Safety Data Sheet according to Regulation (EC) No. 1907/2006

Product:	MIG-ESP® Exterior		
Created on:	03.09.2018		
Revised on:	24.06.2019		
Valid from:	24.06.2019		
Version:	2.1	**Replace version:**	2.0

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

1.1 Product identifier

Substance name/trade name: MIG-ESP® Exterior

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

Coating material

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier

MIG Material Innovative Gesellschaft mbH

Street/postbox

Am Grarock 3

Country/postcode/city

D-33154 Salzkotten

Technical contact point

ICT Ingenieurbüro für CHEMIE und TECHNOLOGIE
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1.4 Emergency telephone number

Poisons Information Centre
University Hospital Bonn
+49(0)22819240

Section 2: Potential hazards

2.1 Classification of the substances/mixtures

Classification according to Regulation (EC) No. 1272/2008:

Aquatic Chronic 3, H412

2.2 Label elements

Labeling according to Regulation (EC) No. 1272/2008:

Pictogramm: not applicable

Signal word: not applicable

Hazardous component(s) for labelling:
Not applicable

Hazard warnings:

H412:	Harmful to aquatic life with long lasting effects.

Safety instructions:

P101:	If medical advice is required, provide packaging or identification label.
P102:	Keep out of the reach of children.
P103:	Read identification label before use.
P273:	Avoid release into the environment.
P501:	Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information **:**
EUH208 Contains 2-octyl-2H-isothiazol-3-one. May cause allergic reactions. Safety data sheet available on request.

2.3 Other hazards:

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Section 3: Composition/information on ingredients

3.2 Mixtures

Description: Silicone resin emulsion paint with mineral fillers.

Substance name: 2-Octyl-2H-isothiazol-3-one
EC No.: 247-761-7 CAS No.: 26530-20-1
Portion: 0.025-0.05 %
Classification according to Regulation (EC) No. 1272/2008:
Flame Liq. 3, H226; Acute Tox. 3, H311; Acute Tox. 3, H331; Skin Corr. 1B, H314;
Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); Acute Tox. 4, H302; Skin Sens. 1, H317

Substance name: Pyrithione Zinc
EC No.: 236-671-3 CAS No.: 13463-41-7 REACH Registration No: 01-2119511196-46
Portion: 0.0025-0.025 %
Classification according to Regulation (EC) No 1272/2008:
Acute Tox. 3, H301; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); Acute Tox. 4, H332

Substance name: Terbutryn (ISO)
EC No.: 212-950-5 CAS No.: 886-50-0
Portion: 0.0025-0.025 %
Classification according to Regulation (EC) No 1272/2008:
Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); Acute Toxic 4, H302; Skin Sens. 1, H317

(The wording of the listed risk phrases can be found in Section 16)

Section 4: First aid measures

4.1 Description of first aid measures

General information:
If the patient feels unwell, consult a doctor and submit this data sheet.
No special measures required.
Self-protection of the first-aider.
Remove affected person from the danger area.

After inhalation
Supply fresh air, consult a doctor in case of complaints.

After contact with skin
If skin irritation persists, consult a doctor.

After contact with eyes
Rinse eyes under running water for several minutes with the eyelid open. If symptoms persist, consult a doctor.

After ingestion

Rinse mouth and drink plenty of water.
Do not induce vomiting, seek medical attention immediately.

4.2 Most important acute and delayed symptoms and effects
No further relevant information available.

4.3 Information on immediate medical help or special treatment
No further relevant information available.

Section 5: Fire-fighting measures

5.1 Extinguishing agent
Suitable: Use fire extinguishing measures that suits the environment.
Unsuitable: Water with full jet

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Information for firefighters
Do not inhale explosion and fire gases.
Wear self-contained breathing apparatus.
Fire residues and contaminated extinguishing water must be disposed of in accordance with official regulations.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear personal protective clothing.

6.2 Environmental measures
Do not empty into drains or watercourses.
Notify the competent authority in case of release into water or sewage system.

6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust).
Dispose of contaminated material as waste in accordance with Section 13.

6.4 Reference to other sections
For information on safe handling see Section 7.
For information on personal protection see Section 8.

Section 7: Handling and storage

7.1 Precautions for safe handling
Store in well closed containers in a cool and dry place.
Measures to protect against fire and explosions
No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Information on storage conditions
Store in well closed containers in a cool and dry place.
Keep container tightly sealed.
Store only in unopened original containers.
Requirements for storage rooms and containers
No special requirements.
Storage class: LGK 12 Non-combustible liquids

7.3 Specific end uses

Industry and sector specific guidelines
No further relevant information available.

Section 8: Exposure controls/Personal protection

8.1 Parameters to be monitored

Occupational exposure limit values and/or biological limit values
Occupational exposure limit values (OEL)

Substance name: 2-Octyl-2H-isothiazol-3-one; CAS No.: 26530-20-1
Specification: Occupational exposure limit values according to TRGS 900 (status 01/2006)
Value: 0.05E mg/m³
Peak limitation: 2(I)
Teratogenic: DFG, H, Y

Substance name: Pyrithione Zinc; CAS No.: 13463-41-7
Specification: Occupational exposure limit values in accordance with TRGS 900 see section IIb
Teratogenic: MAK

8.2 Limitation and monitoring of exposure

Personal protective equipment

General protective and hygenic measures
After processing the product, use a greasy hand cream.
Wash hands before breaks and at the end of work.

Eye/face protection
When refilling, it is advisable to wear tight fitting safety goggles.

Skin protection

Hand gloves
With full contact:
Glove material: Nitrile rubber
Layer thickness (mm): ≥0.4 mm
Penetration time (min.): > 480 minutes

In splash contact:
Glove material: Nitrile rubber
Layer thickness (mm): ≥0.4 mm
Penetration time (min.): > 480 minutes

Other skin protection
butyl rubber
Fluoro rubber (Viton)
PVC gloves.

Gloves made of the following materials are not suitable
No other relevant information available.

Respiratory protection
Not required.

Body protection
Work protective clothing

Limitation and monitoring of environmental exposure
See Section 6 and 7

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
- Physical state:	Liquid
- Colour:	According to product designation
Odour:	Characteristic
Odour threshold:	Not specified
pH-value:	8.0 ± 0.5 (DIN 19261)
Melting point/Freezing point:	Not specified
Initial boiling point and boiling range:	Not specified
Flash point:	Not applicable
Evaporation rate:	Not specified
Flammability (solid, gaseous):	This substance is not flammable.
upper/lower flammability or explosive limits:	Not applicable
Vapour pressure:	23 hPa (calculated)
Vapor density:	Not specified
Density:	1.05 g/cm³ ± 0.1 g/cm³
Solubility:	Fully miscible
Partition coefficient:	Not specified
n-octanol/water:	Not specified
Autoignition temperature:	Not applicable
Decomposition temperature:	Not specified
Viscosity:	Not specified
Explosive properties:	The product / substance is not explosive.
Oxidizing properties:	Not specified

9.2 Other information
No further relevant information available.

Abschnitt 10: Stabilität und Reaktivität

10.1 Reaktivity
No further relevant information available.

10.2 Chemical stability
No decomposition when used as intended.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials
No further relevant information available.

10.6 Hazardous decomposition products
No further relevant information available.

Section 11: Toxicological information

11.1 Information on toxicological effects
The mixture is not tested as such. The preparation is classified according to the conventional method (calculation method of Regulation (EC) No 1272/2008) and toxicological hazards.

Acute toxicity
Based on available data, the classification criteria are not met.
LD/LC_{50} values relevant for classification

2-Octyl-2H-isothiazol-3-one; CAS No.: 26530-20-1
Oral LD_{50} >500 mg/kg (rat) JRF Study no.: 3741, (2002)
Dermal LD_{50} >900 mg/kg (rat) Huntingdon, Study no: 91252F/THR 17/AC, (08/1991)
Inhalativ LC_{50} 0.27 mg/l (rat) Huntingdon Study no: THR 21/911314. (01/1992)

Pyrithione Zinc; CAS No.: 13463-41-7
Oral LD_{50} 774 mg/kg (rat)
dermal LD_{50} >2000 mg/kg (rat)
Inhalative LC_{50} 1.03 mg/l (rat)

Terbutryn (ISO); CAS No.: 886-50-0
Oral LD_{50} 774 mg/kg (rat)
dermal LD_{50} >2000 mg/kg (rat)
Inhalative LC_{50} 1.03 mg/l (rat)

Skin corrosion / irritation
No irritant effect on the skin known.
Serious eye damage / irritation
Based on available data, the classification criteria are not met.
Sensitization of the respiratory tract/skin
Based on available data, the classification criteria are not met.
Germ cell mutagenicity
Based on available data, the classification criteria are not met.
Carcinogenicity
Based on available data, the classification criteria are not met.
Reproductive toxicity
Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure
Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure
Based on available data, the classification criteria are not met.
Aspiration hazard
Based on available data, the classification criteria are not met.

Section 12: Ecological information

12.1 Toxicity

2-Octyl-2H-isothiazol-3-one; CAS No.: 26530-20-1
EC_{50} / 48h 0.42 mg/l (daphnia) (OECD 202) S 95
IC_{50} / 72h 0.084 mg/l (Scenedesmus subspicatus)
LC_{50} / 96h 0.03 mg/l (rainbow trout)
EC_{50} / 72h 0.84 mg/l (Scenedesmus subspicatus) (OECD 201) S 63

Pyrithione Zinc; CAS No.: 13463-41-7
EC_{50} / 48h 0,05 mg/l (daphnia)
IC_{50} / 72h 0.067 mg/l (Selenastrum capricomutum)
LC_{50} / 96h 0.06 mg/l (rainbow trout)

Terbutryn (ISO); CAS No.: 886-50-0
EC_{50} / 48h 7.1 mg/l (daphnia) (OECD 202) S 95
IC_{50} / 72h 0.084 mg/l (Selenastrum capricomutum)
LC_{50} / 96h 1.8 mg/l (Leilfleckbärbling)
EC_{50} / 72h 0.104 mg/l (Pseudokirchneriella subcapitata) (OECD 201)

12.2 Persistence and degradability

No further relevant information available.
Degree of elimination:
2-Octyl-2H-isothiazol-3-one; CAS-No.: 26530-20-1
OECD 309 Simulation Biodegration-Surface water:
0.6-1.4 d ((-)) (half life) rapidly biodegradable; S 635

12.3 Bioaccumulative potential

2-Octyl-2H-isothiazol-3-one; CAS-No.: 26530-20-1
OECD 117 Log Kow (HPLC method)
OECD 305 BCF
2.92 ((-)) (n-Octanol/water)
507-538 BCF (fresh water fishes)

Pyrithione Zinc; CAS-No.: 13463-41-7
OECD 107 (shake flask method)
1.21 ((-)) (n-Octanol/water)

Terbutryn (ISO); CAS-No.: 886-50-0
OECD 117 Log Kow (HPLC method)
OECD 305 BCF

3.19 ((-)) (n-Octanol/water)
103 BCF ((-)) ((calculated) EPIWIN)

12.4 Mobility in soil

No further relevant information available.

Behaviour in sewage treatment plants:
2-Octyl-2H-isothiazol-3-one; CAS No.: 26530-20-1
EC_{50} 0.42 mg/l (30.4 mg/l (activated sludge organisms) OECD 209
EC_{20} / 0.5h 0.084 mg/l 10.4 mg/l (activated sludge organisms) (TTC test) 8901 Macherey nail
EC_{20} / 3h 0.03 mg/l 7.3 mg/l (activated sludge organisms) (OECD 209)

Terbutryn (ISO); CAS No.: 886-50-0
EC20 / 3h >100 mg/l (daphnia) (OECD 209)

12.5 Result of PBT and vPvB assessment

Not applicable

12.6 Other adverse effects

No further relevant information available.

Section 13: Disposal information

13.1 Waste treatment methods

Recycling by treatment or landfill according to legal and local regulations.
Smaller quantities can be disposed of together with household waste.

Treatment of contaminated packaging

Dispose according to official regulations.

Waste code according to Waste Catalog Ordinance (AVV)

080112 paint and paint waste except for those falling under 08 01 11

Section 14: Transport information

14.1 UN-Number

Not applicable

14.2 Proper UN Shipping Name

ADR/RID

Not applicable

IMDG code / ICAO-TI / IATA-DGR

Not applicable

14.3 Transport risk classes

Not applicable

14.4 Packaging group

Not applicable

14.5 Environmental hazards

Environmentally hazardous substances

ADR/RID / IMDG code / ICAO-TI / IATA-DGR: ☐ yes / ☒no

Marine Pollutant: ☐ yes / ☒no

14.6 Special precautions for the user

See sections 6 - 8

14.7 Bulk cargo transportation in accordance with Annex II of the MARPOL Convention and the IBC Code

Not applicable

Section 15: Regulatory information

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

Regulation (EC) No 2037/2000 (substances that deplete the ozone layer):

Not applicable

Regulation (EC) No 850/2004 (persistent organic pollutants):

Not applicable

Regulation (EC) No 689/2008 (export and import of dangerous chemicals):
Not applicable

Regulation (EC) No 648/2004 (Detergents Regulation):
Not applicable

Restrictions under Title VIII of Regulation (EC) No 1907/2006:
Not applicable

Water hazard class
1 slightly hazardous to water

Solvent Ordinance (31. BImSchV)
VOC proportion: 0 (calculated)

15.2 Chemical Safety Assessment
The mixture was not subject to safety assessment

Section 16: Other information

Changes compared to the last version
See Section 8.2

Abbreviations
ADR: European Convention on the International Transport of Dangerous Goods by Road.
AwSV: Regulation on facilities for handling substances that endanger water
BImSchV: Regulation to implement the Federal Import Protection Act
CAS: Chemical Abstracts Service
DIN: Norm of the German Institute for Standardization
EC: Effective concentration
EG: European Community
EN: European standard
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
PBT: Persistent, bioaccumulative and Toxic
VPvB: very Persistent and very Bioaccumulative
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 3: Acute toxicity – Category 3
Skin corr. 1B: Skin irritant de/-corrosive effect – Category 1B
Eye Dam. 1: Severe eye damage/eye irritation – Category 1
Skin Sens. 1: Sensitising the skin – category 1
Aquatic Acute 1: Water pollution hazard - acute water pollution hazard – Category 1
Aquatic Chronic 1: Water hazard - long-term water hazard – Category 1
Aquatic Chronic 3: Water hazard - long-term water hazard – Category 3

Methods referred to in Article 9 of Regulation (EC) No 1272/2008 were used to assess the information for classification purposes
Calculation method

Wording of the hazard statements and / or precautionary statements referred to in sections 2 to 15
H226 Flammable liquid and vapour.
H301 Toxic if swallowed.

H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H317 May cause allergic skin reactions.
H318 Causes severe eye damage.
H331 Toxic by inhalation.
H332 Harmful by inhalation.
H400 Very toxic to aquatic organisms.
H410 Very toxic to aquatic organisms with long-term effects.H315: Causes skin irritation.
H318: Causes severe eye damage.
H335: May irritate respiratory tract.

Training for employees
No training is required for activities involving this hazardous substance.

Further information

This data sheet is intended as a guideline for the proper handling of the product by trained personnel. To the best of our knowledge, the information in this safety data sheet corresponds to our knowledge at the time of printing. They do not constitute an assurance of certain product characteristics and do not establish a contractual legal relationship. It is the responsibility of the user to ensure that all information and properties are consistent with his particular application. The product is designed for a specific application, so the user himself is liable for risks and damages due to other applications. It does not release the user from knowing and using all information about the handling of the product. He is responsible for all measures regarding the use of the product.