



SAFETY DATA SHEET

REDIBOND(R) 5330

1. Identification

Product identifier used on the label:

PRODUCT NUMBER (NEW): 70000048
PRODUCT NUMBER (OLD): 70000048
PRODUCT NAME: REDIBOND(R) 5330
liquid starch

Other means of identification

Chemical family: Modified Starch

Recommended use of the chemical and restrictions on use

Recommended use: Papermaking
Restrictions on use: Not Available

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Ingredion Incorporated
5 Westbrook Corporate Center
Westchester, IL. 60154
USA
Emergency phone number: 1-800-424-9400 (CHEMTREC) MEDICAL: 866-374-2659 (Health & Safety Call Center-24 hours) SDS Requests/Customer Service: See phone numbers in Section 16

2. Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200

GHS Hazard

Symbols: No hazard symbols required

GHS Classification: Not Classified by GHS criteria

Hazards not otherwise classified: None known.

3. Composition/information on ingredients

Chemical Name:	CAS #	%
None classified as hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).		

4. First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion

Inhalation:	First aid is not normally required.
Eye Contact:	Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. If symptoms develop, obtain medical attention.
Skin Contact:	Wash skin with soap and water.
Ingestion:	Treat symptomatically and supportively. Get medical attention.

Most important symptoms/effects, acute and delayed:

Not considered as hazardous.

Indication of immediate medical attention and special treatment needed, if necessary:

No further first aid information is available.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Not Applicable
Unsuitable extinguishing media:	None known.

Specific hazards arising from the chemical:

Non-combustible.

Hazardous combustion products:

This product does not undergo spontaneous decomposition. Typical combustion products are carbon monoxide, carbon dioxide, nitrogen and water.

Special protective equipment and precautions for fire-fighters:

Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment as required.

Methods and materials for containment and cleaning up:

Absorb spillages onto sand, earth or any suitable absorbent material. Wash the spillage area with water. Washings must be prevented from entering surface water drains. Disposal should be in accordance with local, state or national legislation.

7. Handling and storage

Precautions for safe handling: As with all chemicals, good industrial hygiene practices should be followed when handling this material.

Safe storage conditions Ambient. Protect from freezing.

Special Sensitivity: Not available

Sensitivity to Mechanical Impact: No

Sensitivity to Static Electricity: No



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Materials to Avoid/Chemical Incompatibility: None known

8. Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available:

Chemical Component	OSHA PEL	ACGIH TLV-TWA	AIHA Exposure limits
No data available			

Appropriate engineering controls

Ventilation Requirements: Normal ventilation expected to be adequate.

Individual protection measures, such as personal protective equipment.:

Eye Protection: Chemical safety glasses.
Skin Protection: Gloves are recommended due to possible irritation.
Respiratory Protection: None required under normal handling conditions.
Other Protective Equipment: Not available
General Hygiene Conditions: Wash before eating, drinking, or using toilet facilities.
Change/Removal of Clothing: Not applicable.

9. Physical and chemical properties

Pure Substance or Mixture: Mixture
Physical state: Liquid
Color: Amber
Odor: Slight
Odor Threshold: Not available
pH: Approximately 7
Melting Point (°C): Not available
Initial boiling point and boiling range (°C): Not available
Flash Point (°C): Not Applicable
Evaporation Rate: 1 (Water = 1)
Flammability (solid, gas): No
Upper flammability or explosive limits: Not available
Lower flammability or explosive limits: Not available
Vapor pressure: Not available
Vapor density: Not available
Relative density: Not available
Specific Gravity: 1.18
Solubility(ies) (in water): Soluble in water
Partition coefficient: n- Not available



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octanol/water:

Auto-ignition temperature (°C): Not Applicable

Decomposition temperature (°C): Not determined.

Viscosity: Not available

Volatiles: Approximately 70 % Water

Volatile Organic Chemicals: Not available

10. Stability and reactivity

Reactivity: Not expected to be reactive

Chemical stability: Stable

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid (e.g., static discharge, shock, or vibration): None known.

Incompatible materials: None known

Hazardous decomposition products: No hazardous decomposition products known.

11. Toxicological information

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Eye Contact, Skin Contact, Ingestion

Symptoms related to the physical, chemical and toxicological characteristics: No data available

Delayed and immediate effects and also chronic effects from short- and long-term exposure:

Acute (Short Term) Effects of Exposure

Effects of Acute Exposure Unlikely to cause harmful effects under recommended conditions of handling and use.

Chronic (Long Term) Effects of Exposure

Effects of Chronic Exposure No known hazards are associated with the use of this material.

Target Organs Not applicable.

Numerical measures of toxicity (such as acute toxicity estimates)



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Has the chemical been classified as a Carcinogen by NTP, IARC or OSHA:

Chemical Name	OSHA Carcinogen	IARC Carcinogen	NTP Carcinogen
There are no components that are known or reported to cause cancer			

12. Ecological information

Ecotoxicity (aquatic and terrestrial, where available): No information available.

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: Unknown

Other adverse effects (such as hazardous to the ozone layer): None known.

13. Disposal considerations

Waste Disposal Methods: Disposal should be in accordance with local, state or national legislation.

Empty Container Warnings: Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.

14. Transport information

DOT Classification: Not regulated

UN number: Not Applicable

UN proper shipping name: Not Applicable

Transport hazard class(es): Not Applicable

Packing group, if applicable: Not Applicable

Environmental hazards (e.g., Marine pollutant (Yes/No)): No data available

Special precautions: Consult IMO regulations before transporting in bulk by ocean.

15. Regulatory information

TSCA Status: This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C. 2601 et. seq.

FDA: 21CFR176.170(b) - Subject to Extraction Requirements of the Regulation.

SARA - Section 313 (Superfund Amendments and Reauthorization Act of 1986 - 40CFR 372)

CAS NUMBER	CONCENTRATION
	(% by weight)

Contains no substances at or



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above the reporting threshold
under Section 313.

CALIFORNIA PROPOSITION 65

WARNING: This product contains the following chemicals that are known to the State of California to cause cancer, birth defects or other reproductive harm.

Unless a concentration is specified in Section 2 of the SDS, the below chemical/s are present in trace amounts.

Component CAS NUMBER

None reportable.

16. Other information, including date of preparation or last revision.

HMIS® Hazard Ratings

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs by OSHA's 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered. NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual. When two ratings are provided for Health, the first represents the material 'as supplied', and the second represents the material 'in use'. * = chronic health hazard HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).

Health	Flammability	Reactivity
1	0	0

Revision Date

04-March-2021

FOR INFORMATION CONTACT:

Ingredion Incorporated

Customer Service telephone: 1-800-713-0208

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