

SAFETY DATA SHEET

In accordance with Regulation (EC) 1907/2006 (REACH), Annex II

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Trade name	Ureaformaldehyde resin – KFS E1
Synonyms	Urea glue
REACH registration number:	KFS is exempted from Registration (article 2(9), REACH regulation)

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

Uses:	As an adhesive in wood and furniture industry after adding relevant hardeners
Uses advised against:	Not known

1.3 Details of the supplier of the safety data sheet

Manufacturer:	NEOCHIM PLC
Address:	East Industrial Zone, Himkombinatska Str. 6403 Dimitrovgrad, Bulgaria
Tel.;fax:	+359 391 65 205; +359 391 60 555
URL website:	http:// www.neochim.bg
Email:	neochim@neochim.bg
Company e-mail for SDS	pto@neochim.bg

1.4 Emergency telephone number

NEOCHIM PLC	+359 2 809 20 30	24/24 h	7/7 d
European Emergency Number	112	24/24 h	7/7 d
National Toxicology Center - Pirogov	+ 359 2 915 42 33	24/24 h	7/7 d
	+ 359 2 915 43 46	24/24 h	7/7 d

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture****2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP)**

Product is not classified as hazardous

2.1.2 Classification according to Directive 1999/45/EC (DPD)

Product is not classified as hazardous

2.2 Label elements

Labelling according to Regulation 1272/2008 (CLP)

Hazard pictogram(s):	Not applicable
Signal word	Not applicable
Hazard statement(s):	Not applicable
Precautionary statement(s):	Do not heat the resin with steam. Heat it using hot water only. Store in tightly covered warehouses at temperatures from 20°C to 30°C.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances							
3.2 Mixtures - hazardous substance Formaldehyde							
CAS №	EO №	Index №	REACH registration №	Content, % (w/w)	Name	Classification according to 67/548/EEC	Classification according to Regulation (EC) No 1272/2008 (CLP)
50-00-0	200-001-8	605-001-00-5	01-2119488953-20-XXXX	max 0.13	formaldehyde	T; R23/24/25 C; R34 R43 Carc. Cat.3; R40 Specific Conc. Limits: ≥25 % T; R23/24/25 C; R34 ≥5-<25.0 Xn; R20/21/22 Xi; R 36/37/38 ≥0.2 R34	Acute tox. 3 ;H301 Acute tox. 3 ;H311 Acute tox. 3 ;H331 Skin corr. 1B; H314 Skin. Sens. 1; H317 Carc. 2; H351 Specific Conc. Limits: ≥25 % Skin corr. 1B ≥5-<25.0 Skin Irrit. 2 Eye Irrit. 2 ≥5.0 STOT Single Exp. 3A ≥0.2 Skin Sens.1
For full text of R- phrases, H and EU statements: see section 16							
SECTION 4: FIRST- AID MEASURES							
4.1 Description of first aid measures							
General information		Can cause sensitization after long time contact with skin.					
Eye contact:		Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.					
Skin contact:		Wash affected skin area thoroughly with plenty of water and soap. If irritation appears: Consult a physician.					
Ingestion:		Do NOT induce vomiting. Wash out mouth with plenty of water and give to victim plenty of water to drink. Consult a physician.					
Inhalation:		Remove the victim to the fresh air. If discomfort occurs and breathing is difficult, seek medical advice.					
4.2 Most important symptoms and effects, both acute and delayed							
Acute effects		Not known					
Delayed effects		Not known					
4.3 Indication of any immediate medical attention and special treatment needed							
Treat symptomatically							
SECTION 5: FIRE - FIGHTING MEASURES							
5.1 Extinguishing media							
Suitable:		Water spray, carbon dioxide or dry chemical.					
Not suitable:		Not known					
5.2 Special hazards arising from the substance or mixture							
Evacuate personnel not engaged in fire fighting. Keep containers cooled by spraying with large amounts of water from a safe distance. Hazardous combustion products: carbon dioxide, carbon oxide and nitrogen oxides.							

5.3 Advice for firefighter

Self-contained breathing apparatus and a chemical protective suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

6.2 Environmental precautions

Do not discharge directly to a water sources. If accidental spillage or washings enter drains or watercourses contact local authority.

6.3 Methods and material for containment and cleaning up

Small spills - absorb with inert material (eg dry sand). Collect large spills by pumping into a spare container suitably labeled. Wash spill area with water. Do not discharge into drains or watercourses.

6.4 Reference to other sections

See section 8 for personal protective equipment and section 13 for waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure adequate ventilation of the stores and work areas. Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/ conditions:	Storage	Do not heat the resin with steam. Heat it using hot water only. Store in tightly covered warehouses at temperatures from 20°C to 30°C.
Suitable packaging materials:		Stainless steel 1.4301 (V2), High density polyethylene (HDPE), Low density polyethylene (LDPE), Stainless steel 1.4401, aluminum
Unsuitable packaging materials:		Paper, board, glass

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Regulated occupational limit values:	exposure	Workplace exposure limits for formaldehyde according to EH40/2005 8 hours - 2.5 mg/m ³ 15 minutes - 2.5 mg/m ³
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<p>Recommended occupational and consumer exposure limit values (following from the performed CSA of the formaldehyde)</p>	<p><u>DNEL – Derived No Effect Level</u> worker: Short-term exposure: - local effects, Inhalation: 1 mg/m³, 0.8 ppm worker: Long- term exposure: - systemic effects, Inhalation: 9 mg/m³ - local effects, Inhalation: 0.5 mg/m³ worker: Long- term exposure: - systemic effects, dermal: 240 mg/kg bw/day - local effects, dermal: 0.037 mg/cm² consumer: Long-term exposure- systemic effects, oral: 4.1 mg/kg bw/day consumer: Long-term exposure- systemic effects, dermal: 102 mg/kg bw/day consumer: Long-term exposure - local effects, dermal: 0.012 mg/cm² consumer: Long-term exposure- systemic effects, Inhalation: 3.2 mg/m³ consumer: Long-term exposure - local effects, Inhalation: 0.1 mg/m³</p>
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	<p><u>PNEC - Predicted No Effect Concentration</u> freshwater: 0.47 mg/l marine water: 0.47 mg/l intermittent release: 4.7 mg/l sediment (freshwater): 2.44 mg/kg sediment (marine water): 2.44 mg/kg soil: 0.21 mg/kg STP: 0.19 mg/l</p>
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8.2 Exposure controls

<p>Appropriate engineering controls:</p>	<p>Use adequate ventilation is good industrial practice.</p>
<p>Environmental exposure controls:</p>	<p>Avoid uncontrolled discharge of rinse water in surface water or sanitary sewer system. Dispose of rinse water in accordance with local and national regulations.</p>

Individual protection measures, such as personal protective equipment (PPE)

<p>Respiratory protection:</p>	<p>Suitable respiratory protection for lower concentrations or short-term effect: Gas filter for gases/vapours of inorganic compounds (e.g. EN 14387 Type B) Suitable respiratory protection for higher concentrations or long-term effect: Self-contained breathing apparatus.</p>
<p>Hand protection:</p>	<p>Protective gloves</p>
<p>Eye protection:</p>	<p>Protective goggles</p>
<p>Skin and body protection:</p>	<p>Protective clothes</p>
<p>Hygiene measures:</p>	<p>Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing.</p>

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<p>Appearance:</p>	<p>Milky white homogeneous suspension without impurities</p>
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Odour:	Specific odour of formaldehyde
Melting/Freezing temperature:	Not applicable
Boiling temperature:	No information available
Flash-point:	No information available
Flammability:	Hardly flammable
Explosive properties:	No explosive properties
Vapour pressure:	Not applicable
Relative density (D4 (20)):	1.270 - 1.300 g/cm ³ at 20 °C
Partition coefficient n-octanol/water:	No information available
Viscosity:	350 - 800 mPa.s at 20 °C
Auto ignition temperature:	No information available
Jelling time at 100°C, s	45-65
Mixing of resin with water in proportion 1:2 at 20°C ± 1°C	Fully
pH of 50% aqueous solution of the resin at 20 ° C	7.5 - 8.5

9.2 Other information

Not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under recommended storage and handling conditions (see section 7, handling and storage).

10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7, handling and storage).

10.3 Possibility of hazardous reactions

Stable under recommended storage and handling conditions (see section 7, handling and storage).

10.4 Conditions to avoid

Heat, flame, ignition sources and incompatible substances.

10.5 Incompatible materials

Incompatible with strong acids and strong oxidizing agents

10.6 Hazardous decomposition product

Carbon dioxide, carbon monoxide, nitrogen oxides and formaldehyde.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

ACUTE TOXICITY

The product has not been tested. The statement that is toxic by inhalation, in contact with skin and if swallowed is based on properties of the **formaldehyde**.

Acute oral toxicity:

LD₅₀: 460-830 mg/kg bw ;(rat)

Acute dermal toxicity:

LD50: 270 mg/kg (rabbit)

Acute inhalation toxicity:

LC₅₀ (4 h) rat = 588 mg/m³ = 490 ppm

	LC ₅₀ (30 min) rat = 1000 mg/m ³ = 830 ppm
LOCAL EFFECTS	Depends on the concentration and duration of exposure, aqueous solutions can cause a strongly irritating or corrosive effect on the skin or eyes.
Skin irritation:	Corrosive (rabbit)
Eye irritation:	Irreversible damage (rabbit)
Skin sensitization:	Aqueous solutions can cause skin sensitization in animal experiments and in humans.
Carcinogenicity:	Formaldehyde is classified as carcinogenic category 2 (Carc. Cat.2), in accordance with Regulation 1272/2008 EC, Annex VI. After lifelong inhalation exposure to concentrations that were severely damaging to the nasal epithelium, nasal tumors were induced in rats; in other species these findings were not found or were considerably less pronounced. The International Agency for Research on Cancer (IARC) has classified formaldehyde as a Group 1 (known) human carcinogen based on epidemiological evidence linking formaldehyde exposure to occurrence of nasopharyngeal cancer and leukemia.
Toxicity to reproduction:	There is no evidence for adverse effects of formaldehyde on embryo and fetal development at dose levels inducing local maternal effects and secondary decrease in body weights and growth.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Substance name: **Formaldehyde**

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Fish:	96h LC ₅₀ : 41 mg/l (Brachydanio rerio)
Aquatic invertebrates:	24h EC ₅₀ : 42 mg/l, Daphnia magna (DIN 38412 Part 11)
Aquatic plants:	192h 2.5 mg/l, Scenedesmus subspicatus Limit concentration test only (LIMIT test).
Microorganisms/Effect on activated sludge:	16-h 14 mg/l, Pseudomonas putida EC20 (5 h) > 1,995 mg/l (DIN EN ISO 8192-OECD 209-88/302/EEC,P. C) The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

12.2 Persistence and degradability

Biodegradation:	On the basis of the data available concerning eliminability/degradation and bioaccumulation potential, longer-term harm to the environment is improbable.
Assessment of stability in water:	According to structural properties, hydrolysis is not expected.

12.3 Bioaccumulative potential

Insignificantly accumulate in organisms.

Octanol-water partition coefficient (K _{ow}):	Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.
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12.4 Mobility in soil

The substance will not evaporate into the atmosphere from the water surface.
Adsorption to solid soil phase is not expected.

12.5 Results of PBT and vPvB assessment

According to Annex XIII of Regulation 1907/2006(EC): not fulfilling vPvB criteria.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with national and international regulations.

SECTION 14: TRANSPORT INFORMATION

Not classified as dangerous goods according to international transport legislation (ADR, RID, IMDG).
Transport in clean and dry containers and comply with conditions of storage. Do not transport together with food and incompatible materials.
If spillage of the roadway, confined spill, absorb with inert material (e.g. sand) and wash spill area with water.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture:	Regulation EC 1907/2006 (REACH), Directive 67/548/EEC and 1999/45/EC , Regulation EC 1272/2008 (CLP), Regulation (EC) 453/2010,
15.2 Chemical safety assessment:	In accordance with REACH Article 14, a Chemical Safety Assessment has been carried out for formaldehyde.

РАЗДЕЛ 16: ДРУГА ИНФОРМАЦИЯ

The information above is on the basis of our knowledge about the product and represents the data currently available to us at the moment of safety data sheet issue. This document is intended as guidance for the appropriate precautionary handling with the product by a properly trained person using this product, and does not legally bind in no way manufacturer with guarantee for specific properties, qualities and applications.
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Full texts of all R-phrases and H-hazards used in Section 3**H statement**

H301: Toxic if swallowed.
H311: Toxic in contact with skin.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H331: Toxic if inhaled.
H351: Suspected of causing cancer if inhaled.

R phrases

R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.
R34: Causes burns.
R43: May cause sensitization by skin contact.
R40: Limited evidence of a carcinogenic effect.

List of abbreviations

PBT – persistent, bioaccumulative and toxic
vPvB - very persistent and very bioaccumulative
NOAEL - no observed adverse effect level
NOAEC - no observed adverse effect concentration
DNEL - derived no-effect level
PNEC - predicted no-effect concentration
PEC - predicted environmental concentration
LOEC - lowest observed effect concentration
NOEC - no observed effect concentration
OECD - Organisation for Economic Cooperation and Development
LC_x - lethal concentration
EC_x - effective concentration
LD_x - lethal dose

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