

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Miele Mixed Bed Resin E315 - single use

Version	Date:	SDS Number:	Date of last issue: -
1.0	22.05.2020	425091	Country / Language: GB / EN(GB)

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

1.1 Product identifier

Trade name : Miele Mixed Bed Resin E315 single use

Product code : 425091

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

Use of the Sub-stance/Mixture : Ion exchange, resins and catalysts

1.3 Details of the supplier of the safety data sheet

Supplier : EnviroFALK GmbH
Process water technology,
Gutenbergstrasse 7
56457 Westerburg, Germany

Telephone : +49 2663 9908 0

E-mail address of person responsible for the SDS : sdb@envirofalk.com

1.4 Emergency telephone number

0870 190 6777. National Chemical Emergency Centre
+49 2663 9908-23 EnviroFALK Hotline (Monday - Friday, 8:00 - 15:00 (MET/MEST))

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Serious eye damage, Category 1 H318: Causes serious eye damage.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H318 Causes serious eye damage.

Precautionary statements : **Prevention:**
P280 Wear eye protection/ face protection.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Miele Mixed Bed Resin E315 - single use

Version	Date:	SDS Number:	Date of last issue: -
1.0	22.05.2020	425091	Country / Language: GB / EN(GB)

Response:

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label:

Ethylethenylbenzene, ethenylbenzene, diethenylbenzene polymer, methanaminiumN,N,N-trimethyl hydroxide

Ethylbenzene, ethylethenylbenzene, diethenylbenzene polymer, sulfonated

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Ethylethenylbenzene, ethenylbenzene, diethenylbenzene polymer, methanaminiumN,N,N-trimethyl hydroxide	69011-18-3	Eye Dam. 1; H318	>= 30 - < 50
Ethylbenzene, ethylethenylbenzene, diethenylbenzene polymer, sulfonated	69011-20-7	Eye Dam. 1; H318	>= 10 - < 20

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : Call a physician or poison control centre immediately.
Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.
If not breathing, if breathing is irregular or if respiratory arrest

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Miele Mixed Bed Resin E315 - single use

Version	Date:	SDS Number:	Date of last issue: -
1.0	22.05.2020	425091	Country / Language: GB / EN(GB)

- occurs, provide artificial respiration or oxygen by trained personnel.
It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
Loosen tight clothing such as a collar, tie, belt or waistband.
In case of inhalation of decomposition products in a fire, symptoms may be delayed.
The exposed person may need to be kept under medical surveillance for 48 hours.
If symptoms persist, call a physician.
- In case of skin contact : Call a physician immediately.
If on skin, rinse well with water.
Continue to rinse for at least 10 minutes.
Chemical burns must be treated promptly by a physician.
Remove contaminated clothing and shoes.
Wash contaminated clothing before re-use.
Thoroughly clean shoes before reuse.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
Call a physician immediately, preferably one experienced with HF burns/ exposure.
- If swallowed : If swallowed, call a poison control centre or doctor immediately.
Move the victim to fresh air.
Rinse mouth with water.
Keep patient warm and at rest.
If conscious, make the victim drink the following:
Give small amounts of water to drink.
Maintain open airway.
Stop if the exposed person feels sick as vomiting may be dangerous.
If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel.
If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
Chemical burns must be treated promptly by a physician.
Never give anything by mouth to an unconscious person.
If unconscious, place in recovery position and get medical attention immediately.
Loosen tight clothing such as a collar, tie, belt or waistband.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Miele Mixed Bed Resin E315 - single use

Version	Date:	SDS Number:	Date of last issue: -
1.0	22.05.2020	425091	Country / Language: GB / EN(GB)

4.2 Most important symptoms and effects, both acute and delayed

Risks : Causes serious eye damage.

Treat symptomatically.
See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : See Section 11 for more detailed information on health effects and symptoms.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Nitrogen oxides (NO_x)

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.
No action shall be taken involving any personal risk or without suitable training.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Miele Mixed Bed Resin E315 - single use

Version	Date:	SDS Number:	Date of last issue: -
1.0	22.05.2020	425091	Country / Language: GB / EN(GB)

Keep unnecessary and unprotected personnel from entering.
Do not touch or walk through spilt material.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Avoid dust formation.
Move containers from spill area.
Do not dry sweep.
Use approved industrial vacuum cleaner for removal.
Keep in suitable, closed containers for disposal.
Dispose of wastes in an approved waste disposal facility.
Do not allow spilled material or wash water to enter sewers, surface waters, or groundwater systems.

6.4 Reference to other sections

For personal protection see section 8.
For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles.
Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures : When using do not eat or drink. When using do not smoke.
Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Take action to prevent static discharges. Do not allow to dry.

Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

Recommended storage temperature : -20 - 40 °C

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Miele Mixed Bed Resin E315 - single use

Version	Date:	SDS Number:	Date of last issue: -
1.0	22.05.2020	425091	Country / Language: GB / EN(GB)

Further information on storage stability : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

Eye protection : Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Hand protection

Material : Polyvinyl chloride - PVC
Wearing time : < 60 min

Material : Nitrile rubber - NBR
Wearing time : < 60 min

Material : Polychloroprene - CR
Wearing time : < 60 min

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves. After contamination with product change the gloves immediately and dispose of them according to relevant national and local regulations

Skin and body protection : Wear suitable protective clothing.

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : Dust-protection mask if there is a risk of dust formation.

Filter type : P1 filter

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : beads

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Miele Mixed Bed Resin E315 - single use

Version 1.0	Date: 22.05.2020	SDS Number: 425091	Date of last issue: - Country / Language: GB / EN(GB)
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Colour	: brown, black
Odour	: amine-like
Odour Threshold	: No data available
pH	: 6 - 9 Concentration: 10 %
Melting point/freezing point	: No data available
Boiling point/boiling range	: No data available
Flash point	: No data available
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: 1.17 g/cm ³ (20 °C)
Bulk density	: 752 kg/m ³
Solubility(ies) Water solubility	: insoluble
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: > 500 °C Auto-flammability
Decomposition temperature	: No data available
Viscosity	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2 Other information

Self-ignition	: > 500 °C
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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Miele Mixed Bed Resin E315 - single use

Version	Date:	SDS Number:	Date of last issue: -
1.0	22.05.2020	425091	Country / Language: GB / EN(GB)

Auto-ignition temperature

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
Stable under recommended storage conditions.
No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : Take measures to prevent the build up of electrostatic charge.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Remarks: Test results on an analogous product

Components:

Ethylethenylbenzene, ethenylbenzene, diethenylbenzene polymer, methanaminiumN,N,N-trimethyl hydroxide:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Ethylbenzene, ethylethenylbenzene, diethenylbenzene polymer, sulfonated:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Miele Mixed Bed Resin E315 - single use

Version	Date:	SDS Number:	Date of last issue: -
1.0	22.05.2020	425091	Country / Language: GB / EN(GB)

Skin corrosion/irritation

Not classified based on available information.

Product:

Result: No skin irritation

Remarks: Test results on an analogous product

Components:

Ethylethenylbenzene, ethenylbenzene, diethenylbenzene polymer, methanaminiumN,N,N-trimethyl hydroxide:

Result: No skin irritation

Remarks: Test results on an analogous product

Ethylbenzene, ethylethenylbenzene, diethenylbenzene polymer, sulfonated:

Result: No skin irritation

Remarks: Test results on an analogous product

Serious eye damage/eye irritation

Causes serious eye damage.

Product:

Result: Risk of serious damage to eyes.

Remarks: Test results on an analogous product

Remarks: May cause irreversible eye damage.

Components:

Ethylethenylbenzene, ethenylbenzene, diethenylbenzene polymer, methanaminiumN,N,N-trimethyl hydroxide:

Assessment: Risk of serious damage to eyes.

Remarks: Test results on an analogous product

Ethylbenzene, ethylethenylbenzene, diethenylbenzene polymer, sulfonated:

Assessment: Risk of serious damage to eyes.

Remarks: Test results on an analogous product

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Miele Mixed Bed Resin E315 - single use

Version	Date:	SDS Number:	Date of last issue: -
1.0	22.05.2020	425091	Country / Language: GB / EN(GB)

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: According to our experience and information the product has no harmful effects on health if properly handled.

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

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 Other adverse effects

Product:

Additional ecological information : The product is insoluble in water. Therefore, ecological tests have not been conducted.

SAFETY DATA SHEET

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Miele Mixed Bed Resin E315 - single use

Version	Date:	SDS Number:	Date of last issue: -
1.0	22.05.2020	425091	Country / Language: GB / EN(GB)

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- | | | |
|------------------------|---|--|
| Product | : | Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company. |
| Contaminated packaging | : | Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers. |
-

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

- | | | |
|-------------------|---|--|
| Hazard statements | : | Not dangerous cargo.
Risk of serious damage to eyes.
Avoid temperatures below -20 °C.
Keep separated from foodstuffs. |
|-------------------|---|--|

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

- | | | |
|---|---|----------------|
| International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors | : | Not applicable |
| REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). | : | Not applicable |
| REACH - List of substances subject to authorisation | : | Not applicable |
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(Annex XIV)

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Not applicable

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

Full text of H-Statements

H318 : Causes serious eye damage.

Full text of other abbreviations

Eye Dam. : Serious eye damage

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

Further information

Classification of the mixture:

Eye Dam. 1 H318

Classification procedure:

Based on product data or assessment

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet and its Annex [if required according to Regulation (EC) 1907/2006 (REACH)] is to describe the products in terms of their safety requirements. The given details do not imply any guarantee concerning the composition, properties or performance.