SDS: 0001146
Date Prepared: 06/17/2024

SAFETY DATA SHEET

1. IDENTIFICATION

Product Name:	**CYMEL® 385 RESIN**
Synonyms:	None
Product Description:	Modified melamine-formaldehyde resin in water
Molecular Formula:	Mixture
Molecular Weight:	Mixture
Intended/Recommended Use:	Encapsulant, Raw material for surface coatings

Allnex USA Inc., 9005 Westside Parkway, Alpharetta, Georgia 30009, USA
For Product and all Non-Emergency Information call your local Allnex contact point or contact us at http://www.allnex.com/contact

EMERGENCY PHONE (24 hours/day) - For emergency only involving spill, leak, fire, exposure or accident call:
+1-866-928-0789 (toll free) or +1-215-207-0061 (Carechem 24 - Allnex29003-NCEC)
See Section 16 for Emergency phone numbers for other regions.

2. HAZARDS IDENTIFICATION

GHS Classification
Carcinogenicity Hazard Category 1B
Skin Sensitizer Hazard Category 1A

LABEL ELEMENTS

Signal Word
DANGER

Hazard Statements
May cause cancer
May cause an allergic skin reaction

Precautionary Statements
Obtain special instructions before use.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Contaminated work clothing should not be allowed out of the workplace.
IF exposed or concerned: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
Specific treatment (see supplemental first aid instructions on this label).
Wash contaminated clothing before reuse.
Store locked up.
Dispose of contents/container in accordance with local and national regulations.

Hazards Not Otherwise Classified (HNOC), Other Hazards
Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS

Component / CAS No.	%	GHS Classification
Formaldehyde 50-00-0	<= 0.25	Carc. 1B (H350) Muta. 2 (H341) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Skin Sens. 1A (H317) Aquatic Acute 2 (H401)

The specific chemical identity and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret.

Additional GHS classification or other information may be included in this section but has not been adopted by OSHA. See Section 16 for full text of H phrases.

4. FIRST AID MEASURES

First-aid Measures

Inhalation:
Remove to fresh air. If breathing is difficult, give oxygen. Obtain medical advice if there are persistent symptoms. Remove to fresh air. Treat symptomatically. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Skin Contact:
Wash immediately with plenty of water and soap. Treat symptomatically. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Eye Contact:
Rinse immediately with plenty of water for at least 15 minutes. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. Treat symptomatically. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If easy to do, remove any contact lenses.

Ingestion:
If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person. Clean mouth with water and drink afterwards plenty of water. Treat symptomatically. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Do NOT induce vomiting.

Most Important Symptoms and Effects, Acute and Delayed
No information available.

Immediate Medical Attention and Special Treatment
Not applicable.

Notes To Physician:
No specific measures have been identified.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:
Use water spray, carbon dioxide or dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media:
full water jet.

Protective Equipment:
Firefighters, and others exposed, wear self-contained breathing apparatus. Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Special Hazards:
Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Product is or contains a sensitizer. May cause sensitization by skin contact.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:
Refer to Section 8 (Exposure Controls/Personal Protection) for appropriate personal protective equipment. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Methods For Containment:
Prevent further leakage or spillage if safe to do so.

Methods For Cleaning Up:
Cover spills with some inert absorbent. Sweep up into containers for disposal. Flush spill area with water. Take up mechanically, placing in appropriate containers for disposal.

Environmental Precautions:
None known.

References to other sections:
See Sections 7, 8 and 13 for additional information.

7. HANDLING AND STORAGE

HANDLING

Precautions: Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Special Handling Statements: Provide good ventilation of working area (local exhaust ventilation if necessary). During processing and handling of the product, comply with the indicative occupational exposure limit values.

Avoid contact with strong acids. Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

STORAGE
Keep from freezing. Do not store together with oxidizing agents. Keep container tightly closed and dry in a cool, well-ventilated place. Store locked up. Keep out of reach of children.

Storage Temperature: Store at 4.4 - 32.2 °C 40 - 90 °F
Reason: Quality.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures:
Engineering controls are not usually necessary if good hygiene practices are followed. Ensure adequate ventilation, especially in confined areas.

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. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure. Where exposures are below the established exposure limit, no respiratory protection is required.
Recommended respirators include those certified by NIOSH.

Recommended:
Full Face Mask with organic vapor cartridge, Type A filter (BP >65°C)

Eye Protection:
Wear eye/face protection. Tight sealing safety goggles.

Skin Protection:
Avoid skin contact. Wear impermeable gloves. Wear suitable protective clothing. Gloves made of plastic or rubber.

Hand Protection:
Wear protective gloves. Recommendations are listed below. Other protective materials may be used based on user's own risk assessment. Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred. Replace gloves immediately when torn or any change in appearance (dimension, color, flexibility etc.) is noticed.

Gloves for repeated or prolonged exposure - non exhaustive list:
Nitrile rubber (NBR), thickness: > 0.38 mm, break through time: > 480 min

Gloves for short term exposure/splash protection - non exhaustive list:
Nitrile rubber (NBR), thickness: 0.12 mm, break through time: up to 240 min

The chemical resistance depends on the type of product and amount of product on the glove. Therefore gloves need to be changed when in contact with chemicals.

Not suitable gloves - non exhaustive list:
Polyvinyl alcohol (PVA), thickness: 0.2-0.3 mm

Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing. Use PE gloves as under gloves for difficult situations like for instance: high exposure, unknown composition or unknown properties of the chemicals.

Additional Advice:
Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water. It is recommended that a shower be taken after completion of workshift especially if significant contact has occurred. Work clothing should then be laundered prior to reuse. Street clothing should be stored separately from work clothing and protective equipment.

Work clothing and shoes should not be taken home. When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wash hands before breaks and after work.

Exposure Limit(s)

50-00-0 Formaldehyde

OSHA (PEL):	0.75 ppm (TWA) 2 ppm (STEL) 2 ppm STEL 15 min 0.5 ppm Action Level 0.75 ppm TWA
ACGIH (TLV):	0.3 ppm (STEL) 0.1 ppm (TWA)
Other Value:	Not established

Biological Exposure Limit(s)

No values have been established.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	white
Appearance:	viscous liquid
Odor:	Formaldehyde
Boiling Point:	~ 100 °C 212 °F
Melting Point:	Not available
Vapor Pressure:	Not available
Specific Gravity/Density:	1.25 g/cm³ @ 25 °C
Vapor Density:	Not available
Percent Volatile (% by wt.):	~ 20 (water)
pH:	8.5 - 9.5
Saturation In Air (% By Vol.):	Not available
Evaporation Rate:	Not available
Solubility In Water:	Complete
Volatile Organic Content:	1 %
Flash Point:	Not applicable
Flammable Limits (% By Vol):	Not available
Autoignition Temperature:	Not available
Decomposition Temperature:	Not available
Partition coefficient n-octanol/water (log value):	Not available
Odor Threshold:	Not available
Viscosity (Kinematic):	480 mm²/s
Viscosity (Dynamic):	600 - 1000 mPa.s
Flammability:	Not available
Oxidizing Properties:	Not available

Other safety characteristics
Not applicable

10. STABILITY AND REACTIVITY

Reactivity:	No information available
Stability:	Stable.
Conditions To Avoid:	None known. Protect from heat and direct sunlight.
Polymerization:	Will not occur
Conditions To Avoid:	None known
Materials To Avoid:	Strong acids and/or oxidizing agents. Nitrating agents None known
Hazardous Decomposition Products:	None known Ammonia (NH3) Carbon dioxide Carbon monoxide (CO) Formaldehyde methanol oxides of nitrogen

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Skin, Eyes, Oral, Respiratory System.

Acute toxicity - oral: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.
Acute toxicity - dermal: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.
Acute toxicity - inhalation: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.

Skin corrosion / irritation: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.
Serious eye damage / eye irritation: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.

Respiratory sensitization: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.
Skin sensitization: May cause an allergic skin reaction

Carcinogenicity: May cause cancer
Germ cell mutagenicity: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.
Reproductive toxicity: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure: Not Classified. **-** Based on available data and/or professional judgment, the classification criteria are not met.
Specific target organ toxicity (STOT) - repeated exposure: Not Classified. **-** Based on available data and/or professional judgment, the classification criteria are not met.

Aspiration hazard: Not Classified **-** Based on available data and/or professional judgment, the classification criteria are not met.

PRODUCT TOXICITY INFORMATION

ACUTE TOXICITY DATA

oral	rat	Acute LD50		> 2000	mg/kg
dermal	rabbit	Acute LD50		> 2000	mg/kg
Inhalation	rat	Acute LC50	4 hr	> 20	mg/l (Vapors)

LOCAL EFFECTS ON SKIN AND EYE

Acute Irritation	Skin	Not irritating
Acute Irritation	eye	Not irritating

ALLERGIC SENSITIZATION

Sensitization	Skin	Sensitizing
Sensitization	respiratory	No data

SUBACUTE/SUBCHRONIC TOXICITY

oral (gavage)	rat	No data
dermal	rat	No data

GENOTOXICITY

Assays for Gene Mutations

Ames Salmonella Assay	No data

OTHER INFORMATION

The product toxicity information above has been estimated.

HAZARDOUS INGREDIENT TOXICITY DATA

Formaldehyde has oral (rat) and dermal (rabbit) LD50 values of 640 mg/kg and 270 mg/kg, respectively. 50% of the mice had reduced respiration rate following a 10 minutes inhalation exposure at a concentration of 4.9 ppm. Irritation of the nose and throat has been observed in people exposed to formaldehyde vapor levels in excess of 1 ppm. Normal breathing may be seriously impaired and serious lung damage can occur. Formaldehyde has been reported to cause pulmonary hypersensitivity in some individuals who were exposed to concentrations known to cause irritation; however, no pulmonary sensitization has been demonstrated in laboratory animal studies. Formaldehyde solutions can cause severe eye and skin irritation. Repeated skin exposure to solutions of 2% or more formaldehyde has caused allergic skin reactions. Formaldehyde was found to be weakly genotoxic in a number of in vitro genotoxicity tests and positive in certain in vivo genotoxicity studies. Formaldehyde did not cause birth defects in rats inhaling concentrations up to 10 ppm. However, a study using higher levels did show a slight but statistically significant reduction in male fetal body weight. Lifetime inhalation of formaldehyde vapor at concentrations above 5 ppm for 6 hours per day, caused nasal tumors in laboratory animals. 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 the occurrence of nasopharyngeal cancer, a rare type of cancer. IARC also found limited evidence of cancer of the nasal cavity and paranasal sinuses and insufficient evidence for an association between formaldehyde and leukemia. Inhalation caused liver and kidney damage in laboratory animal tests.

Carcinogenicity

This product contains one or more Carcinogen Chemical(s) in accordance with IARC (International Agency for Research on Cancer), NTP (National Toxicology Program), ACGIH (American Conference of Governmental Industrial Hygienists).

Component / CAS No.	Carcinogen
Formaldehyde 50-00-0	IARC 1 NTP ACGIH A2

WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

12. ECOLOGICAL INFORMATION

TOXICITY, PERSISTENCE AND DEGRADABILITY, BIOACCUMULATIVE POTENTIAL, MOBILITY IN SOIL, OTHER ADVERSE EFFECTS

The ecological assessment for this material is based on an evaluation of its components.
This material is not classified as dangerous for the environment.

ALGAE TEST RESULTS

Test: Growth Inhibition (OECD 201)
Duration: 72 hr
Species: Green Algae (Desmodesmus subspicatus)
> 100 mg/l EbC50
> 100 mg/l ErC50
Test: Growth Inhibition (OECD 201)
Duration: 72 hr.
Species: Green Algae (Selenastrum capricornutum)
88.3 mg/l ErC50
92.5 mg/l EbC50

FISH TEST RESULTS

Test: Acute toxicity, freshwater (OECD 203)
Duration: 96 hr.
Species: Bluegill Sunfish (Lepomis macrochirus)
> 1000 mg/l LC50 As Water Accommodating Fraction

INVERTEBRATE TEST RESULTS

Test: Acute Immobilization (OECD 202)
Duration: 48 hr **Procedure:** Static
Species: Water Flea (Daphnia magna)
549 mg/l EC50 As Water Accommodating Fraction

DEGRADATION

Test: Closed Bottle (OECD 301D)
Duration: 28 day **Procedure:** Ready biodegradability
47.2 % This material is not readily biodegradable.
Test: Biological Oxygen Demand
Duration: 5 day **Procedure:** Other
10900 mg/l Oxygen

Test: Chemical Oxygen Demand
Procedure: Other
632000 ppm

RESULTS OF PBT AND vPvB ASSESSMENT

Not determined

HAZARDOUS INGREDIENT TOXICITY DATA

Component / CAS No.	Toxicity to Fish
Formaldehyde (50-00-0)	LC50 = 6.7 mg/L - Morone saxatilis (96h)

Component / CAS No.	Toxicity to Water Flea
Formaldehyde (50-00-0)	EC50 = 5.8 mg/L - Daphnia pulex (48h)

Component / CAS No.	Toxicity to Algae
Formaldehyde (50-00-0)	EC50 = 4.89 mg/L - Desmodesmus subspicatus (72hrs)

Component / CAS No.	Partition coefficient
Formaldehyde (50-00-0)	0.35

13. DISPOSAL CONSIDERATIONS

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this SDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this SDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 3 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

14. TRANSPORT INFORMATION

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

US DOT

Dangerous Goods? X
PROPER SHIPPING NAME: OTHER REGULATED SUBSTANCE, LIQUID, N.O.S.
Hazard Class: 9
Packing Group: III
UN/ID Number: NA3082
Transport Label Required: Miscellaneous
TECHNICAL NAME (N.O.S.): FORMALDEHYDE

Component / CAS No.	Hazardous Substances/Reportable Quantity of Product (lbs)
Formaldehyde	40160

Comments: Hazardous Substances/Reportable Quantities - DOT requirements specific to

Hazardous Substances only apply if the quantity in one package equals or exceeds the product reportable quantity.

TRANSPORT CANADA

Dangerous Goods? Not applicable/Not regulated

ICAO / IATA

Dangerous Goods? Not applicable/Not regulated

IMO

Dangerous Goods? Not applicable/Not regulated

SPECIAL PRECAUTIONS FOR USER
PROTECT FROM FREEZING

15. REGULATORY INFORMATION

Inventory Information

United States (USA): All components of this product are designated as “Active” on the TSCA Inventory or are not required to be listed.

Canada: All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

European Economic Area (including EU): When purchased and shipped 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 and/or registered.

United Kingdom: When purchased from allnex UK this product is compliant with the UK-REACH Regulation as all its components are either notified, excluded, exempt and/or registered. If the material has been purchased by your legal entity based in GB from an allnex legal entity based in the EEA (EU or Norway) in 2019 or 2020, you can continue to import the material into GB as it is covered by allnex DUIN.

Australia: All components of this product are included in the Australian Inventory of Industrial Chemicals (AIIC) or are not required to be listed on AIIC.

New Zealand: This product is approved or exempt under the Hazardous Substances and New Organisms (HSNO) Act.

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

Japan: All components of this product are included on the Japanese (ENCS and ISHL) inventories or are not required to be listed on the Japanese inventories.

Korea: All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory. When purchased from Allnex Korea or Chemart distributor this product is compliant with the ARECs (the Act on the Registration and Evaluation, etc. of Chemical Substances). All its components are either excluded, exempt, pre-notified and/or registered. When purchased from another allnex entity, please contact PSRA-KREACH@allnex.com to check the possibility to be covered by our Only Representative.

Philippines: All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine 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).

Switzerland: All components of this product are exempt from the new substance notification requirements for Switzerland (SR 813.11 art. 24-26).

OTHER ENVIRONMENTAL INFORMATION
The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.) See Section 13 for information on waste classification and waste disposal of this product.

Component / CAS No.	%	TPQ (lbs)	RQ(lbs)	S313	TSCA 12B
Formaldehyde 50-00-0	<= 0.25	500	100	Yes	No

PRODUCT HAZARD CATEGORY UNDER SECTIONS 311 AND 312 OF EPCRA

Physical Hazards
Not applicable

Health Hazards
Carcinogenicity
Respiratory or Skin Sensitization

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16. OTHER INFORMATION

NFPA Hazard Rating (National Fire Protection Association)
Health: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

Fire: 1 - Materials that must be preheated before ignition can occur.

Instability: 0 - Materials that in themselves are normally stable, even under fire exposure conditions.

Reasons for Issue: Revised Section 15

Date Prepared: 06/17/2024
Date of last significant revision: 03/06/2022

Component - Hazard Statements
Formaldehyde
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.
H318 - Causes serious eye damage.
H331 - Toxic if inhaled.
H341 - Suspected of causing genetic defects.
H350 - May cause cancer.
H401 - Toxic to aquatic life.

Emergency phone numbers for other regions

Asia Pacific
Australia: +61 1800 022 037 (Allnex Australia)
China (PRC): +86 532 8388 9090 (NRCC)
India: 000 800 100 7479 (toll free) or +65 3158 1198 (Carechem 24)
Indonesia: 007 803 011 0293 (Carechem 24)

Japan: 0120 015 230 (toll free) (Carechem 24)
Korea: +82 2 3479 8401 (Carechem 24)
Malaysia: +60 3 6207 4347 (Carechem 24)
New Zealand: +64 0800 803 002 (Allnex New Zealand)
Philippines: +63 2 231 2149 (Carechem 24)
Taiwan: +886 2 8793 3212 (Carechem 24)
Vietnam: +84 8 4458 2388 (Carechem 24)
All Others: +65 3158 1074 (Carechem 24)

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+44 (0) 1235 239 670 (Carechem 24)

Europe
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Brazil: +55-800-707-7022 (toll free) or +55-11-98149-0850 (Suatrans 24)
Chile: +56 2 2582 9336 (Carechem 24)
Mexico and all others: +52-555-004-8763 (Carechem 24)

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