

Safety Data Sheet

according to 29 CFR 1910.1200(g)

BRUFASOL Gelb / Yellow AL 2301

Print date: 13.11.2018

Product code: BFSOL_Gelb_AL2301

Page 1 of 7

1. Identification

Product identifier

BRUFASOL Gelb / Yellow AL 2301

Further trade names

Pigment Gelb 184 (Bismutvanadat, stabilisiert)

Pigment Yellow 184 (Bismuth vanadate, stabilized)

CAS No: 14059-33-7

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Colouring agent, pigment

Coatings and paints, fillers, putties, thinners

Identified uses: see attached exposure scenario.

Uses advised against

none

Further information: refer to exposure scenarios attached to this safety data sheet.

Details of the supplier of the safety data sheet

Company name: Bruchsaler Farbenfabrik GmbH & Co. KG

Street: Talstraße 37

Place: D-76676 Bruchsal

Telephone: +49 7251 / 97 54 - 0

Telefax: +49 7251 / 1 59 53

e-mail: info@bruchsaler-farben.de

Contact person: Thomas Schleier

Telephone: +49 7251 / 97 54 - 41 *

e-mail: technicalcenter@bruchsaler-farben.de

Internet: http://www.bruchsaler-farben.de

Responsible Department: Labor Chemie

Emergency phone number:

+49 7251 / 97 54 - 47 *

+49 7251 / 97 54 - 49 *

*) This number is serviced during office hours.

2. Hazard(s) identification

Classification of the chemical

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

Label elements

Additional advice on labelling

According to EC directives or the corresponding national regulations the product does not have to be labelled.

Toxicological information : see chapter 11

Ecological information : see chapter 12

Hazards not otherwise classified

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

No special precautionary measures are necessary.

3. Composition/information on ingredients

Substances

Safety Data Sheet

according to 29 CFR 1910.1200(g)

BRUFASOL Gelb / Yellow AL 2301

Print date: 13.11.2018

Product code: BFSOL_Gelb_AL2301

Page 2 of 7

Chemical characterization

Colour Index Name: Pigment Yellow 184 / Colour Index No.: 771740

Composition/information on ingredients: 100% Pigment Yellow 184

particle characteristics A: respirable fraction (Particle size (μm) < 10), Mass fraction (wt %): < 10%

Product is inorganic.

Hazardous components

CAS No	Components	Quantity
14059-33-7	A: respirable fraction Pigment Yellow 184 (Bismuth vanadate, Particle size in μm : < 10)	< 10 %

Further Information

According to EC directives or the corresponding national regulations the product does not have to be labelled.
no classification in delivery state

4. First-aid measures**Description of first aid measures****After inhalation**

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

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. In all cases of doubt, or when symptoms persist, seek medical advice.

Most important symptoms and effects, both acute and delayed

The following symptoms may occur: Asthmatic complaints. difficulties of breathing.

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Specific hazards arising from the chemical

No risks worthy of mention.

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Suppress gases/vapours/mists with water spray jet.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Avoid dust formation. Wear breathing apparatus if exposed to

Safety Data Sheet

according to 29 CFR 1910.1200(g)

BRUFASOL Gelb / Yellow AL 2301

Print date: 13.11.2018

Product code: BFSOL_Gelb_AL2301

Page 3 of 7

vapours/dusts/aerosols.

Environmental precautions

No special environmental protection measures are necessary.

Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

Reference to other sections

none

7. Handling and storage**Precautions for safe handling****Advice on safe handling**

No special handling instructions are necessary.

Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container dry. Keep container tightly closed in a cool, well-ventilated place.

Further information on storage conditions

Store in a cool dry place.

8. Exposure controls/personal protection**Control parameters****Additional advice on limit values**DNEL inhalation (long-term / local effects, professionals): 0,02 mg/m³DNEL inhalation (long-term / local effects, consumers): 0,005 mg/m³

DNEL oral (long-term / systematic effects, consumers): 20 mg/kg bw/day

PNEC aqua (freshwater): –

PNEC aqua (marine water): –

PNEC aqua (intermittent releases): –

PNEC sediment (freshwater): –

PNEC sediment (marine water): –

PNEC soil: –

PNEC sewage treatment plant: 10000 mg/l

PNEC oral: –

Exposure controls**Appropriate engineering controls**

see attached exposure scenario.

Protective and hygiene measures

Change contaminated clothing. Protect skin by using skin protective cream. After work, wash hands and face.

Do not eat, drink, smoke or sneeze at the workplace.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Wash hands before breaks and after work.

Skin protection

Protective clothing: Street clothing should be stored separately from work clothing.

Respiratory protection

Respiratory protection: In the case of the formation of dust.

Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter:

up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to

a max. of 30 times the expo.

Safety Data Sheet

according to 29 CFR 1910.1200(g)

BRUFASOL Gelb / Yellow AL 2301

Print date: 13.11.2018

Product code: BFSOL_Gelb_AL2301

Page 4 of 7

Environmental exposure controls

see attached exposure scenario.

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state:	solid: Powder
Color:	yellow
Odor:	odourless

Test method

pH-Value:	6 - 8
-----------	-------

Changes in the physical state

Melting point/freezing point:	>1000 °C
Flash point:	Non-flammable.
Ignition temperature:	Non-flammable.
Density:	5,0 - 6,0 g/cm ³
Water solubility:	insoluble

Other information

Solid content:	>99 %
----------------	-------

Further information: see technical data sheet.

10. Stability and reactivity**Reactivity**

No ignition, explosion, self-heating or visible decomposition.

Chemical stability

Stability:	Stable
------------	--------

The product is stable.

Possibility of hazardous reactions

Hazardous reactions:	Will not occur
----------------------	----------------

No risks worthy of mention.

Conditions to avoid

No special measures are necessary.

Incompatible materials

No special precautionary measures are necessary.

Hazardous decomposition products

Hazardous decomposition products: No.

11. Toxicological information**Information on toxicological effects****Route(s) of Entry**

Inhalation

Routes of entry for solids include ingestion, eye and skin contact.

Toxicokinetics, metabolism and distribution

Toxicological tests

Safety Data Sheet

according to 29 CFR 1910.1200(g)

BRUFASOL Gelb / Yellow AL 2301

Print date: 13.11.2018

Product code: BFSOL_Gelb_AL2301

Page 5 of 7

Acute toxicity

CAS No	Components			
	Exposure route	Dose	Species	Source
14059-33-7	A: respirable fraction Pigment Yellow 184 (Bismuth vanadate, Particle size in µm: < 10)			
	oral	LD50 >5000 mg/kg	Rat (Wistar)	
	inhalative aerosol	LC50 >5,15 mg/l	Rat (Wistar)	

Irritation and corrosivity

Irritant effect on the skin: Not an irritant.

species: Rabbit

OECD 404

Irritant effect on the eye: Not an irritant.

Species: Rabbit

OECD 405

Carcinogenicity (NTP): not listed

Carcinogenicity (IARC): not listed

Carcinogenicity (OSHA): not listed

Additional information on tests

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

12. Ecological information

Ecotoxicity

Toxicological tests

Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

Bioaccumulative potential

No indication of bioaccumulation potential.

Mobility in soil

Mobility/evaluation: Low.

Other adverse effects

No data available

Further information

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

13. Disposal considerations

Waste treatment methods

Advice on disposal

Dispose of waste according to applicable legislation.

Contaminated packaging

Water (with cleaning agent). Completely emptied packages can be recycled.

14. Transport information

US DOT 49 CFR 172.101

UN/ID number: -Transport hazard class(es): -Packing group: -

Hazard label: -

Safety Data Sheet

according to 29 CFR 1910.1200(g)

BRUFASOL Gelb / Yellow AL 2301

Print date: 13.11.2018

Product code: BFSOL_Gelb_AL2301

Page 6 of 7

Marine transport (IMDG)

<u>UN number:</u>	No dangerous good in sense of this transport regulation.
<u>UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO)

<u>UN number:</u>	No dangerous good in sense of this transport regulation.
<u>UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>Packing group:</u>	No dangerous good in sense of this transport regulation.

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

Special precautions for user

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information**U.S. Regulations****National Inventory TSCA**

TSCA Inventory Status:

All chemical substances in this material are included on or exempted from listing on the TSCA

OSHA hazard category

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

National regulatory information

SARA Section 311/312 Hazards:

A: respirable fraction Pigment Yellow 184 (Bismuth vanadate, Particle size in µm: < 10) (14059-33-7):
Delayed (chronic) health hazard**SARA**

EPCRA / SARA Title III (Chemical Listings)

Section 302 Extremely Hazardous Substances / EHSs (40 CFR 355):

Not listed

Section 304 CERCLA Hazardous Substances (40 CFR 302):

Not listed

Section 311/312 Hazard Class (40 CFR 370):

Acute: Not listed

Chronic: Not listed

Fire: Not listed

Pressure: Not listed

Reactive: Not listed

Section 313 Toxic Chemicals (40 CFR 372):

N770 - Vanadium Compounds:

CAS Number: Chemical name:

14059-33-7 Bismuth vanadium tetroxide (BiVO₄ ; Pigment Yellow 184)

Safety Data Sheet

according to 29 CFR 1910.1200(g)

BRUFASOL Gelb / Yellow AL 2301

Print date: 13.11.2018

Product code: BFSOL_Gelb_AL2301

Page 7 of 7

State Regulations**Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Additional information

California (Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65)

Not listed

Massachusetts

No ingredient regulated by MA Right-to-Know Law present.

New Jersey – Pennsylvania – Illinois – Rhode Island

Required composition information (no component on Hazardous Substance List).

CAS Number: Chemical name:

14059-33-7 Bismuth vanadium tetroxide (BiVO₄ ; Pigment Yellow 184)

16. Other information**Hazardous Materials Information Label (HMIS)**

Health: 1

Flammability: 0

Physical Hazard: 0

Personal Protection: X

NFPA Hazard Ratings

Health: 1

Flammability: 0

Reactivity: 0

Unique Hazard: X

Revision date: 13.11.2018

Revision No: 1,04

Other data

Chemical Safety Report, Chapter 9: EXPOSURE ASSESSMENT

