

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

1.1 Product identifier

Trade name/designation

RA1-700Gruppe
Lawn Marking Colour
Concentrate 100 to 500
RA1-700 to RA9-799

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

Relevant identified uses

see as in techn. data sheet

1.3 Details of the supplier of the safety data sheet

Supplier

griwecolor GmbH
Im Wieselbrunnen 2
78199 Bräunlingen
Germany
Telephone: +49 7707 9904-0
E-mail: info@griwecolor.de

Department responsible for information

E-mail (competent person) info@griwecolor.de

1.4 Emergency telephone number

Emergency telephone number: +49 7707 99040
Only available during office hours.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2 Label elements

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

Hazard pictograms

not applicable

Signal word

not applicable

Hazard statements

not applicable

Precautionary statements

not applicable

Hazard components for labelling

not applicable

Supplemental hazard information

EUH208 Contains 1,2-benzisothiazol-3(2H)-one, 2-methylisothiazol-3(2H)-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH210 Safety data sheet available on request.
EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3 Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients.

3.2 Mixtures

Description

waterbased Dispersion

Hazardous ingredients

CAS No. EC No. Index No.	Substance name REACH No. Classification according to Regulation (EC) No 1272/2008 [CLP]	weight-%
2634-33-5 220-120-9 613-088-00-6	1,2-benzisothiazol-3(2H)-one 01-2120761540-60 Acute Tox. 4 H302 / Skin Irrit. 2 H315 / Skin Sens. 1 H317 / Eye Dam. 1 H318 / Acute Tox. 2 H330 / Aquatic Acute 1 H400 / Aquatic Chronic 1 H410 Specific concentration limit (SCL) Skin Sens. 1 H317: >= 0,05 ATE (oral): = 532 mg/kg ATE (dermal): = 5,000 mg/kg	0,025 < 0,050
55965-84-9 - 613-167-00-5	reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1) Acute Tox. 3 H301 / Acute Tox. 2 H310 / Skin Corr. 1C H314 / Skin Sens. 1A H317 / Eye Dam. 1 H318 / Acute Tox. 2 H330 / Aquatic Acute 1 H400 (M = 100,00) / Aquatic Chronic 1 H410 (M = 100,00) / EUH071 Specific concentration limit (SCL) Eye Irrit. 2 H319: >= 0,06 / Skin Sens. 1A H317: >= 0,0015 / Eye Dam. 1 H318: >= 0,60 / Skin Irrit. 2 H315: >= 0,06 / Skin Corr. 1C H314: >= 0,60	< 0,025
2682-20-4 220-239-6 613-326-00-9	2-methylisothiazol-3(2H)-one Acute Tox. 3 H301 / Acute Tox. 3 H311 / Skin Corr. 1B H314 / Skin Sens. 1A H317 / Eye Dam. 1 H318 / Acute Tox. 2 H330 / Aquatic Acute 1 H400 (M = 10,00) / Aquatic Chronic 1 H410 (M = 1,00) / EUH071 Specific concentration limit (SCL) Skin Sens. 1A H317: >= 0,0015 ATE (oral): 120 mg/kg ATE (dermal): 300 mg/kg ATE (inhalative): 0.134 mg/L (4 h)	< 0,025

Remark

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

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

Following skin contact

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

Following ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

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

4.3 Indication of any immediate medical attention and special treatment needed

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1 Extinguishing media

The product itself does not burn.

Suitable extinguishing media

alcohol resistant foam, Carbon dioxide (CO₂), Powder, spray mist, (water)

Unsuitable extinguishing media

Strong water jet

5.2 Special hazards arising from the substance or mixture

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage. Hazardous decomposition byproducts may form with exposure to high temperatures: Carbon dioxide (CO₂), carbon monoxide, smoke, Nitrogen oxides (NO_x).

5.3 Advice for firefighters

Provide a conveniently located respiratory protective device. Cool closed containers that are near the source of the fire. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Observe protective provisions (see section 7 and 8).

6.2 Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

For containment

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

For cleaning up

Clean using cleansing agents. Do not use solvents.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

Avoid contact with skin, eyes and clothes. Avoid respiration of swarf. Personal protection equipment: see section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

Advices on general occupational hygiene

When using do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

Storage class LGK12 - non-combustible liquids that cannot be assigned to any of the above storage classes

Further information on storage conditions

Protect from heat and direct sunlight. Protect from frost. Take care of instructions on label.

7.3 Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No data available

Biological limit values

No data available

DNEL worker

CAS No.	Substance name	DNEL type	DNEL value
2634-33-5	1,2-benzisothiazol-3(2H)-one	DNEL long-term dermal (systemic)	0.966 mg/kg
2634-33-5	1,2-benzisothiazol-3(2H)-one	DNEL long-term inhalative (systemic)	6.81 mg/m ³

55965-84-9	reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	DNEL acute inhalative (local)	0.04 mg/m ³
55965-84-9	reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	DNEL long-term inhalative (local)	0.02 mg/m ³

DNEL Consumer

CAS No.	Substance name	DNEL type	DNEL value
2634-33-5	1,2-benzisothiazol-3(2H)-one	DNEL long-term inhalative (systemic)	1.2 mg/m ³
2634-33-5	1,2-benzisothiazol-3(2H)-one	DNEL long-term dermal (systemic)	0.345 mg/kg
55965-84-9	reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	DNEL acute inhalative (local)	0.04 mg/m ³
55965-84-9	reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	DNEL long-term inhalative (local)	0.02 mg/m ³
55965-84-9	reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	DNEL long-term oral (repeated)	0.09 mg/kg
55965-84-9	reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	DNEL short-term oral (acute)	0.11 mg/kg

PNEC

CAS No.	Substance name	PNEC type	PNEC Value
55965-84-9	reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	PNEC soil, freshwater	0.01 mg/kg
55965-84-9	reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)	PNEC aquatic, freshwater	0.004 mg/L

8.2 Exposure controls

Provide good ventilation. This can be achieved with local or room suction.

Personal protection equipment

Respiratory protection

not applicable

Hand protection

Suitable material: NBR (Nitrile rubber)
Thickness of the glove material >= 0.4 mm
Breakthrough time >= 480 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin.

Recommended glove articles: EN ISO 374

Skin protection

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection

Eye glasses with side protection: EN 166

Body protection

Wear suitable protective clothing.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	refer to label
Odour	characteristic
pH at 20 °C	7 - 8.8
Melting point/freezing point	not determined
Initial boiling point and boiling range	> 35 °C

Flash point	not applicable
flammability	not applicable
Lower explosion limit at 20°C	not determined
Upper explosion limit at 20°C	not determined
Vapour pressure at 20°C	not determined
Relative vapour density	not applicable
Density at 20 °C	1.36 kg/l
Water solubility at 20°C	completely miscible
Partition coefficient: n-octanol/water	see section 12
Ignition temperature in °C	not determined
Decomposition temperature	not determined
Kinematic viscosity at 20 °C:	thixotropic
Dynamic viscosity: particle characteristics	45-50 Sec/4mm not applicable

9.2 Other information

not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3 Possibility of hazardous reactions

Not applicable

10.4 Conditions to avoid

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7. Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

Decomposition products in case of fire: see section 5.

SECTION 11: Toxicological information

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

Acute toxicity

Based on available data, the classification criteria are not met.

1,2-benzisothiazol-3(2H)-one

LD50: oral (Rat): = 532 mg/kg

LD50: dermal (Rat): = 5,000 mg/kg

2-methylisothiazol-3(2H)-one

LD50: oral (Rat): 120 mg/kg

LD50: dermal (Rat): 300 mg/kg

LC50: inhalative (Rat): 0.134 mg/L (4 h)

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Overall assessment on CMR properties

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Practical experience/human evidence

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

SECTION 12: Ecological information

12.1 Toxicity

Based on available data, the classification criteria are not met.

Algae toxicity

1,2-benzisothiazol-3(2H)-one

ErC50: (*Pseudokirchneriella subcapitata*): = 0.11 mg/L

reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)

ErC50: (*Pseudokirchneriella subcapitata*): = 0.048 mg/L

Daphnia toxicity

1,2-benzisothiazol-3(2H)-one

EC50 = 16.4 mg/L (48 h)

reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)

EC50 = 0.1 mg/L (48 h)

Fish toxicity

1,2-benzisothiazol-3(2H)-one

LC50: (*Oncorhynchus mykiss* (Rainbow trout)): = 11 mg/L (96 h)

12.2 Persistence and degradability

1,2-benzisothiazol-3(2H)-one

Biodegradation = 0.04 %

reaction mass of 5-chloro-2- methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3- one (3:1)

Biodegradation = 60 %

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not empty into drains; dispose of this material and its container in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Waste codes/waste designations according to EWC/AVV

080112 - waste paint and varnish other than those mentioned in 08 01 11

Other disposal recommendations

Non-contaminated packages may be recycled. Following consultation with waste management company and after solidification, landfill together with household waste.

SECTION 14: Transport information

14.1 UN number or ID number

not applicable

14.2 UN proper shipping name

Land transport (ADR/RID)

No dangerous good in sense of these transport regulations.

Sea transport (IMDG)

No dangerous good in sense of these transport regulations.

Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

not applicable

14.4 Packing group

not applicable

14.5 Environmental hazards

Land transport (ADR/RID)	not applicable
Sea transport (IMDG)	not applicable

14.6 Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.

Advices on safe handling: see parts 6 - 8

14.7 Maritime transport in bulk according to IMO instruments

No transport as bulk according to IBC Code.

14.8 Additional information

Land transport (ADR/RID)

not applicable

Sea transport (IMDG)

not applicable

Air transport (ICAO-TI / IATA-DGR)

not applicable

SECTION 15: Regulatory information

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

EU legislation

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable. Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]

VOC value: 0 g/l

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive] Hazard categories / Named dangerous substances

This product is not classified according to Directive 2012/18/EU.

National regulations

Observe in addition any national regulations!

SECTION 16: Other information

List of relevant hazard statements and/or precautionary statements from sections 2 to 15

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.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

not applicable

Key literature references and sources for data

Data arise from reference works and literature.

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

OEL: Occupational Exposure Limit Value

BLV: Biological limit values

CAS: Chemical Abstracts Service

CLP: Classification, Labelling and Packaging

CMR: Carcinogenic, Mutagenic and Reprotoxic

DIN: German Institute for Standardization / German industrial standard

DNEL: Derived No-Effect Level

EAKV: European Waste Catalogue Directive

EC: Effective Concentration

EC: European Community

EN: European Standard

EU/EEA: European Community

IATA-DGR: International Air Transport Association – Dangerous Goods Regulations

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

ICAO-TI: International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air

IMDG Code: International Maritime Code for Dangerous Goods

ISO: International Organization for Standardization

LC: Lethal Concentration

LD: Lethal Dose

:

MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

OECD: Organisation for Economic Cooperation and Development

PBT: persistent, bioaccumulative, toxic

PNEC: Predicted No Effect Concentration

REACH: Registration, Evaluation and Authorization of Chemicals

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

UN: United Nations

VOC: Volatile Organic Compounds

vPvB: very persistent and very bioaccumulative

Indication of changes

* Data changed compared with the previous version.

Additional information

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in section 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878



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Version 1.1

Lawn Marking Colour
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