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Material Safety Data Sheet Phenolic Resin

Section 1 - Product Identification

Synonyms : Phenol Formaldehyde Resins

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Recommended use : Thermoset plastic molding compound

Section 2 - Hazards Identification

2.1 Classification

Physical hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 2B

OSHA defined hazards Not classified.

2.2 Label elements Hazard symbol None Signal Word Warning

Hazard Statements Cause eye irritation

Precautionary Statements

Prevention

Wash thoroughly after handling.

Response

If in eyes: 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.

Storage

Store away from incompatible materials.

Disposal

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

Hazard(s) classified (HNOC)

Not otherwise Not classified.

Section 3 – Composition/Information on Ingredients

3.1 Composition comments

Chemical Name	EC No/CAS No	Purity, %
Phenol-formaldehyde resin	9003-35-4	max. 99.9

Section 4 – First-Aid Measures

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4.1. Description of first aid measures

General Advice If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

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

N.A.

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

N.A.

Section 5 – Fire Fighting Measures

5.1. Suitable Extinguishing media

Water, Water fog, Foam, Dry chemical, Carbon dioxide (CO2).

5.2. Specific hazards arising from the chemical

Exposure to elevated temperatures or strong acids will cause rapid, but non-explosive, polymerization with evolution of formaldehyde and water.

5.3. Special protective actions for fire-fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Section 6 – Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7 – Handling and Storage

7.1. Precautions for safe Handling

Observe good industrial hygiene practices. Use only with adequate ventilation. Wash thoroughly after handling.

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7.2. Conditions for safe storage, including any incompatibilities

Keep container closed. Store in a cool place but keep from freezing. Store away from incompatible materials.

Section 8 – Exposure Controls/Personal Protection

8.1. Appropriate engineering controls

Engineering controls are not usually necessary if good hygiene practices are followed.

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

Eye/face protection

Wear eye/face protection such as chemical splash proof goggles or face shield.

Skin protection

Avoid skin contact. Wear impermeable gloves and suitable protective clothing. Since this product is absorbed through the skin, care must be taken to prevent skin contact and contamination of clothing.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For operations where inhalation exposure can occur use an approved respirator. Recommendations are listed below. Other protective respiratory equipment may be used based on user's own risk assessment. Recommended respirators include those certified by NIOSH.

Control of environmental exposure

Do not let product enter drains.

Section 9 – Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Color: yellow-brown Appearance: solid

Odor: slight

Boiling Point: Not applicable

Melting Point: ~ 80 °C 176 °F DIN 53181

Vapor Pressure: Not available

Specific Gravity/Density: 1.25 g/cm³ DIN EN ISO 2811-2

Vapor Density: Not available

Percent Volatile (% by wt.): Not available

pH: Not available

Saturation In Air (% By Vol.): Not available

Evaporation Rate: Not available Solubility In Water: partly soluble

Volatile Organic Content: Not available

Flash Point: > 100 °C 212 °F DIN EN ISO 2719 Flammable Limits (% By Vol): Not available

Autoignition Temperature: > 400 °C 752 °F DIN 51794

Decomposition Temperature: Not available

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Partition coefficient (n-octanol/water): Not available

Odor Threshold: Not available

Viscosity (Kinematic): Not applicable Viscosity (Dynamic): Not applicable

Section 10 – Stability and Reactivity

10.1. Reactivity

N.A

10.2. Chemical stability

Stable under the prescribed storage conditions

10.3. Possibility of hazardous reactions

Exposure to elevated temperatures or strong acids will cause rapid, but non-explosive, polymerization with evolution of formaldehyde and water.

10.4. Conditions to avoid:

Elevated temperatures.

10.5. Incompatible materials

Strong oxidizing agents. Acids.

10.6. Hazardous decomposition products

Formaldehyde.

Section 11 – Toxicological Information

11.1 Health effects associated with ingredients

Information on likely routes of exposure

Ingestion No harmful effects expected in amounts likely to be ingested by accident.

Inhalation Not relevant at normal room temperatures. When heated, harmful vapors may be formed.

Skin contact No adverse effects due to skin contact are expected.

Eye contact Causes eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity No adverse effects are expected.

Skin corrosion/irritation Not assigned.

Serious eye damage/eye irritation Causes eye irritation.

Respiratory sensitization Not assigned.

Skin sensitization Not assigned.

Germ cell mutagenicity Not assigned.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity Not assigned.

Specific target organ toxicity - single exposure Not assigned.

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Specific target organ toxicity - repeated exposure Not assigned.

Aspiration hazard Not applicable.

Further information

The product contains a small impurity of formaldehyde: Formaldehyde is a known skin and respiratory sensitizer

Section 12 – Ecological Information

12.1.Ecotoxicity

Not expected to be harmful to aquatic organisms.

12.2. Bioaccumulative potential

N.A.

12.3. Mobility in soil

N.A.

12.4. Other adverse effects

N.A.

Section 13 – Disposal Considerations

13.1. Disposal methods

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Section 14 – Transport Information

14.1. Transportation Information

US DOT

Dangerous Goods? Not applicable/Not regulated

TRANSPORT CANADA

Dangerous Goods? Not applicable/Not regulated

ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

IMO

Dangerous Goods? Not applicable/Not regulated

Section 15 – Regulatory Information

15.1. Safety, health and environmental regulations

United States (USA): All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

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Canada: One or more components of this product are NOT included on the Canadian Domestic Substances List (DSL).

European Economic Area (including EU): When purchased from an Allnex legal entity based in the EEA (EU or Norway), this product is compliant with the registration of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, pre-registered and/or registered.

Australia: One or more components of this product have NOT yet been included in the Australian Inventory of Chemical Substances (AICS) or assessed by NICNAS.

China: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

Japan: One or more components of this product are NOT included on the Japanese (ENCS and/or ISHL) inventories.

Korea: One or more components of this product are NOT included on the Korean (ECL) inventory.

Philippines: One or more components of this product are NOT included on the Philippine (PICCS) inventory.

Taiwan: All components of this product are included in the Taiwan chemical substance inventory or are not required to be listed on the Taiwan chemical substance inventory (TCSI).

Section 16: Additional Information

16.1. List of abbreviation and acronyms used in this MSDS

SDS: Safety Data Sheets

Index N°: atomic number of the element most characteristic of the properties of the substance

CAS No: Chemical Abstracts Service number

EC No: EINECS Number: European Inventory of Existing Commercial Substances

Repr. Cat. 2 : Substance presumed human reproductive toxicant

Acute Oral Cat. 5: Substance which is of relatively low acute oral toxicity.

GHS: Globally Harmonised System of Classification and Labelling

LD₅₀: Median Lethal Dose

LC₅₀: Lethal Concentration, 50%

N.A.: Not Applicable

OSHA: Occupational Safety & Health Administration

Cal OSHA: The State of California Division of Occupational Safety and Health (DOSH)

PEL: Permissible Exposure Limits

ACGIH: American Conference of Governmental Industrial Hygienists

TLV: Threshold Limit Value

Japanese MITI: Japanese Ministry of International Trade and Industry

EC₅₀: Half maximal effective concentration

UN: United Nations

U.S. EPA TSCA Inventory: Inventory of the chemical substances manufactured or processed in the United States according to Toxic Substances Control Act compiled and published under the autority of the Environmental Protection Agency

Canadian DSL: Canadian Domestic Substances List

16.2. List of relevant hazard statements and precautionary statements used in this MSDS

Hazard Statement

H361 d: Suspected of damaging the unborn child

H319: Causes serious eye irritation

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H303: May be harmful if swallowed

Precautionary Statements

Prevention

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P281: Use personal protective equipment as required.

P264: Wash eyes thoroughly after handling.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P308 + P313: If exposed or concerned: get medical advice/attention.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

Storage

P405: Store locked up.

Disposal

P501: Dispose of contents/container to in accordance with local regulations.

16.3. References

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- 7. Scialli AR, Bonde JP, Brüske-Hohlfeld I, Culver D, Li Y, Sullivan FM; ELSEVIER 2009
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For general information on the toxicology of borates see ECETOC Technical Report No. 63 (1995); Patty's Industrial Hygiene and Toxicology, 4th Edition Vol. II, (1994) Chap. 42, 'Boron'.

16.4. Disclaimer of Liability

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its accuracy, reliability or completeness. The conditions or methods of handling, storage use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. It is the user's responsibility to satisfy himself as to the suitableness and completeness of such information for his own particular use.

This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

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