

SAFETY DATA SHEET

M-35 Methylene Urea Resin

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name:

M-35 Methylene Urea Resin

Unique formula identifier (UFI):

UM90-00YY-6001-5N9V

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

Relevant identified uses of the substance or mixture: Fertiliser
Restricted to professional users.

Use descriptors (REACH):

Sectors of use	Description
LCS "IS"	Industrial uses: Uses of substances as such or in preparations at industrial sites
SU 1	Agriculture, forestry, fishery
Product category	Description
PC 12	Fertilizers
Process category	Description
PROC 7	Industrial spraying

Uses advised against : None known.

1.3. Details of the supplier of the safety data sheet

Company and address:

Brineflow Ltd
Ferry House
South Denes Road

NR30 3PJ Great Yarmouth
England
01493 809820

Contact person:

Patricia Wormald

E-mail:

patricia.wormald@cea-res.co.uk

Revision:

09/08/2024

SDS Version:

1.0

1.4. Emergency telephone number

Emergency telephone number +44 (0)1493809820

SECTION 2: HAZARDS IDENTIFICATION

Classified according to Regulation (EC) No. 1272/2008 (CLP).

2.1. Classification of the substance or mixture

Skin Sens. 1; H317, May cause an allergic skin reaction.

2.2. Label elements

Hazard pictogram(s):



Signal word:

Warning

Hazard statement(s):

May cause an allergic skin reaction. (H317)

Precautionary statement(s):

General:

Keep out of reach of children. (P102)

Prevention:

Avoid breathing mist/vapour. (P261)

Wear eye protection/protective gloves/protective clothing. (P280)

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)

If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)

Storage:

Protect from sunlight. Store in a well-ventilated place. (P410+P403)

Disposal:

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Hazardous substances:

Urea, polymer with formaldehyde

Additional labelling:

Not applicable.

2.3. Other hazards

Additional warnings:

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Urea, polymer with formaldehyde	CAS No.: 9011-05-6 EC No.: 618-464-3 REACH: Index No.:	40-60%	Skin Sens. 1, H317	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

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SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information:

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet.
Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation:

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact:

IF ON SKIN: Wash with plenty of water and soap.
Remove contaminated clothing and shoes.
Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.
If skin irritation occurs: Get medical advice/attention.

Eye contact:

If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes.
Remove contact lenses. Seek medical assistance and continue flushing during transport.

Ingestion:

If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink.

In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns:

Not applicable.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact. Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

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

If skin irritation or rash occurs: Get medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Containers can burst violently or explode when heated, due to excessive pressure build-up. Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO₂). Carbon monoxide (CO). Oxides of nitrogen.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders:

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution

(sewers, waterways, soil or air). Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Small spill:

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill:

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

6.4. Reference to other sections

See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin, eyes and clothing. Avoid breathing gas, fume, vapours or spray. Use only in well ventilated areas. If ventilation is inadequate, suitable respiratory protection must be worn. Keep only in the original container. Keep container tightly sealed when not in use. Product residues retained in emptied containers can be hazardous. Do not reuse empty containers.

Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. For personal protection, see Section 8.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material:

Keep only in original packaging.

Storage conditions:

Keep container tightly sealed when not in use. Use appropriate containment to avoid environmental contamination. Keep away from food, drink and animal feeding stuffs. Store the containers in a dry well-ventilated room in a sealed condition, avoiding direct sunlight.

Incompatible materials:

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits

formaldehyde

Long-term exposure limit (8-hour TWA): WEL 2 ppm 2.5 mg/m³

Short-term exposure limit (15-minute): WEL 2 ppm 2.5 mg/m³

WEL = Workplace Exposure Limit.

DNEL

Formaldehyde

Workers - Inhalation; Short term systemic effects: 1 ppm

Workers - Inhalation; Long term local effects: 0.5 mg/m³

Workers - Inhalation; Short term local effects: 0.75 mg/m³

Workers - Inhalation; Long term systemic effects: 0.5 mg/m³

Workers - Dermal; Long term systemic effects: 240 mg/kg/day

Workers - Dermal; Long term local effects: 0.037 mg/cm²

PNEC

Formaldehyde

- Water; 4.7 mg/l

- Fresh water; 0.47 mg/l

- marine water; 0.47 mg/l

- Sediment (Freshwater); 2.44 mg/kg

- Sediment (Marinewater); 2.44 mg/kg

- Soil; 0.21 mg/kg

- STP; 0.19 mg/l

8.2. Exposure controls

Apply general control to prevent unnecessary exposure

General recommendations:

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios:

There are no exposure scenarios implemented for this product.

Exposure limits:

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures:

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures:

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure:

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally:

Use only CE marked protective equipment.

Respiratory Equipment:

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Type	Class	Colour	Standards	
AX		Brown	EN14387	
A	Class 2 (medium capacity)	Brown	EN14387	

Skin protection:

Recommended	Type/Category	Standards	
Use chemically protective clothing.			

Hand protection:

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Vinyl/PVC	-	> 480	EN374-3, EN388	
Cotton/Latex	-	> 480	EN374-2, EN374-3, EN388	

Eye protection:

Type	Standards	
Safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<i>Physical state:</i>	Liquid
<i>Colour:</i>	Colourless
<i>Odour / Odour threshold:</i>	Testing not relevant or not possible due to the nature of the product.
<i>pH:</i>	9.80-10.80
<i>Density (g/cm³):</i>	-
<i>Relative density:</i>	1.258-1.2763 (25 °C)
<i>Kinematic viscosity:</i>	27-79 centistokes (25 °C)
<i>Particle characteristics:</i>	Does not apply to liquids.

Phase changes

<i>Melting point/Freezing point (°C):</i>	Testing not relevant or not possible due to
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<i>Softening point/range (°C):</i>	the nature of the product.
<i>Boiling point (°C):</i>	Does not apply to liquids.
<i>Vapour pressure:</i>	>100
<i>Relative vapour density:</i>	Testing not relevant or not possible due to the nature of the product.
<i>Decomposition temperature (°C):</i>	Testing not relevant or not possible due to the nature of the product.

Data on fire and explosion hazards

<i>Flash point (°C):</i>	>100 Closed cup
<i>Flammability (°C):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Auto-ignition temperature (°C):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Lower and upper explosion limit (% v/v):</i>	Testing not relevant or not possible due to the nature of the product.

Solubility

<i>Solubility in water:</i>	Soluble
<i>n-octanol/water coefficient (LogKow):</i>	Testing not relevant or not possible due to the nature of the product.
<i>Solubility in fat (g/L):</i>	Testing not relevant or not possible due to the nature of the product.

9.2. Other information

<i>Other physical and chemical parameters:</i>	No data available.
<i>Refractive Index:</i>	1.4690-1.4810
<i>Oxidizing properties:</i>	Testing not relevant or not possible due to the nature of the product.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

Hazardous reactions or instability may occur under certain conditions of storage or use.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

Reactive or incompatible with the following materials: Acids and salts of aluminum and ammonia.

10.6. Hazardous decomposition products

Decomposition products may include the following materials: carbon monoxide, carbon dioxide, aldehydes (including formaldehyde), hydrogen cyanide, only particles, other organic compounds. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

During mixing and use vapors of formaldehyde may be evolved.

SECTION 11: TOXICOLOGICAL INFORMATION

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

Acute toxicity

FORMALDEHYDE

Acute toxicity - oral

Acute toxicity oral (LD50mg/kg): 640.0

Species: Rat

ATE oral (mg/kg): 100.0

Skin corrosion/irritation

Acute toxicity - dermal

Acute toxicity dermal (LD50 mg/kg): 270.0

Species: Rabbit

ATE dermal (mg/kg): 300.0

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory sensitisation

Acute toxicity - inhalation

Acute toxicity inhalation (LC50 gases ppmV): 463.0

Species: Rat

ATE inhalation (gases ppm): 100.0

Acute toxicity-inhalation

Acute toxicity-inhalation (LC50 gases ppmV): 463.0

Species: Rat

ATE inhalation (gases ppm): 100.0

Skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

NTP carcinogenicity: Known human carcinogen.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

None known.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute toxicity - aquatic invertebrates

Formaldehyde

EC50, 48 hours: 5.8 mg/l, Daphnia magna

Acute toxicity - aquatic plants Formaldehyde

EC50, 72 hours: 4.89 mg/l, Scenedesmus subspicatus, Freshwater algae

12.2. Persistence and degradability

Not tested but expected to be readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential log Pow: 0.35

12.4. Mobility in soil

Mobile liquid, Completely water soluble

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

The generation of waste should be minimised or avoided wherever possible. Larger quantities should be treated in a suitable plant or disposed of via a licensed waste disposal contractor.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

EWC code:

Not applicable.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Restrictions for application:

Restricted to professional users.
People under the age of 18 shall not be exposed to this product.

Demands for specific education:

No specific requirements.
National regulations The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

SEVESO - Categories / dangerous substances:

Not applicable.

Additional information:

Not applicable.

Sources:

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
Commission Regulation (EU) No 1357/2014 of

18 December 2014 on waste.
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H317, May cause an allergic skin reaction.

The full text of identified uses as mentioned in section 1

LCS "IS" = Industrial uses: Uses of substances as such or in preparations at industrial sites

SU 1 = Agriculture, forestry, fishery

PROC 7 = Industrial spraying

PC 12 = Fertilizers

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWG = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

GWP = Global warming potential

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).

The safety data sheet is validated by

Dr Patricia Wormald

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product.

Information in this safety data sheet cannot be used as a product specification.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated.

However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

Country-language: NL-en