



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

amended by 2020/878/EU

A1 Pigment Orange

Version number: 2.0
Replaces version of: 20.06.2022 (1)

Revision: 24.03.2025

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

1.1 Product identifier

Trade name

A1 Pigment Orange

the product contains nanoparticles

Registration number (REACH)

not relevant (mixture)

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

Relevant identified uses

Aqueous dispersion
Pigment
A1 Liquid/Powder system
Professional use
Consumer uses

1.3 Details of the supplier of the safety data sheet

Active Composite Technologies
Nijverheidsweg 15 A
3251 LP Stellendam
Netherlands

Telephone: +31 187 663006
e-mail: info@acrylicone.com
Website: <https://www.activecomposite.com/>

1.4 Emergency telephone number

Emergency information service

+31 187 663006
This number is only available during the following office hours: Mon-Fri 09:00 - 17:00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

2.2 Label elements

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

- signal word Not required.

- pictograms Not required.

- supplemental hazard information

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 Mixtures



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The product does not contain (other) ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
1,2-benzisothiazol-3(2H)-one	CAS No 2634-33-5 EC No 220-120-9 Index No 613-088-00-6 REACH Reg. No 01-2120761540-60-xxxx	< 0,05	Acute Tox. 4 / H302 Acute Tox. 2 / H330 Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Skin Sens. 1A / H317 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410		GHS-HC

Notes

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)

1,2-benzisothiazol-3(2H)-one. CAS No.
2634-33-5.

EC No.
220-120-9. Skin Sens. 1A; H317: C \geq 0,036 %. M-Factor (acute) = 1. M-Factor (chronic) = 1. 450 mg/kg
0,21 mg/l/4h. Oral
inhalation: dust/mist.

Remarks

All the percentages given are percentages by weight unless stated otherwise. For full text of H-phrases: see SECTION 16.

Nanomaterial:

C.I. pigment Yellow 42

51274-00-1

D10: 30 - 50 nm

D50: 50 - 100 nm

D90: 120 - 200 nm.

Elongated

Ratio: (:1): 4 - 6

Specific surface area 15 - 25 m²/cm³

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Following skin contact

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Following eye contact

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Following ingestion

Rinse mouth with water (only if the person is conscious). Call a doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed



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Treat symptomatic.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray; Alcohol resistant foam; Dry extinguishing powder; Carbon dioxide (CO₂);
Co-ordinate firefighting measures to the fire surroundings.

Unsuitable extinguishing media

Water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

During fire hazardous fumes/smoke could be produced.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Self-contained breathing apparatus (EN 133). Standard protective clothing for firefighters.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Ventilate affected area.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene



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Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- flammability hazards

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.

- incompatible substances or mixtures

Keep away from alkalis, oxidising substances, acids.

Control of effects

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight. Frost.

Consideration of other advice

Store in a well-ventilated place. Keep container tightly closed.

- specific designs for storage rooms or vessels

- storage temperature

Minimum storage temperature: >0 °C

- packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

No information available.

Relevant DNELs/DMELs/PNECs and other threshold levels

relevant DNELs of components of the mixture 1,2-benzisothiazol-3(2H)-one. 2634-33-5. DNEL. 6,81 mg/m³. Human, inhalatory. Worker (industry). Chronic - systemic effects. 1,2-benzisothiazol-3(2H)-one. 2634-33-5. DNEL. 0,966 mg/kg bw/day. Human, dermal. Worker (industry). Chronic - systemic effects. 1,2-benzisothiazol-3(2H)-one. 2634-33-5. DNEL. 1,2 mg/m³. Human, inhalatory. Consumer (private households). Chronic - systemic effects. 1,2-benzisothiazol-3(2H)-one. 2634-33-5. DNEL. 0,345 mg/kg bw/day. Human, dermal. Consumer (private households). Chronic - systemic effects.

relevant PNECs of components of the mixture 1,2-benzisothiazol-3(2H)-one. 2634-33-5. PNEC. 4,03 µg/l. Aquatic organisms. Freshwater. Short-term (single instance). 1,2-benzisothiazol-3(2H)-one. 2634-33-5. PNEC. 0,403 µg/l. Aquatic organisms. Marine water. Short-term (single instance). 1,2-benzisothiazol-3(2H)-one. 2634-33-5. PNEC. 1,03 mg/l. Aquatic organisms. Sewage treatment plant (STP). Short-term (single instance). 1,2-benzisothiazol-3(2H)-one. 2634-33-5. PNEC. 49,9 µg/kg. Aquatic organisms. Freshwater sediment. Short-term (single instance). 1,2-benzisothiazol-3(2H)-one. 2634-33-5. PNEC. 4,99 µg/kg. Aquatic organisms. Marine sediment. Short-term (single instance). 1,2-benzisothiazol-3(2H)-one. 2634-33-5. PNEC. 3 mg/kg. Terrestrial organisms. Soil. Short-term (single instance).

8.2 Exposure controls

Appropriate engineering controls

General ventilation. Provide eyewash stations and safety showers at the workplace.

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection (EN 166).

Skin protection



Protective clothing (EN 340 & EN ISO 13688).



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Hand protection



Wear suitable gloves. Check leak-tightness/impermeability prior to use. 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. Chemical protection gloves are suitable, which are tested according to EN 374. 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.

- type of material

Nitrile rubber

- breakthrough time of the glove material

Use gloves with a minimum breakthrough time of the glove material: >10 minutes (permeation: level 1).

- other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Full face mask/half mask/quarter mask (EN 136/140). P2 (filters at least 94 % of airborne particles, colour code: White).

Environmental exposure controls

Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	orange
Odour	characteristic
Melting point/freezing point	~0 °C
Boiling point or initial boiling point and boiling range	~100 °C
Flammability	non-combustible
Lower and upper explosion limit	LEL: UEL: not determined
Flash point	not applicable
Auto-ignition temperature	not relevant
Decomposition temperature	no data available
pH (value)	6,5 – 8,5 (20 °C)
Kinematic viscosity	not determined

Solubility

Water solubility	miscible in any proportion
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Partition coefficient n-octanol/water (log value)	this information is not available
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Vapour pressure	not determined
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Density and/or relative density

Density	1,9 g/cm ³
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)
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9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
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Other safety characteristics

Miscibility	Completely miscible with water.
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SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

Oxidisers.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

Acute toxicity

Shall not be classified as acutely toxic.

acute toxicity estimate (ATE) of components of the mixture 1,2-benzisothiazol-3(2H)-one. 2634-33-5. Oral. 450 mg/kg. 1,2-benzisothiazol-3(2H)-one. 2634-33-5. Inhalation: dust/mist. 0,21 mg/l/4h.

acute toxicity of components of the mixture 1,2-benzisothiazol-3(2H)-one. 2634-33-5. Oral. LD50. 670 mg/kg. Rat. 1,2-benzisothiazol-3(2H)-one. 2634-33-5. Dermal. LD50. >2.000 mg/kg. Rat.



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Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

Other information

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

aquatic toxicity (acute) of components of the mixture 1,2-benzisothiazol-3(2H)-one. 2634-33-5. LC50. 16,7 mg/l . Fish. 96 h. 1,2-benzisothiazol-3(2H)-one. 2634-33-5. EC50. 2,94 mg/l . Aquatic invertebrates. 48 h. 1,2-benzisothiazol-3(2H)-one. 2634-33-5. ErC50. 150 $\mu\text{g/l}$. Algae. 72 h. 1,2-benzisothiazol-3(2H)-one. 2634-33-5. NOEC. 55 $\mu\text{g/l}$. Algae. 72 h.

aquatic toxicity (chronic) of components of the mixture 1,2-benzisothiazol-3(2H)-one. 2634-33-5. EC50. 13 mg/l . Microorganisms. 3 h. 1,2-benzisothiazol-3(2H)-one. 2634-33-5. NOEC. 11 mg/l . Microorganisms. 3 h.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

12.7 Other adverse effects

Data are not available.



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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

- | | |
|--|---|
| 14.1 UN number or ID number | not subject to transport regulations |
| 14.2 UN proper shipping name | not relevant |
| 14.3 Transport hazard class(es) | none |
| 14.4 Packing group | not assigned |
| 14.5 Environmental hazards | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 Special precautions for user | There is no additional information. |
| 14.7 Maritime transport in bulk according to IMO instruments | No data available. |

Additional information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - additional information

Not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG) - additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - additional information

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

1,2-benzisothiazol-3(2H)-one. Substances in tattoo inks and permanent make-up. 75.

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

Seveso Directive

2012/18/EU (Seveso III) Not assigned.

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

Water Framework Directive (WFD)



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None of the ingredients are listed.

Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

None of the ingredients are listed.

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

National regulations (Netherlands)

SZW-lijst CMR effects

None of the ingredients are listed.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Abbreviations and acronyms

Acute Tox. Acute toxicity. ADN. Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways). ADR. Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road). Aquatic Acute. Hazardous to the aquatic environment - acute hazard. Aquatic Chronic. Hazardous to the aquatic environment - chronic hazard. ATE. Acute Toxicity Estimate. CAS. Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances). CLP. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. CMR. Carcinogenic, Mutagenic or toxic for Reproduction. DGR. Dangerous Goods Regulations (see IATA/DGR). DMEL. Derived Minimal Effect Level. DNEL. Derived No-Effect Level. EC50. Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval. EC No. The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union). ED. Endocrine disruptor. EINECS. European Inventory of Existing Commercial Chemical Substances. ELINCS. European List of Notified Chemical Substances. ErC50. \equiv EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control. Eye Dam. Seriously damaging to the eye. Eye Irrit. Irritant to the eye. GHS. "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations. IATA. International Air Transport Association. IATA/DGR. Dangerous Goods Regulations (DGR) for the air transport (IATA). ICAO. International Civil Aviation Organization. IMDG. International Maritime Dangerous Goods Code. Index No. The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008. LC50. Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval. LD50. Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval. LEL. Lower explosion limit (LEL). M-Factor. Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present. NLP. No-Longer Polymer. NOEC. No Observed Effect Concentration. PBT. Persistent, Bioaccumulative and Toxic. PNEC. Predicted No-Effect Concentration. REACH. Registration, Evaluation, Authorisation and Restriction of Chemicals. RID. Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail). Skin Corr. Corrosive to skin. Skin Irrit. Irritant to skin. Skin Sens. Skin sensitisation. SVHC. Substance of Very High Concern. UEL. Upper explosion limit (UEL). VPvB. Very Persistent and very Bioaccumulative.

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

H302. Harmful if swallowed. 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.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this



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