

UREA FORMALDEHYDE RESIN POWDER

Safety Data Sheet

Date of issue: 01/01/2021 Revision No.:1 Next Revision date: 01/01/2023

SECTION 1: Identification

1.1. Identification

Product Name : Urea-formaldehyde-Resin Powder (UF 300-P-96%)

CAS-No. : 9011-05-6

Synonyms : Urea Formaldehyde Resin Powder

1.2. Recommended use and restrictions on use

Recommended use: Plywood, Blockboard, Laminated Veneer Lumber, Decorative plywood, Composite floor, Building template, MDF/HDF, Bent wood

1.3. Manufacturer

Manufacturer Name : National company for sulphur products

Address: National Company For Sulphur Products,

Head Office: P.O Box 2951, Riyadh 11461

Email: ncsp@ncsp.com.sa
Tel:011 4647711 Fax: 2170866
Factory: 3rd Industrial Area - Dammam

1.4. Emergency telephone number

Emergency number : Tel: 011 4647711 Fax: 2170866

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

UF Resin powder is not classified as Hazardous goods. In its intact state, though the product is non- hazardous in nature, emission of free formaldehyde from the product is hazardous to human health on long term exposure.

2.2. Health Hazard Information:

The product itself emits a very low amount of formaldehyde. However, in well ventilated storage areas or workplace, the concentration of formaldehyde is not likely to affect the general environment.

Exposure to free formaldehyde at workplace may result in the following health effects:

- Eye irritation causing discomfort in the eye.
- Skin irritation resulting in itching and occasional rash.
- Nose, throat and lung irritation, especially on people closest to the emitter.

Explosion Danger : None Scheduled.

Dangerous goods class & Side Risks : None Allocated.

Poisons schedule Number : None Scheduled

SECTION 3: Composition/Information on ingredients

3.1. Substances

Composition:

Name CAS# % by weight

 Urea Formaldehyde Resin
 9011-05-6
 >95

 Formaldehyde
 50-00-0
 < 2</td>

 Water
 7732-18-5
 <3</td>

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general

: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation

: Remove victim from exposure and then have him lie down in the recovery position. Get medical attention if symptoms occur.

First-aid measures after skin contact

: Wash off with plenty of water. Remove and wash contaminated clothing before re-use. Obtain medical attention.



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First-aid measures after eye contact

: Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Obtain medical attention

First-aid measures after ingestion

: Clean mouth with water and drink afterwards plenty of water. Obtain medical attention.

4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

5.2. Specific hazards arising from the chemical

Fire hazard : The material is not readily combustible under normal conditions. Decomposes on heating

emitting toxic fumes Not considered to be a significant fire risk.

5.3. Special protective equipment and precautions for fire-fighters

Protective precautions for firefighters : Firefighters wear breathing apparatus. Protection during firefighting

Combustion resulting from gas : Not applicable
Hazchem code : None allotted.
Auto ignition Temperature : Not Applicable
Flash Point : Not Applicable
Flammable Limits, Lower : Not Applicable
Flammable Limits, Upper : Not Applicable

NFPA Rating (estimated) : Health: 1; Flammable: 0; Instability: 0

The Dust Explosion limit Data for UFR 103P: 135g/m3

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses. Dust mask Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning : Wear protective equipment and damp dust before filling it into containers.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Smoking, eating and drinking should be prohibited in the application area. Work under fume hood. Do not inhale fumes. Avoid contact with skin and eyes. Take off all contaminated clothing immediately. Wash hands and face before breaks and immediately after handling the product. Do not empty into drains.

Hygiene measures : Wash exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store at 15°C to 25°C, i

: Store at 15°C to 25°C, in a well-ventilated place. Keep well closed and protected from direct sunlight and moisture. As the material is hygroscopic, keep containers sealed. Keep away from any ignition sources.

Incompatible material : Moisture.



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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

EXPOSURE LIMITS : UF Resin (Dust) 10 mg/m3. Formaldehyde (vapor): 0.3 ppm

8.2. Appropriate engineering controls

ENGINEERING CONTROLS : Use in a well-ventilated area. Use local exhaust ventilation to remove air borne emissions

below the applicable exposure limits and guidelines

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Safety glasses.





Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear dust mask. Selection of the Class and Type of respirator will depend upon the level of Breathing zone contaminant and the chemical nature of the contaminant.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state and appearance : White free flowing powder

Odor : Slight.

Color : white free flowing powder

pH of solution 50% Solution : 8-9

Boiling Point : Not applicable
Melting point : Approx. 125 OC
Viscosity of 2:1 solution : 2000-6000 cP
Bulk Density : 0.4-0.6 g/cc
Solubility : soluble in water

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

If stored and handled in accordance with standard industrial practices, no hazardous reactions are known.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

If stored and handled in accordance with applicable standard industrial practices and local regulations: None

10.4. Conditions to avoid

Heat, flame, ignition sources and incompatible substances.



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Incompatible materials 10.5.

Incompatible with strong acids and strong oxidizing agents.

Hazardous decomposition products

Carbon dioxide, carbon monoxide, nitrogen oxides and formaldehyde.

SECTION 11: Toxicological information

Information on toxicological effects 11.1.

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 = $588 \text{ mg/m}^3 = 490 \text{ ppm}$ LC50 (30 min) rat = $1000 \text{ mg/m}^3 = 830 \text{ ppm}$

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 272/2008 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 LC50: 41 mg/l (Brachydanio rerio)

Aquatic invertebrates

: 24h EC50: 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.

Persistence and degradability 12.2.

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 (Kow)

: Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Mobility in soil

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.



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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 regulations/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.

SECTION 16: Other Information

Preparation Date : 01/01/2021 Revision Date : 01/01/2023

Prepared by : National Company for Sulphur products

Disclaimer

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