

Polysynthren Brown 3RL P

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Substance key: KS100177

Revision Date: 03.06.2022

Version : 2 - 2 / EU

Date of printing : 06.03.2023

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

1.1. Product identifier

Trade name

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Material number: 133649

Identification of the substance according to its REACH registration

[2,2'-[1,2-phenylenebis(nitrilomethylidyne)]-bis(phenolato)]-N,N',O,O'-nickel(II)

REACH - Registration number according to article 20(3): 01-0000015079-68-0000, 01-0000015079-68-0001, 01-0000015079-68-0003

Chemical nature: azomethine dyestuff/nickel complex

CAS number : 14406-71-4

EC number : 400-870-5

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

Relevant identified uses of the substance or mixture

Industry sector : Plastic processing industry.

Type of use : Colouring agents, dyes

1.3. Details of the supplier of the safety data sheet

Identification of the company

Heubach Colorants Germany GmbH

Brüningstraße 50

65929 Frankfurt am Main

Telephone no. : +49 69 305 13619

Information about the substance/mixture

Product Stewardship

e-mail: SDS.PI.Europe@clariant.com

1.4. Emergency telephone number

00800-5121 5121 (24 h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

According to the present state of knowledge provided this product is handled correctly, there is no danger to humans or the environment
Potential dust explosion hazard.

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name : azomethine dyestuff/nickel complex
EC-No. : 400-870-5

Components

Remarks : No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Get medical advice/ attention if you feel unwell.
If inhaled : Remove from danger zone. Obtain medical advice.
In case of skin contact : After contact with skin, wash immediately with plenty of soap and water.
In case of eye contact : Rinse immediately with plenty of water and seek medical advice.
If swallowed : If swallowed, call a poison control centre or doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No symptoms known currently.
Risks : No hazards known at this time.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray jet
Foam

Unsuitable extinguishing media : High volume water jet
Carbon dioxide (CO₂)
Dry powder

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Carbon oxides
Nickel oxide
Nitrogen oxides (NO_x)

5.3 Advice for firefighters

Special protective equipment for firefighters : Self-contained breathing apparatus

Further information : Cool container and metallic parts with a water spray jet

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear suitable protective equipment.
Avoid dust formation.
Keep away sources of ignition.
Do not empty into drains.
Do not dispose of waste into sewer.
Take up as such and consider recycling.

6.2 Environmental precautions

Environmental precautions : The product should not be allowed to enter drains, water courses or the soil.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Take up mechanically
Avoid dust formation.
Take measures to prevent the build up of electrostatic charge.
Risk of dust explosion.
Treat recovered material as described in the section "Disposal considerations".

6.4 Reference to other sections

Information regarding Safe handling, see chapter 7., For disposal considerations see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling : Keep container tightly closed.
Keep container in a well-ventilated place.
- Advice on protection against fire and explosion : Avoid dust formation.
To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.
Keep away sources of ignition.
Observe the usual precautionary measures required for chemicals with dust explosive properties (Observe national regulations).
- Hygiene measures : This substance is classified as non-hazardous. However, the usual precautions for handling chemicals must be observed to avoid contact with the skin, eyes and respiratory tract. In case of contact with the product, wash the eye immediately with running water and the skin with water and soap.
- Dust explosion class : St1

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep only in the original container. Keep container tightly closed.
- Further information on storage conditions : Keep containers tightly closed in a dry, cool and well-ventilated place.
- Advice on common storage : When used and handled as intended, none.
Keep away from food and drink.
- Further information on storage stability : Stable at normal ambient temperature and pressure.

7.3 Specific end use(s)

- Specific use(s) : No further recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Personal protective equipment

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Eye protection	:	Safety glasses
Hand protection	:	
Remarks	:	Chemical resistant gloves Minimum breakthrough time (glove): not determined Minimum thickness (glove): not determined Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Skin and body protection	:	working clothes
Respiratory protection	:	in case of dust, use dust-mask. mask, comb.gas/particle filter
Protective measures	:	Observe the usual precautions for handling chemicals.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	powder
Colour	:	dark red
Odour	:	not specified
Odour Threshold	:	cannot be determined
Boiling point	:	not determined
Flammability	:	The product is not flammable.
Upper explosion limit / upper flammability limit	:	not tested.
Lower explosion limit / Lower flammability limit	:	not tested.
Flash point	:	Not applicable
Auto-ignition temperature	:	not tested.
Decomposition temperature	:	320 °C Method: dynamic decomposition test
		290 °C Method: isoperibolic decomposition test
pH	:	approximately 7 (20 °C) Concentration: 50 g/l
Viscosity	:	
Viscosity, dynamic	:	Not applicable

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Viscosity, kinematic	:	Not applicable
Solubility(ies)		
Water solubility	:	< 0,00003 g/l (20 °C) insoluble
Solubility in other solvents	:	0,1353 g/l Solvent: 1-octanol insoluble Solvent: fat not tested.
Partition coefficient: n-octanol/water	:	not determined
Vapour pressure	:	not tested.
Relative density	:	1,58 (20 °C, approx. 1.013 hPa) Method: ISO 1183 GLP: no
Density	:	1,58 g/cm ³ (20 °C) Method: Pyknometer
Relative vapour density	:	not tested.
Particle characteristics		
Particle size	:	not tested.
9.2 Other information		
Explosives	:	Not explosive Method: Directive 84/449/EEC, A.14 GLP: yes
Oxidizing properties	:	Not applicable
Flammable solids		
Burning number	:	2 Method: Combustibility test safety laboratory GLP: no Short flaring up without spreading
Self-ignition	:	> 360 °C approx. 1.013 hPa Method: Sandoz Ignition test of deposited dust. GLP: no
Substances and mixtures, which in contact with water, emit flammable gases	:	GLP: no

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Dust explosion class	:	St1
Evaporation rate	:	not tested.
Miscibility with water	:	practically insoluble
Surface tension	:	Not applicable
Minimum ignition energy	:	not tested.

SECTION 10: Stability and reactivity

10.1 Reactivity

See section 10.3. "Possibility of hazardous reactions"

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use. Stable

10.4 Conditions to avoid

Conditions to avoid : Temperatures exceeding thermal stability. High concentration of powders. Electrostatic charges.

10.5 Incompatible materials

Materials to avoid : See under section "Conditions to avoid"

10.6 Hazardous decomposition products

When used and handled as intended, none.

SECTION 11: Toxicological information

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

Acute toxicity

Product:

Acute oral toxicity	:	LD50 (Rat, male and female): > 10.000 mg/kg Method: OECD Test Guideline 401 GLP: no data available
Acute inhalation toxicity	:	Remarks: not tested.
Acute dermal toxicity	:	LD50 (Rat, male and female): > 2.000 mg/kg Method: OECD Test Guideline 402 GLP: yes

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Skin corrosion/irritation

Product:

Species : Rabbit
Exposure time : 4 h
Method : OECD Test Guideline 404
Result : No skin irritation
GLP : no data available

Serious eye damage/eye irritation

Product:

Species : Rabbit
Exposure time : 30 s
Method : OECD Test Guideline 405
Result : No eye irritation
GLP : no data available

Respiratory or skin sensitisation

Product:

Test Type : Maximisation Test
Exposure routes : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Not a skin sensitizer.
GLP : yes

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Concentration: 0,5 bis 500 µg/plate
Metabolic activation: with and without metabolic activation
Method: Ames test
Result: negative
GLP: yes

Test Type: Ames test
Test system: Escherichia coli
Concentration: 0,5 bis 500 µg/plate
Metabolic activation: with and without metabolic activation
Method: Ames test
Result: negative
GLP: yes

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male and female)
Strain: NMRI
Cell type: Bone marrow cells
Application Route: oral (gavage)
Exposure time: 24 - 48 - 72 h

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Dose: 5000 mg/kg
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Germ cell mutagenicity-
Assessment : In vitro tests did not show mutagenic effects, In vivo tests did not show mutagenic effects

Carcinogenicity

Product:

Carcinogenicity -
Assessment : No information available.

Reproductive toxicity

Product:

Reproductive toxicity -
Assessment : No information available.

STOT - single exposure

Product:

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Product:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Product:

Species : Rat, male and female
Application Route : Dermal
Exposure time : 28 d
Number of exposures : daily, 6h/d
Dose : 1000 mg/kg
Control Group : yes
Subsequent observation
period : 7 d
Method : OECD Test Guideline 410
GLP : yes
Remarks : Consult referenced source for details

Aspiration toxicity

Product:

No aspiration toxicity classification

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11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Experience with human exposure

Product:

General Information : Health injuries are not known or expected under normal use.

SECTION 12: Ecological information

12.1 Toxicity

Product:

- Toxicity to fish : LC50 (Cyprinus carpio (Carp)): > 1.000 mg/l
End point: mortality
Exposure time: 96 h
Analytical monitoring: yes
Method: Directive 67/548/EEC, Annex V, C.1.
GLP: yes
- Toxicity to daphnia and other aquatic invertebrates : EC0 (Daphnia magna (Water flea)): >= 1.000 mg/l
End point: Immobilization
Exposure time: 24 h
Analytical monitoring: yes
Method: OECD Test Guideline 202
GLP: yes
Remarks: static test
- Toxicity to algae/aquatic plants : Remarks: not tested.
- Toxicity to fish (Chronic toxicity) : Remarks: not tested.
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: not tested.

12.2 Persistence and degradability

Product:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge
Concentration: 41,36 mg/l
Result: Not biodegradable

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Biodegradation: 3 %
Related to: Biochemical Oxygen Demand (BOD)
Exposure time: 5 d
Method: OECD Test Guideline 301D
GLP: yes

Biochemical Oxygen Demand (BOD) : Test substance
60 mg/g
Incubation time: 5 d
Concentration: 41,36 mg/l
Method: Directive 84/449/EEC, C.8
GLP: yes

Chemical Oxygen Demand (COD) : 1.907 mg/g
Method: Directive 84/449/EEC, C.9
GLP: yes

BOD/COD : BOD: 60 mg/g (BOD5)
COD: 1907 mg/g
BOD/COD: approx. 3 %

Physico-chemical removability : Remarks: The product is slightly soluble in water. It can be eliminated from water by abiotic processes.

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Environmental fate and pathways : no data available

Additional ecological : Do not allow to enter ground water, waterways or waste water.

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information

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : Incineration in an approved, controlled furnace. Observe: fire hazard data, physical and corrosion data.
- Contaminated packaging : Dispose of in accordance with local regulations.

SECTION 14: Transport information

Section 14.1. to 14.5.

ADR	not restricted
ADN	not restricted
RID	not restricted
IATA	not restricted
IMDG	not restricted

14.6. Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

14.7. Maritime transport in bulk according to IMO instruments

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

- REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Conditions of restriction for the following entries should be considered:
C.I. Pigment Orange 70 (Number on list 27)
- REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable
- Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable
- Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable
- Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors : Neither banned nor restricted

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Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Other regulations:

Apart from the data/regulations specified in this chapter, no further information is available concerning safety, health and environmental protection.

15.2 Chemical safety assessment

No Chemical Safety Assessment (CSA) is yet available for the substance, or for the component substances, contained in this product.

SECTION 16: Other information

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006



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Further information

Other information : Observe national and local legal requirements

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