SAFETY DATA SHEET



Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

POXY COLOR WHITE RAL9016

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

1.1. Product identifier

: POXY COLOR WHITE RAI 9016 Product name

Registration number REACH : 01-2119475779-15

: Substance/mono-constituent Product type REACH

CAS number : 1314-98-3 **EC** number : 215-251-3 **Molecular mass** : 97.43 g/mol Formula : ZnS

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

1.2.1 Relevant identified uses

Dyestuff/pigment

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*

Industrielaan 5B

B-2250 Olen

2 +32 14 25 76 40

₼ +32 14 22 02 66

*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.

Industrielaan 5B

B-2250 Olen

2 +32 14 85 97 37

4 +32 14 85 97 38 info@novatech.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch):

+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.2. Label elements

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.3. Other hazards

The criteria of PBT and vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006 do not apply to inorganic substances

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	CAS No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and
REACH Registration No	EC No					ATE
zinc sulphide	1314-98-3	C>99 %			Mono-constituent	
01-2119475779-15	215-251-3					

3.2. Mixtures

Not applicable

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

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SECTION 4: First aid measures

4.1. Description of first aid measures

General:

If you feel unwell, consult a doctor/medical service.

After inhalation:

Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water.

After eye contact:

Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:

Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

4.2. Most important symptoms and effects, both acute and delayed

4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

No effects known.

After eye contact:

Slight irritation.

After ingestion:

No effects known.

4.2.2 Delayed symptoms

No effects known.

4.3. Indication of any immediate medical attention and special treatment needed

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Adapt extinguishing media to the environment for surrounding fires.

5.1.2 Unsuitable extinguishing media:

Not applicable.

5.2. Special hazards arising from the substance or mixture

On burning: release of toxic and corrosive gases/vapours (sulphur oxides) and formation of metal oxides.

5.3. Advice for firefighters

5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No naked flames.

6.1.1 Protective equipment for non-emergency personnel

See section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See section 8.2

6.2. Environmental precautions

Contain released product.

6.3. Methods and material for containment and cleaning up

Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

See section 13.

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SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Avoid raising dust. Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Meet the legal requirements. Store in a dry area. May be stored under nitrogen.

7.2.2 Keep away from:

Heat sources, oxidizing agents, (strong) acids, water/moisture.

7.2.3 Suitable packaging material:

Plastics

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

Product name	Test	Number
Zinc & Cpds (as Zn)	NIOSH	7030

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

DNEL/DMEL - Workers

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Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	5 mg/m³	
	Long-term systemic effects dermal	83 mg/kg bw/day	

DNEL/DMEL - General population

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Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	2.5 mg/m ³	
	Long-term systemic effects dermal	83 mg/kg bw/day	
	Long-term systemic effects oral	0.83 mg/kg bw/day	

PNEC

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DAY COLOR WHITE RAL9010								
Compartments	Value	Remark						
Fresh water	20.6 μg/l							
Marine water	6.1 μg/l							
STP	100 μg/l							
Fresh water sediment	117.8 mg/kg sediment dw							
Marine water sediment	56.5 mg/kg sediment dw							
Soil	35.6 mg/kg soil dw							

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Avoid raising dust. Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Do not eat, drink or smoke during work.

a) Respiratory protection:

Dust production: dust mask with filter type P1.

b) Hand protection:

Protective gloves against chemicals (EN 374).

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	Measured breakthrough time	Thickness	Protection index	Remark
nitrile rubber	> 480 minutes	0.11 mm	Class 6	

c) Eye protection:

Safety glasses (EN 166). In case of dust production: protective goggles (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Crystalline solid				
	Powder				
	Grains				
Odour	Odourless				
Odour threshold	Not applicable				
Colour	White-yellow to white-grey				
Particle size	D50 ; ASTM E323-09 ; 0.71 μm				
Explosion limits	Not applicable				
Flammability	Not classified as flammable				
Log Kow	Not applicable				
Dynamic viscosity	Not applicable (solid)				
Kinematic viscosity	Not applicable (solid)				
Melting point	Not quantifiable ; EU Method A.1				
Boiling point	Not applicable				
Relative vapour density	Not applicable (solid)				
Vapour pressure	Not applicable (solid)				
Solubility	Water ; < 0.001 g/100 ml ; 25 °C				
Relative density	4.16 ; 22 °C ; EU Method A.3				
Absolute density	4160 kg/m³ ; 22 °C ; EU Method A.3				
Decomposition temperature	589 °C - 657 °C				
Auto-ignition temperature	Not applicable				
Flash point	Not applicable (solid)				
рН	Not applicable (non-soluble in water)				

9.2. Other information

	Not applicable (solid)	
lEvaporation rate	INOT applicable (SOIIG)	

SECTION 10: Stability and reactivity

10.1. Reactivity

Neutral reaction.

10.2. Chemical stability

Unstable on exposure to moisture.

10.3. Possibility of hazardous reactions

Oxidizes slowly in moist air.

10.4. Conditions to avoid

Precautionary measures

Avoid raising dust. Keep away from naked flames/heat.

10.5. Incompatible materials

Oxidizing agents, (strong) acids, water/moisture.

10.6. Hazardous decomposition products

Reacts with (some) acids: release of toxic/combustible gases/vapours (hydrogen sulphide). On burning: release of toxic and corrosive gases/vapours (sulphur oxides) and formation of metal oxides.

SECTION 11: Toxicological information

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

11.1.1 Test results

Acute toxicity

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Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	Equivalent to OECD 401	> 5000 mg/kg		Rat (male / female)	Read-across	
Dermal						Data waiving	
Inhalation (dust)	LC50	OECD 403	> 5.41 mg/l		Rat (male / female)	Read-across	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

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Route of exposure	Result	Method	Exposure time	Time point	Species	Value	Remark
						determination	
Eye	Slightly irritating	EU Method B.5	24 h	1; 24; 48; 72 hours	Rabbit		Single treatment with rinsing
Skin	Not irritating	Patch test	5 day(s)		Rabbit	Read-across	

Conclusion

Not classified as irritating to the skin $% \left\{ 1\right\} =\left\{ 1\right\} =\left$

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

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Route of exposure	Result	Method	•	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406			Guinea pig (female)	Read-across	

Conclusion

Not classified as sensitizing for skin Not classified as sensitizing for inhalation

Specific target organ toxicity

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Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral (diet)	NOAEL	OECD 408	13.26 mg/kg		No effect	13 week(s)	Rat (male /	Read-across
			bw/dav				female)	

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

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Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)		Read-across	
Negative with metabolic activation, negative without metabolic activation	OECD 481	Yeast (S. cerevisiae)		Read-across	

Mutagenicity (in vivo)

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No (test)data available

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

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No (test)data available

$\underline{\textbf{Conclusion}}$

Not classified for carcinogenicity

Reproductive toxicity

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		Parameter	Method	Value	Exposure time	Species	Effect	- 0	Value determination
Development (Oral (stomac	,	NOAEL	Developmenta I toxicity study	, ,,	10 days (gestation, daily)	Rat	No effect		Read-across
Maternal toxic	, ,	NOAEL	Developmenta I toxicity study	, ,,	10 days (gestation, daily)	Rat	No effect		Read-across
Effects on fert (diet))	tility (Oral	Dose level			30 day(s) - 32 day (s)	l ' '	Reduction in sperm motility	Male reproductive organ	Read-across

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

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No (test)data available

Chronic effects from short and long-term exposure

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No effects known.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

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	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	> 0.25 mg/l	96 h	Danio rerio	Static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	LC50	OECD 202	> 29 μg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	OECD 201	> 13 μg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; GLP
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea								Data waiving

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

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Biodegradation water

Method	Value	Duration	Value determination
			Data waiving

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
			Data waiving

Conclusion

Water

Biodegradability in water: no data available

12.3. Bioaccumulative potential

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BCF other aquatic organisms

Parameter Meth	thod \	/alue	Duration	Species	Value determination
BCF	3	38 - 28960	28 day(s)	Palaemon elegans	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable			

Conclusion

Bioaccumable

12.4. Mobility in soil

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(log) Koc

Parameter	Method	Value	Value determination
			Data waiving

Conclusion

Adsorbs into the soil

12.5. Results of PBT and vPvB assessment

The criteria of PBT and vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006 do not apply to inorganic substances.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

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Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

Groundwater

Groundwater pollutant

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

06 03 14 (wastes from the MFSU of salts and their solutions and metallic oxides: solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).

15 01 02 (plastic packaging).

SECTION 14: Transport information

Road (ADR), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

14. <u>1. UN number</u>	14.1. UN number					
Transport	Not subject					
14.2. UN proper shipping name						
14.3. Transport hazard class(es)						
Hazard identification number						
Class						
Classification code						
14.4. Packing group						
Packing group						
Labels						
14.5. Environmental hazards						
Environmentally hazardous substance mark	no					
14.6. Special precautions for user						
Special provisions						
Limited quantities						
14.7. Maritime transport in bulk according to IMO instruments						
Annex II of MARPOL 73/78	Not applicable					

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture <u>European legislation:</u>

VOC content Directive 2010/75/EU

VOC content	Remark
	Not applicable (inorganic)

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Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

National legislation Belgium

No data available

National legislation The Netherlands

Waterbezwaarlijkheid A (4); Algemene Beoordelingsmethodiek (ABM)

National legislation France

No data available

National legislation Germany

WGK	nwg; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
TA-Luft	5.2.1

National legislation Austria

No data available

National legislation United Kingdom

No data available

Other relevant data

No data available

15.2. Chemical safety assessment

A chemical safety assessment has been performed.

SECTION 16: Other information

(*) INTERNAL CLASSIFICATION BY BIG

ADI Acceptable daily intake

AOEL Acceptable operator exposure level

ATE Acute Toxicity Estimate

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

DMEL Derived Minimal Effect Level
DNEL Derived No Effect Level
EC50 Effect Concentration 50 %

ErC50 EC50 in terms of reduction of growth rate

LC50 Lethal Concentration 50 %

LD50 Lethal Dose 50 %

NOAEL No Observed Adverse Effect Level NOEC No Observed Effect Concentration

OECD Organisation for Economic Co-operation and Development

PBT Persistent, Bioaccumulative & Toxic
PNEC Predicted No Effect Concentration
STP Sludge Treatment Process

vPvB very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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