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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier — PARICIN* 285

Synonyms: N,N'-Ethylenebis(12-hydroxystearamide)

Chemical Abstracts Registry No: 123-26-2

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

Plastics Additive

1.3. Details of the supplier of the safety data sheet

Aurorium
201 North Illinois Street, Suite 1800
Indianapolis, Indiana 46204 USA
+1-336-292-1781

e-mail Address: SDS@aurorium.com

1.4. Emergency telephone number

Aurorium: +1-336-292-1781
CHEMTREC (USA): +1-800-424-9300
CHEMTREC (International): +1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture (According to Regulation (EC) No 1272/2008, 29 CFR 1910.1200 and the Globally Harmonized System)

Skin Sensitization Category 1
Environmental Chronic Category 3
Hazard Not Otherwise Classified - Combustible Dust

2.2. Label elements

Hazard Symbols (Pictogram):

Signal Word: Warning

Hazard Precautions:
H317 - May cause an allergic skin reaction.
H412 - Harmful to aquatic life with long lasting effects.

Prevention Precautionary Statements:
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

First Aid Precautionary Statements:
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.

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2.3. Other hazards

Other Hazards: WARNING! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR (DURING PROCESSING).

SECTION 3: Composition/information on ingredients

3.1. Substances or 3.2. Mixtures

Ingredient	CAS Number	Concentration (weight %)	EC Number	CLP Inventory/ Annex VI	EU CLP Classification (1272/2008)
N,N'-Ethylenebis(12-hydroxyoctadecanamide)	123-26-2	90 - 99	204-613-6	Not listed.	Skin Sens. 1; H317 Aquatic Chronic 3; H412

NOTE: See Section 8 for exposure limit data for these ingredients. See Section 15 for trade secret information (where applicable).

SECTION 4: First aid measures

4.1. Description of first aid measures

Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

Eye Contact: Rinse eyes immediately with large amounts of water for at least 15 minutes, occasionally lifting the eyelids. Seek medical advice if symptoms persist.

Inhalation: If exposed to excessive levels remove to fresh air and get medical attention if cough or other symptoms develop.

Ingestion: If swallowed, do not induce vomiting. Get prompt medical attention. Do not give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Acute: Single exposure to inhalation is not likely to be hazardous.
May cause abdominal cramps, nausea, and diarrhea.

Delayed Effects: Sensitization effects may occur following the second or subsequent exposure.

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

Note to Physician: No specific indications. Treatment should be based on the judgment of the physician in response to the reactions of the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Appropriate Extinguishing Media: Use methods suitable to fight surrounding fire., Water spray, water fog, alcohol-resistant foam, carbon dioxide, dry chemical.

5.2. Special hazards arising from the substance or mixture

Hazardous Products of Combustion: None Known

Potential for Dust Explosion: Paricin 285 was tested for dust explosion characteristics and the following results were obtained:
- minimum ignition energy: 3 - 5 mJ
- Minimum ignition temperature of dust cloud: 520 - 530°C

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- Explosion severity - 20L Sphere
- Maximum explosion pressure (bar): 7.9 pressure rise (bar/s): 879
- Kst value (bar.m/s): 239

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.
Refer to European standards: EN1127-1, EN14491, EN14797, EN14373, and EN15089 for safe handling of and controlling explosive atmospheres in the workplace.

Special Flammability Hazards: This product is an organic solid. As such, in its finely divided form, this product has the potential to present a dust explosion hazard under certain conditions, although no dust explosion data is currently available. Handle this product in a manner that prevents dust generation and accumulation, and refer to National Fire Protection Association (NFPA) Standard 654 for further information on prevention of dust explosions.

5.3. Advice for firefighters

Basic Fire Fighting Guidance: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Frothing can occur if a water stream is used.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuation Procedures: Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Special Instructions: See Section 8 for personal protective equipment recommendations. Remove all contaminated clothing to prevent further absorption. Decontaminate affected personnel using the first aid procedures in Section 4. Leather shoes that have been saturated must be discarded.

6.2. Environmental precautions

Prevent releases to soils, drains, sewers and waterways.

6.3. Methods and material for containment and cleaning up

Wear protective equipment during clean-up. Carefully scoop up and place into appropriate disposal container. Scrub area with detergent and water. Avoid generation of dust clouds during clean-up.

6.4. Reference to other sections

Refer to section 8 for information on selecting personal protective equipment. Refer to section 13 for information on spilled product, absorbent and clean up material disposal instructions.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for Unique Hazards: This material may present a dust explosion hazard in solid form and is sensitive to ignition by electrostatic discharge. Maintain areas below flammable vapor / explosive dust concentrations.

Practices to Minimize Risk: Wear appropriate protective equipment when performing maintenance on contaminated equipment. Wash hands thoroughly before eating or smoking after handling this material. Do not eat, drink or smoke in work areas. Prevent contact with incompatible materials. Avoid spills and keep away from drains. Handle in a manner to prevent generation of aerosols, vapors or dust clouds.

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Special Handling Equipment: Use non-sparking tools and ground any equipment used in handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage Precautions & Recommendations: This product should be stored at ambient temperature in a dry, well-ventilated location. Minimize dust generation and accumulation.
Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
Dry powders can build static electricity charges when subjected to friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

Dangerous Incompatibility Reactions: Strong oxidizing agents

Incompatibilities with Materials of Construction: None known

7.3. Specific end use(s)

If a chemical safety assessment has been completed an exposure scenario is attached as an annex to this Safety Data Sheet. Refer to this annex for the specific exposure scenario control parameters for uses identified in subsection 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Country	Occupational Exposure Limit
Canada - Quebec, Denmark (total dust)	10 mg/m3 as an 8-hour time-weighted average
China (total dust)	8 mg/m3 as an 8-hour time-weighted average
Spain (total dust)	0.5 mg/m3 as an 8-hour time-weighted average
Austria (respirable fraction)	5 mg/m3 as an 8-hour time-weighted average; 10mg/m3 Short Term limit
France, Sweden, USA - OSHA (respirable fraction)	5 mg/m3 as an 8-hour time-weighted average
Belgium, Spain, Switzerland (respirable fraction)	3 mg/m3 as an 8-hour time-weighted average
Germany (respirable fraction)	1.5 mg/m3 as an 8-hour time-weighted average
Hungary (respirable fraction)	6 mg/m3 as an 8-hour time-weighted average
Ireland (respirable fraction)	4 mg/m3 as an 8-hour time-weighted average

Air Monitoring Method: Gravimetric analysis for total particulate and respirable fraction (<10 microns).

8.2. Exposure controls

Also see the annex to this SDS (if applicable) for specific exposure scenario controls.

Other Engineering Controls: All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be provided. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Personal Protective Equipment: Chemical goggles or face shield where necessary, impervious gloves and clothing, boots, NIOSH approved chemical cartridge respirator or supplied air breathing apparatus should be used as necessary.

Respirator Caution: Observe OSHA regulations for respirator use (29 CFR 1910.134). Air-purifying respirators must not be used in oxygen-deficient atmospheres.

Thermal Hazards: Not applicable.

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Environmental Exposure Controls:	The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance, State & Odor (ambient temperature):	White Flakes		
Molecular Formula:	C38H76N2O4	Molecular Weight:	624.00
Vapor Pressure:	No data available.	Evaporation Rate:	Not applicable
Specific Gravity or Density:	1.04 g/cm3	Vapor Density (air = 1):	Heavier than air.
Boiling Point:	450 °C	Freezing / Melting Point:	284 °F
Solubility in Water:	Insoluble	Octanol / Water Coefficient:	No data available.
pH:	No data available.	Odor Threshold:	No data available.
Viscosity:	Solid @ 77 °F	Autoignition Temperature:	Greater than melting point
Flash Point and Method:	Not applicable. ()	Flammable Limits:	No data available.
Flammability (solid, gas):	No data available.	Decomposition Temperature:	No data available.
Explosive Properties:	Not explosive.	Oxidizing Properties:	Not an oxidizer.

9.2. Other information

Not applicable.

SECTION 10: Stability and reactivity

10.1. Reactivity	Not classified as dangerously reactive.
10.2. Chemical stability	Stable
10.3. Possibility of hazardous reactions	Polymerization is not expected to occur
10.4. Conditions to avoid	Strong oxidizers.
10.5. Incompatible materials	Strong oxidizing agents
10.6. Hazardous decomposition products	Products of incomplete combustion may include carbon monoxide, carbon dioxide, nitrogen oxides, and dense smoke.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Oral LD_{50}:	2000 mg/ kg
Acute Dermal LD_{50}:	No data available.
Acute Inhalation LC_{50}:	No data available.
Skin Irritation:	May cause slight irritation.
Eye Irritation:	May cause slight irritation.
Skin Sensitization:	Positive for sensitizing effects in guinea pig maximization test
Mutagenicity:	This product was found to be non-mutagenic in various Ames assays, both with and without metabolic activation.
Reproductive / Developmental Toxicity:	No evidence of reproductive effects
Carcinogenicity:	This material is not listed by IARC, NTP or OSHA as a carcinogen. No test data is available that indicates this material is a carcinogen.
Target Organs:	None known
Aspiration Hazard:	Based on physical properties, not likely to be an aspiration hazard.
Primary Route(s) of Exposure:	Skin contact and absorption, eye contact, and inhalation. Ingestion is not likely to be a primary route of exposure.
Most important symptoms and effects, both acute and delayed	Single exposure to inhalation is not likely to be hazardous. May cause abdominal cramps, nausea, and diarrhea. Delayed Effects: Sensitization effects may occur following the second or subsequent exposure.
Additive or Synergistic effects:	None known.

SECTION 12: Ecological information

12.1. Toxicity	No data available.
12.2. Persistence and degradability	Material is inherently biodegradable
12.3. Bioaccumulative potential	Bioconcentration is not expected to occur.
12.4. Mobility in soil	Not expected to be mobile in soil.
12.5. Results of PBT and vPvB assessment	Substance is not bioaccumulative.
12.6. Other adverse effects	No data available.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

US EPA Waste Number:	Non-Hazardous
Waste Classification: (per US regulations)	The waste may be classified as "special" or hazardous per State regulations.
Waste Disposal:	NOTE: Generator is responsible for proper waste characterization. State hazardous waste regulations may differ substantially from federal regulations. Dispose of this material responsibly, and in accordance with standard practice for disposal of potentially hazardous materials as required by applicable international, national, regional, state or local laws, and environmental protection duty of care principles. Do NOT dump into any sewers, on the ground, or into any body of water. For disposal within the EC, the appropriate classification code according to the European Community List of Wastes should be used. Note that disposal regulations may also apply to empty containers and equipment rinsates.

SECTION 14: Transport information

The following information applies to all shipping modes (DOT/IATA/ICAO/IMDG/ADR/RID/ADN), unless otherwise indicated:

14.1. UN number	Not applicable	14.2. UN proper shipping name	Chemicals, n.o.s. (Paricin® 285)
14.3. Transport hazard class(es)	Not applicable	14.4. Packing group	Not applicable
14.5. Environmental hazards	Not applicable		
NA Emergency Guidebook Numbers:	Not applicable	IMDG EMS:	Not applicable;
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code			Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical Inventory Lists:	Status:		
USA TSCA:	Listed	EINECS:	204-613-6
Canada(DSL/NDSL):	DSL	Japan:	(2)-2720
Korea:	Listed KE-13194	Australia:	Listed
China:	Listed 36954	Philippines:	Listed
Taiwan:	Listed	New Zealand:	Listed
German Water Hazard Classification:	No data available.		
SARA 313:	Not listed.		
Reportable Quantities:	None		
State Regulations:	Not applicable.		

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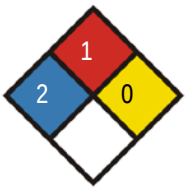
HMIS IV:

NFPA:



15.2. Chemical safety assessment

A chemical safety assessment has not been performed on this substance.

SECTION 16: Other information

Key Data Sources: In-house company data and knowledge, e-chem Portal and Sci-Finder.

Classification Method: Bridging principle - similar substance

Legend of Abbreviations:

ACGIH = American Conference on Governmental Industrial Hygienists.
CAS = Chemical Abstracts Service.
CFR = Code of Federal Regulations.
DSL/NDSL = Domestic Substances List/Non-Domestic Substances List.
EC = European Community.
EINECS = European Inventory of Existing Commercial Chemical Substances.
ELINCS = European List of Notified Chemical Substances.
EU = European Union.
GHS = Globally Harmonized System.
LC = Lethal Concentration.
LD = Lethal Dose.
NFPA = National Fire Protection Association.
NIOSH = National Institute of Occupational Safety and Health.
NTP = National Toxicology Program.
OSHA = Occupational Safety and Health Administration
PEL = Permissible Exposure Limit.
RQ = Reportable Quantity.
SARA = Superfund Amendments and Reauthorization Act of 1986.
TLV = Threshold Limit Value.
WHMIS = Workplace Hazardous Materials Information System.

Important Note: Please note that the information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. The information contained herein may change without prior notice. THIS SAFETY DATA SHEET SUPERSEDES ALL PREVIOUS EDITIONS.

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