Revision: 25.10.2023



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 25.10.2023

Version number 1.00

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

1.1 Product identifier

Trade name: Ralston Colorant AQ 871 Bismuth Vanadat Yellow

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

No further relevant information available.

Application of the substance / the mixture

Restricted to professional users.

Dyestuff/Colouring agent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Ralston Colour & Coatings B.V.

part of

Royal Van Wijhe Verf

Russenweg 14

8041 AL ZWOLLE

THE NETHERLANDS

+31(0)38 - 429 1100

msds@ralstoncolour.com

1.4 Emergency telephone number:

NVIC

+31(0)88 755 8000

Only for the purpose of informing medical personnel in case of acute intoxications

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Sens. 1 H317 May cause an allergic skin reaction.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07

Signal word Warning

Hazard-determining components of labelling:

2-methyl-2H-isothiazol-3-one

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

Hazard statements

H317 May cause an allergic skin reaction.

Precautionary statements

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.



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P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

Additional information:

Restricted to professional users.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition/information on ingredients

3.2 Mixtures

Dangerous components:		
CAS: 14059-33-7 EINECS: 237-898-0 Reg.nr.: 01-2119486965-17	Bismuth vanadium tetraoxide substance with a Community workplace exposure limit	>25–≤50%
CAS: 14059-33-7 EINECS: 237-898-0 Reg.nr.: 01-2119486965-17	Bismuth vanadium tetraoxide, particle size < 10µm STOT RE 2, H373	≥0–<10%
CAS: 55406-53-6 EINECS: 259-627-5 Index number: 616-212-00-7 Reg.nr.: 01-2120762115-60	3-lodo-2-propynylbutylcarbamate Acute Tox. 3, H331; STOT RE 1, H372; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1); Acute Tox. 4, H302; Skin Sens. 1, H317	≥0.025–<0.1%
CAS: 2634-33-5 EINECS: 220-120-9 Index number: 613-088-00-6 Reg.nr.: 01-2120761540-60	1,2-benzisothiazol-3(2H)-one Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317 Specific concentration limit: Skin Sens. 1; H317: C ≥0.05 %	<0.05%
CAS: 2682-20-4 EINECS: 220-239-6 Index number: 613-326-00-9 Reg.nr.: 01-2120764690-50	2-methyl-2H-isothiazol-3-one Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 2, H330; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1); Skin Sens. 1A, H317, EUH071 Specific concentration limit: Skin Sens. 1A; H317: C ≥0.0015 %	≥0.0015–<0.025%

Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

4.1 Description of first aid measures

General information:

Take affected persons out into the fresh air.

Keep warm, position comfortably and cover well.

Consult doctor if symptoms persist.



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After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately remove any clothing soiled by the product.

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water.

Remove contact lenses, if present and easy to do. Continue rinsing.

After swallowing:

If person is conscious, rinse out mouth.

Do not induce vomiting; call for medical help immediately.

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

No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

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 No further relevant information available.

5.3 Advice for firefighters

Protective equipment: Wear fully protective suit.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

For non-emergency personnel Keep people at a distance and stay on the windward side.

6.2 Environmental precautions: Do not allow product to reach sewage system or any water course.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

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.

7 Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.



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Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Observe instructions for use / storage.

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

8.1 Control parameters

Ingredients with I	imit values that require monitoring at the workplace:
14059-33-7 Bismu	th vanadium tetraoxide
TGG (Netherland)	Short-term value: 0.03 mg/m³
	Long-term value: 0.01 mg/m³
	Vanadiumoxiden (als V)
14059-33-7 Bismu	th vanadium tetraoxide, particle size < 10μm
TGG (Netherland)	Short-term value: 0.03 mg/m³
	Long-term value: 0.01 mg/m³
	Vanadiumoxiden (als V)

DNELs			
14059-33-	14059-33-7 Bismuth vanadium tetraoxide		
Oral	DNEL Systemic; Long term	0.33 mg/kg bw/24h (Consumers)	
Dermal	DNEL Systemic; Long term	0.33 mg/kg bw/24h (Consumers)	
		0.67 mg/kg bw/24h (Workers)	
Inhalative	DNEL Local; Long term	0.005 mg/m³ (Consumers)	
		0.02 mg/m³ (Workers)	
14059-33-	7 Bismuth vanadium tetrac	oxide, particle size < 10μm	
Oral	DNEL Systemic; Long term	0.33 mg/kg bw/24h (Consumers)	
Dermal	DNEL Systemic; Long term	0.33 mg/kg bw/24h (Consumers)	
		0.67 mg/kg bw/24h (Workers)	
Inhalative	DNEL Local; Long term	0.005 mg/m³ (Consumers)	
		0.02 mg/m³ (Workers)	

PNEC	
14059-33-7 Bismuth vanadium tetraoxide	
PNEC	10,000 mg/l (Sewage treatment plant)
14059-33-7 Bismuth vanadium tetraoxide, particle size < 10μm	
PNEC 10,000 mg/l (Sewage treatment plant)	

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



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8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

Hand protection



Protective gloves

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Eye/face protection Goggles recommended during refilling

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state Fluid Colour: Yellow

Odour: Product specific
Odour threshold: Not determined.
Melting point/freezing point: Undetermined.

Boiling point or initial boiling point and boiling

range 100 °C (7732-18-5 water, distilled, conductivity or of

similar purity)

Flammability Not applicable.

Lower and upper explosion limit

Lower: Not determined.
Upper: Not determined.
Flash point: Not applicable.
Decomposition temperature: Not determined.

pH at 20 °C 8.5–9.5

Viscosity:

Kinematic viscosity Not determined.

Dynamic at 20 °C: 1,141.3–1,897.64 mPas

Solubility

water: Fully miscible.

Partition coefficient n-octanol/water (log value) Not determined.

Vapour pressure at 20 °C: 23 hPa (7732-18-5 water, distilled, conductivity or of

similar purity)

Density and/or relative density

Density at 20 °C:1.74–1.84 g/cm³Relative densityNot determined.Vapour densityNot determined.

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9.2 Other information

Appearance:

Form: Pasty

Important information on protection of health

and environment, and on safety.

Ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Solvent content:

 VOC (EC)
 9.70 %

 Solids content:
 54.3 %

Change in condition

Evaporation rate Not determined.

10 Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability The product is stable.

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.

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.

LD/LC50 values relevant for classification:		
14059-33-	14059-33-7 Bismuth vanadium tetraoxide, particle size < 10μm	
Oral	LD50	>5,000 mg/kg (rat)
Inhalative	LC50/4 h	5.15 mg/l (rat)
55406-53-6 3-lodo-2-propynylbutylcarbamate		
Oral	LD50	1,470 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	>6.89 mg/l (rat)

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation May cause an allergic skin reaction.

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

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

Reproductive toxicity 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.

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11.2 Information on other hazards

Endocrine disrupting properties None of the ingredients is listed.

12 Ecological information

12.1 Toxicity

Aquatic toxicity:		
14059-33-7 B	14059-33-7 Bismuth vanadium tetraoxide, particle size < 10μm	
EC10	>10,000 mg/l /16h (Pseudomonas putida)	
EC50 (static)	>100 mg/l /48h (daphnia)	
	>100 mg/l /72h (Desmodesmus subspicatus)	
LC50	>10,000 mg/l /96h (Danio rerio)	
2634-33-5 1,2-benzisothiazol-3(2H)-one		
EC50	2.9 mg/l /48h (daphnia)	
ErC50	0.11 mg/l /72h (Pseudokirchneriella subcapitata)	
LC50	2.15 mg/l /96h (Oncorhynchus mykiss)	
NOEC	0.0403 mg/l /72h (Pseudokirchneriella subcapitata)	

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

Additional ecological information:

General notes:

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

14.1 UN number or ID number

ADR, IMDG, IATA Not regulated.

14.2 UN proper shipping name

ADR, IMDG, IATA Not regulated.

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14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA

Class Not regulated.

14.4 Packing group

ADR, IMDG, IATA

Not regulated.

14.5 Environmental hazards:

Not applicable.

Not applicable.

14.7 Maritime transport in bulk according to

IMO instruments Not applicable.
UN "Model Regulation": Not regulated.

15 Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

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.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.
- 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.



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H330	Fatal if inhaled.
H331	Toxic if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Classification according to Regulation (EC) No 1272/2008

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Skin sensitisation	The classification of the mixture is generally based on the calculation method using
	substance data according to Regulation (EC) No 1272/2008.

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (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 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)

VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Acute Tox. 4: Acute toxicity – Category 4 Acute Tox. 2: Acute toxicity – Category 2 Acute Tox. 3: Acute toxicity – Category 3

Skin Corr. 1B: Skin corrosion/irritation – Category 1B Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Skin Sens. 1: Skin sensitisation – Category 1 Skin Sens. 1A: Skin sensitisation – Category 1A

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2