROL L] [CONTROL H] [CONTROL]

[CONJL] [AB SOLN] [CONJS]

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

1.2.1. Relevant identified uses

Use of the substance/mixture : In vitro diagnostics

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier Email competent person

Bioactiva diagnostica GmbH Louisenstraße 137 61348 Bad Homburg – Germany

T:+49 6172 17102 0 F:+49 617217102 29

1.4. Emergency telephone number

Emergency number :+49 6172 17102 0 (available only during business hours from Monday – Friday 08.00 a.m.

- 5.00 p.m.)

sds@kft.de

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation, Category 1 H317

Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning

Contains : 2-methylisothiazol-3(2H)-one Hazard statements (CLP) : H317 - May cause an allergic skin reaction.

Precautionary statements (CLP) : P261 - Avoid breathing mist, vapours, spray.

P280 - Wear protective clothing, protective gloves, eye protection. P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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Component	
2-methylisothiazol-3(2H)-one (2682-20-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : Solvent mixture with additives

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-methylisothiazol-3(2H)-one	(CAS-No.) 2682-20-4 (EC-No.) 220-239-6 (EC Index-No.) 613-326-00-9	0.01 – 0.02	Acute Tox. 2 (Inhalation), H330 (ATE=0.1 mg/l/4h) Acute Tox. 3 (Dermal), H311 (ATE=242 mg/kg bodyweight) Acute Tox. 3 (Oral), H301 (ATE=120 mg/kg bodyweight) Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
2-methylisothiazol-3(2H)-one	(CAS-No.) 2682-20-4 (EC-No.) 220-239-6 (EC Index-No.) 613-326-00-9	(0.0015 ≤C ≤ 100) Skin Sens. 1A, 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 general

: In all cases of doubt, or when symptoms persist, seek medical attention.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

: Take off contaminated clothing. Wash skin with plenty of water. Cover wounds with sterile bandage. Get medical advice if skin irritation persists. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact

: Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

First-aid measures after ingestion

: Rinse mouth out with water. Drink plenty of water. Do NOT induce vomiting. Call a doctor. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : May cause an allergic skin reaction.

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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 : Not combustible. Use extinguishing media appropriate for surrounding fire. Water spray. Dry

powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : release of harmful/irritant gases/vapours. Nitrogen oxides.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

Other information : Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be

done according to official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Concerning personal protective equipment to use, see section 8.

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing mist, vapours,

spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid sub-soil penetration. Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material, e.g.: sand, saw dust. Take up mechanically

(sweeping, shovelling) and collect in suitable container for disposal. Wash away remainder

with plenty of water.

Other information : Disposal must be done according to official regulations.

6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear

personal protective equipment. Avoid breathing mist, vapours, spray.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash

contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

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Information about storage in one common storage facility

: Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

In vitro diagnostics.

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

2-methylisothiazol-3(2H)-one (2682-20-4)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	0.043 mg/m³
Long-term - local effects, inhalation	0.021 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, oral	0.053 mg/kg bodyweight/day
Acute - local effects, inhalation	0.043 mg/m³
Long-term - systemic effects,oral	0.027 mg/kg bodyweight/day
Long-term - local effects, inhalation	0.021 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	3.39 µg/L
PNEC aqua (marine water)	3.39 µg/L
PNEC aqua (intermittent, freshwater)	3.39 µg/L
PNEC aqua (intermittent, marine water)	3.39 µg/L
PNEC (Soil)	
PNEC soil	0.047 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0.23 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Keep workplace clean and tidy as much as possible. Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

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Eye	protection:
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Chemical goggles. EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing. EN ISO 13688. EN 13034

Hand protection:

Chemically resistant protective gloves. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemically resistant protective gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,35	3 (> 0.65)	EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Filter. A-P2. EN 143. Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Always wash hands after handling the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Colour : Yellow. Odour : odourless. Odour threshold : Not available Melting point : Not applicable Freezing point : Not available **Boiling point** : Not available Flammability : Not applicable

Explosive properties : Product is not explosive.

Oxidising properties : Non oxidizing. : Not available **Explosive limits** Lower explosive limit (LEL) : Not available Upper explosive limit (UEL) : Not available Flash point : Not available Auto-ignition temperature : Not available Decomposition temperature : Not available pΗ : 6.3 - 7.5 (20 °C) Viscosity, kinematic : Not available Solubility : Water: Miscible

Partition coefficient n-octanol/water (Log Kow)

: Not available

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Partition coefficient n-octanol/water (Log Pow) : Not applicable Vapour pressure : Not available Vapour pressure at 50 °C : Not available Density : Not available Relative density : Not available : Not available Relative vapour density at 20 °C Particle size : Not applicable Particle size distribution : Not applicable Particle shape : Not applicable : Not applicable Particle aspect ratio Particle aggregation state : Not applicable Particle agglomeration state : Not applicable Particle specific surface area : Not applicable Particle dustiness : 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

Other properties : [AG LYO]: Powder, white to slightly yellow/pink

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available.

10.2. Chemical stability

No decomposition if stored normally.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

heat

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

2-methylisothiazol-3(2H)-one (2682-20-4)	
LD50 oral rat	120 mg/kg bodyweight (EPA OPPTS 870.1100)
LD50 dermal rat	242 mg/kg bodyweight (OECD 402 method)
LC50 Inhalation - Rat (Dust/Mist)	0.1 mg/l/4h (OECD 403 method)

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met) pH: 6.3 – 7.5 (20 °C)

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Additional information : Repeated or prolonged skin contact may cause irritation

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)

pH: 6.3 - 7.5 (20 °C)

Additional information : Slight eye irritant upon direct contact

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term (chronic)

: Not classified (Based on available data, the classification criteria are not met)

: Not classified (Based on available data, the classification criteria are not met)

2-methylisothiazol-3(2H)-one (2682-20-4)		
LC50 - Fish [1]	4.77 mg/l (96 h; Oncorhynchus mykiss; (OECD 203 method))	
EC50 - Crustacea [1]	0.934 mg/l (48 h; Daphnia magna; (OECD 202 method))	
EC50 72h algae	0.103 mg/l (72 h, Pseudokirchneriella Subcapita; (OECD 201 method))	
ErC50 algae	0.072 mg/l (OECD 201 method)	
NOEC chronic fish	4.93 mg/l (98 d; Oncorynchus mykiss; (OECD 210 method))	
NOEC chronic crustacea	0.044 mg/l (21 d; Daphnia magna; (OECD 211 method))	
NOEC chronic algae	0.05 mg/l (5 d; Pseudokirchneriella subcapitata; (OECD 201 method))	

12.2. Persistence and degradability

[CAL] [CONTROL +] [CUT OFF] [AG LYO] [CONTROL L] [CONTROL H] [CONTROL] [CONJL] [AB SOLN] [CONJS]	
Persistence and degradability	No additional information available.

2-methylisothiazol-3(2H)-one (2682-20-4)	
Persistence and degradability	Not readily biodegradable. (OECD 301B method). (OECD 301D method).

12.3. Bioaccumulative potential

[CAL] [CONTROL +] [CUT OFF] [AG LYO] [CONTROL L] [CONTROL H] [CONTROL] [CONJL] [AB SOLN] [CONJS]		
Partition coefficient n-octanol/water (Log Pow) Not applicable		
Bioaccumulative potential	No additional information available.	

2-methylisothiazol-3(2H)-one (2682-20-4)	
Partition coefficient n-octanol/water (Log Pow)	-0.486 (20 °C)

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ioaccumulative potential	Bioaccumulation unlikely.
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12.4. Mobility in soil

[CAL] [CONTROL +] [CUT OFF] [AG LYO] [CONTROL L] [CONTROL H] [CONTROL] [CONJL] [AB SOLN] [CONJS]	
Ecology - soil	No additional information available.

2-methylisothiazol-3(2H)-one (2682-20-4)	
Surface tension	68.8 mN/m (19 °C, EEC Method A5)
Ecology - soil	Low mobility (soil).

12.5. Results of PBT and vPvB assessment

[CAL] [CONTROL +] [CUT OFF] [AG LYO] [CONTROL L] [CONTROL H] [CONTROL] [CONJL] [AB SOLN] [CONJS]	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

Component	
2-methylisothiazol-3(2H)-one (2682-20-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects : No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Disposal must be done according to official regulations. European waste catalogue. Do not dispose of with domestic waste. Do not discharge into drains or the environment.

Product/Packaging disposal recommendations

: Dirty containers cannot be handled as normal waste. Disposal must be done according to official regulations.

European List of Waste (LoW) code

: 16 05 06* - laboratory chemicals consisting of or containing dangerous substances including mixtures of laboratory chemicals

15 01 02 - plastic packaging

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID r	number			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippin	g name			1
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
4.3. Transport hazard	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

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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

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:		
Reference code	Applicable on	
3(b) [CAL] [CONTROL +] [CUT OFF] [AG LYO] [CONTROL L] [CONTROL H] [CONTROL] [CONJL] [AB SOLN] [CONJS]		

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Other information, restriction and prohibition regulations

: Take note of Directive 94/33/EC on the protection of young people at work.

15.1.2. National regulations

United Kingdom

National regulations

: This safety data sheet is for informational purposes only and does not comply with national legal requirements without reference to a national distributor. The national distributor is responsible for a legally compliant safety data sheet.

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		Comments	
	General revision		
15.1	National regulations	Added	

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Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
TLM	Median Tolerance Limit	
vPvB	Very Persistent and Very Bioaccumulative	

Data sources : MSDS of the supplier. European Chemicals Agency, http://echa.europa.eu/.

Department issuing data : KFT Chemieservice GmbH specification sheet: Im Leuschnerpark 3 D-64347 Griesheim

Contact person

Phone: +49 6155-8981-400 Fax: +49 6155 8981-500 SDS Service: +49 6155 8981-522

: Christian Rank

Other information : Version/s 1.00-8.00 is/are not available in this language.

Full text of H- and EUH-statements:		
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3	

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Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1A	Skin sensitisation, category 1A	
H301	Toxic if swallowed.	
H311	Toxic in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H330	Fatal if inhaled.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Sens. 1	H317	Calculation method

KFT SDS EU 00

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.