SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830

PASSIVE PURPLE

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

1.1. Product identifier

Product name : **PASSIVE PURPLE**
Registration number REACH : Not applicable
Product type REACH : Mixture (Mixture)

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

1.2.1 Relevant identified uses
Airtight coating

1.2.2 Uses advised against
No uses advised against

1.3. Details of the supplier of the safety data sheet

Intelligent Membranes Ltd.
Clopton Farm, Lower Road
Croydon, SG8 0EF, United Kingdom
☎ +441223208174
info@intelligentmembranes.com

1.4. Emergency telephone number

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

SECTION 2: Hazards

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

Supplemental information

EUH208 Contains: reactionmass of: 5-chloro-2-methyl-4-isothiazolin-3-one[ECno.247-500-7]and2-methyl-4-isothiazolin-3 -one[ECno.220-239-6](3:1).Mayproducean allergic reaction.

EUH210 Safety data sheet available on request.

2.3.Other hazards

No other hazards known

SECTION 3: Composition/information on ingredients

3.1.Substances

Not applicable

01-2119529246-39 244-492-7
(2)Substance with community workplace exposure limit

Name CAS no.		Conc. (C)	Classification according to CLP	Note	Remark
Aluminium hydroxide 21645-51-2		C <25 %		(2)	Constituent

SECTION 4: First aid measures

4.1. Description of first aid measures

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Wash immediately with lots of water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Consult a doctor/medical service if you feel unwell.

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:

No effects known.

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:

Water spray. Polyvalent foam. ABC powder. Carbon dioxide.

5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

5.2.Special hazards arising from the substance or mixture

Upon combustion: formation of CO and CO2, metallic fumes and small quantities of hydrogen chloride.

5.3.Advice for firefighters

5.3.1 Instructions:

No specific fire-fighting instructions required.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Face-shield. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

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 heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Face-shield. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2.Environmental precautions

Contain released substance, pump into suitable containers. Plug the leak, cut off the supply.

6.3.Methods and material for containment and cleaning up

Solid spill: cover with absorbent material. 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 heading 13.

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

Keep away from naked flames/heat. Keep container tightly closed. Observe strict hygiene.

7.2.Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Storage temperature: 5 - 35 °C. Store in a cool area. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources.

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
If applicable and available it will be listed below.
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
If applicable and available it will be listed below.
8.1.5 Control banding
If applicable and available it will be listed below.

Belgium
Aluminium (métal et composés insolubles, fraction alvéolaire) Time-weighted average exposure limit 8 h

USA (TLV-ACGIH)

Aluminium, insoluble compounds Time-weighted average exposure limit 8 h (TLV - Adopted Value)
(R): Respirable fraction

Aluminum & Compounds (as Al) NIOSH 7013

DNEL/PNEC values

DNEL/DMEL - Workers
aluminium hydroxide

DNEL Long-term systemic effects inhalation 10.76 mg/m³
Long-term local effects inhalation 10.76 mg/m³
DNEL/DMEL - General population
aluminium hydroxide

DNEL Long-term systemic effects oral 4.74 mg/kg bw/day
PNEC
aluminium hydroxide

Compartments Value Remark
STP 20 mg/l

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

Keep away from naked flames/heat. Keep container tightly closed. 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 strict hygiene. Do not eat, drink or smoke during work.

a) Respiratory protection:

Wear gas mask with filter type A if conc. in air > exposure limit.

b) Hand protection:

Gloves.

c) Eye protection:

Safety glasses.

d) Skin protection:

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Paste
Odour	Odourless
Odour threshold	No data available
Colour	White to blue
Particle size	Not applicable (mixture)
Explosion limits	No data available
Flammability	Non-flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	10000 mPa.s ; 40 °C
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Relative vapour density	No data available
Vapour pressure	No data available
Solubility	water ; miscible
Relative density	No data available
Decomposition	No data available
temperature Auto-ignition	No data available
temperature Explosive properties	No chemical group associated with explosive properties No chemical group associated with oxidising properties No data available
Oxidising properties	
pH	

9.2.Other information

No data available

SECTION 10: Stability and reactivity

10.1.Reactivity

Heating increases the fire hazard.

10.2.Chemical stability

No data available.

10.3.Possibility of hazardous reactions

Keep away from naked flames/heat. Keep container tightly closed.

10.5.Incompatible materials

No data available.

10.6.Hazardous decomposition products

Upon combustion: formation of CO and CO2, metallic fumes and small quantities of hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

PASSIVE PURPLE
No (test)data on the mixture available
aluminium hydroxide

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LC50	OECD 423	>2000 mg/kg bw		Rat (Female)	Experimental value	
Dermal						Data waiving	
Inhalation (aerosol)	LC50	Equivalent to OECD 403	> 2.3 mg/kg bw	4 h	Rat (Male/Female)	Read-across	

Judgement is based on the relevant ingredients
Conclusion
Not classified for acute toxicity

Corrosion/irritation

PASSIVE PURPLE
No (test)data on the mixture available
aluminium hydroxide

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitising	OECD 406		24;48 hours	Guinea pig (male)	Experimental value	
Intrathecal instillation	Not sensitising					Weight of evidence	

Judgement is based on the relevant ingredients
Conclusion
Not classified as sensitizing for skin
Not classified as sensitizing for inhalation

Specific target organ toxicity

PASSIVE PURPLE
No (test)data on the mixture available
aluminium hydroxide

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral diet	NOAEL	Equivalent to OECD 407	302 mg/kg food		No effect	4 weeks (daily)	Rat (male)	Weight of evidence
Inhalation (aerosol)	NOAEC	Equivalent to OECD 412	3 mg/m³ air	Lungs	No effect	4 weeks (6h/day,5 days/week)	Rat (male)	Read-across
Inhalation (aerosol)	LOAEC	Equivalent to OECD 412	28 mg/m³ air	Lungs	Overall effects	4 weeks (6h/day,5 days/week)	Rat (male)	Read-across

Judgement is based on the relevant ingredients
Conclusion
Not classified for sub chronic toxicity

Mutagenicity (in vitro)

PASSIVE PURPLE
No (test) data on the mixture available
aluminium hydroxide

Result	Method	Test substrate	Effect	Value determination
Negative	OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value

Mutagenicity (in vitro)

PASSIVE PURPLE
No (test) data on the mixture available
aluminium hydroxide

Result	Method	Exposure time	Test substrate	Organ	Value determination
Negative	OECD 474	24 h	Rat (male)	Bone marrow	Experimental value

Carcinogenicity

PASSIVE PURPLE
No (test)data on the mixture available
aluminium hydroxide

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Inhalation (dust)				86 weeks (6h/day,5 days/week)	Rat (male/female)	No effect	Lungs	Read-across

Reproductive toxicity

PASSIVE PURPLE
No (test)data on the mixture available
aluminium hydroxide

Route of exposure	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Developmental toxicity	NOAEL	Equivalent to OECD 414	266 mg/kg	10 day(s) bw/day	Rat	No effect		Experimental value
Effects on fertility	NOAEL (P)	OECD 422	1000 mg/kg	4 weeks daily	Rat (male)	No effect	Reproductive organ	Read-across
	NOAEL (P)	OECD 422	1000 mg/kg	5 weeks daily	Rat (female)	No effect	Reproductive organ	Read-across

Judgement is based on the relevant ingredients
Conclusion CMR
Not classified for carcinogenicity
Not classified for mutagenic or genotoxic toxicity
Not classified for reprotoxic or developmental toxicity

Toxicity other effects

Passive Purple
No (test)data on the mixture available

Chronic effects from short and long-term exposure

PASSIVE PURPLE

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation.

SECTION 12: Ecological information

12.1.Toxicity

PASSIVE PURPLE
No (test)data on the mixture available
aluminium hydroxide

Route of exposure	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fish	LC50		>10000 mg/l	96 h	Pisces			Literature study
Acute toxicity invertebrates	EC50		>10000 mg/l	48 h	Daphnia magna			Literature study

Judgement of the mixture is based on the relevant ingredients

Conclusion

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

12.2.Persistence and degradability

No test data of component(s) available

12.3.Bioaccumulative potential

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Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

Method	Remark	Value	Temperature	Value determination
	No data available			

Conclusion

No test data of component(s) available

aluminium hydroxide

12.4.Mobility in soil

No (test)data on mobility of the components available

12.5. Results of PBT and vPvB assessment

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT andvPvB according to Annex XIII of Regulation (EC) No 1907/2006.

12.6. Other adverse effects

Passive Purple

Global warming potential (GWP)

None of the known components is 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)

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

Can be considered as non-hazardous waste according to Regulation (EU) No 1357/2014. The waste code must be assigned by the user, preferably in
consultation with the (environmental) authorities concerned.

13.1.2 Disposal methods

Recycle/reuse. Remove waste in accordance with local and/or national regulations.
Any waste water from cleaning machinery on site will be sealed in product containers and returned to Intelligent Membranes for disposal.

13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).
15 01 02 (plastic packaging).

SECTION 14: Transport information

Road (ADR)

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	

Rail (RID)

14.7. UN number

Transport — Not subject

14.8. UN proper shipping name

14.9. Transport hazard class(es)

Hazard identification number

Class

Classification Code

14.10. Packing group

Packing group

Labels

14.11. Environmental hazards

Environmentally hazardous substance mark

14.12. Special precautions for user

Inland waterways (ADN)

14.13. UN number

Transport — Not subject

14.14. UN proper shipping name

14.15. Transport hazard class(es)

Class

Classification code

14.16. Packing group

Packing group

Labels

14.17. Environmental hazards

Environmentally hazardous substance mark — no

14.18. Special precautions for user

Special provisions

Limited quantities

Sea (IMDG/IMSBC)

14.19. UN number

Transport — Not subject

14.20. UN proper shipping name

14.21. Transport hazard class(es)

Class

14.22. Packing group

Packing group

Labels

14.23. Environmental hazards

Marine pollutant

Environmentally hazardous substance mark — no

14.24. Special precautions for user

Special provisions

Limited quantities

14.25. Transport in bulk according to Annex II of Marpol and the IBC Code

Annex II of MARPOL 73/78

Air (ICAO-TI/IATA-DGR)

14.26. UN number

Transport — Not subject

14.27. UN proper shipping name

14.28. Transport hazard class(es)

Class

14.29. Packing group

Packing group

Labels

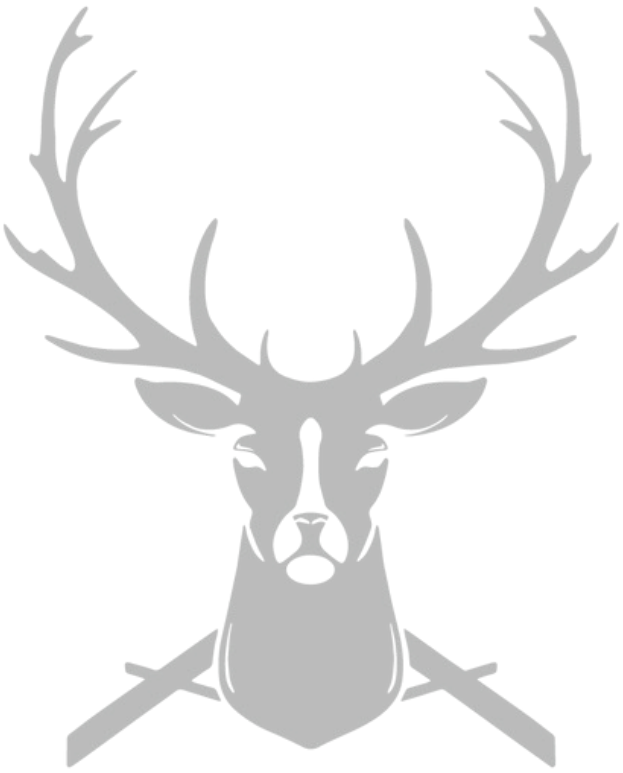
14.30. Environmental hazards

Environmentally hazardous substance mark — no

14.31. Special precautions for user

Special provisions

Passenger and cargo transport: limited quantities: maximum net quantity per packaging



SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC Content	Remark
VOC content Directive 2004/42/EC	No data available

Maximum value EC limit	Value	Category	Subcategory	Notation
0 g/l 40 g/l		IIA	c: Exterior walls of mineral substrate	2004/42/IIA(c)(40)0

European drinking water standards (Directive 98/83/EC)
Passive Purple

Note	Reference	Parameter	Parametric value
Aluminium 200 µg/l			Listed in Annex I, part c, of directive 98/83/EC on the quantity of water intended for human consumption

National legislation The Netherlands

Passive Purple
Waste identification (the LWCA (the Netherlands): KGA category 03
Netherlands)
Waterbezwaarlijkheid 11

National legislation Germany

Passive Purp le
WGK 1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4)

Schwangerschaft Gruppe	D
Schwangerschaft Gruppe	D
MAK 8-Stunden- Mittelwert mg/m³	Aluminium-, Aluminiumoxid-, Aluminiumhydroxidhaltige Ställlube (alveolengälllngige Fraktion); 1.5 mg/m³; gemessen als alveolengängige Fraktion (vgl. Abschn. Vd) S. 191) Aluminium-, Aluminiumoxid-, Aluminiumhydroxidhaltige Ställlube (einatembare Fraktion); 4 mg/m³; gemessen als einatembare Fraktion (vgl. Abschn. Vd) S. 191)
TA-Luft	5.2.1

National legislation France

Passive Purple
No data available

National legislation Belgium

PASSIVE PURPLE
No data available

Other relevant data

PASSIVE PURPLE
No data available
aluminium hydroxide

TLV - Carcinogen	Aluminium, insoluble compounds; A4

SECTION 16: Other information

(*) = INTERNAL CLASSIFICATION BY BIG
PBT-substances = persistent, bioaccumulative and toxic substances
CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

PASSIVE PURPLE

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 me. 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 me to me. 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 exhausveness 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.