

**SAFETY DATA SHEET**

(according to (EC) 1907/2006)

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier** NATURECHEM® CR**Synonyms:** 9-Octadecanoic acid, 12-hydroxy-, hexadecyl ester, (9Z, 12R)- Cetyl Ricinoleate**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Personal Care (FDA regulated use only, see section 15).

1.3. Details of the supplier of the safety data sheet**Manufacturer Information:** Vertellus Performance Materials,
Inc., 2110 High Point Road,
Greensboro, NC 27403 USA**Non-Emergency Phone Number:** 336-292-1781**Non-Emergency Fax Number:****E-Mail Address:**

336-854-4058

msds@vertellus.com

Distributed by:
The HalStar Company*
120 S. Riverside Plaza
Suite 1620
Chicago, IL 60606
Ph: 877-427-4255*Affiliated companies include
RTD**HalStar, Inc.,
HalStar Solutions Corp.,
Ester Solutions Company,
Memphis Solutions Company, and
Marine Magnesium & Minerals Company**1.4. Emergency telephone number**

Vertellus: 336-292-1781

CHEMTREC (USA): (800) 424-9300

(collect calls accepted); (Int'l): (703) 527-3887

(collect calls accepted; 011 prefix not needed)

SECTION 2: Hazards identification

HMIS Rating	
HEALTH	0
FLAMMABILITY	1
REACTIVITY	0

2.1. Classification of the substance or mixture(According to Regulation (EC) No 1272/2008)

Not classified as hazardous under this directive.

Signal Word:

Not required.

Hazard Precautions:

Not classified as hazardous under this directive.

2.2. Label elements**Prevention Precautions:**



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Note: These precautionary statements are not prescribed by directive 1272/2008 as this product is not classified as hazardous under this directive. Wash hands thoroughly after handling with soap and water. Wear protective gloves, protective clothing, eye protection and face protection. If swallowed, in eyes, on skin or inhaled call a poison center or doctor/physician if you feel unwell. If inhaled, remove victim to fresh air and keep at rest in a comfortable position for breathing. Take off contaminated clothing before reuse. Store in a well-ventilated place. Keep container tightly closed.

First Aid Precautions:

Not required.

Storage Precautions:

Not required.

Disposal Precautions:

Not required.

Single Exposure Target Organs:

Not applicable

Repeated Exposure Target Organs:

Not applicable

(According to Directive 67/548/EEC)

Symbol: Not classified as hazardous under this directive.

Risk Phrases: Not classified as hazardous under this directive.

Safety Phrases: Not classified as hazardous under this directive.

2.3. Other hazards

Signs and Symptoms of Potential Overexposure: Contact with this product may cause mild irritation to skin, eyes and mucous membranes. No dermal reactions were observed in a 48-hour human patch test. This product is not expected to be toxic by inhalation, ingestion or dermal exposure. Although it has been observed that health effects related to this substance are minimal, as with any chemical, use appropriate precautions during handling. □

Primary Route(s) of Exposure: Skin contact, Eye contact. Inhalation. Ingestion.

Medical Conditions Aggravated by Exposure: No data found

SECTION 3: Composition/information on ingredients

3.1. Substances or 3.2. Mixtures

Ingredient	CAS Number	Concentration (%)	EINECS / ELINCS	EU Symbol	Risk Phrases
Ricinoleic acid, cetyl ester	10401-55-5	90.00	233-864-4	N/A	Not applicable

NOTE: See Section 8 of this MSDS for exposure limit data for these ingredients.
See Section 15 of this MSDS for trade secret information (where applicable).
See Section 16 of this MSDS for the full text of the R-phrases above.

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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. Flush eyes with water for at least 15 minutes; if irritation occurs seek medical attention.
- Inhalation:** No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels remove to fresh air and get medical attention if cough or other symptoms develop.
- Ingestion:** GET MEDICAL ATTENTION. Do not give anything by mouth to an unconscious person.

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

- Acute:** Contact with this product may cause mild irritation to skin, eyes and mucous membranes. No dermal reactions were observed in a 48-hour human patch test. This product is not expected to be toxic by inhalation, ingestion or dermal exposure. Although it has been observed that health effects related to this substance are minimal, as with any chemical, use appropriate precautions during handling. □
- Delayed Effects:** None known.

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

- Thermal Exposure:** Not applicable.
- Note to Physician:** No additional first aid information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Appropriate Extinguishing Media:** Carbon dioxide Dry chemical Alcohol foam Water spray

5.2. Special hazards arising from the substance or mixture

- Hazardous Products of Combustion:** Smoke Carbon dioxide, Carbon monoxide
- Potential for Dust Explosion:** Not applicable.
- Special Flammability Hazards:** Material may burn, but does not ignite readily. Avoid high temperature.

5.3. Advice for firefighters

- Basic Fire Fighting Guidance:** Evacuate area and fight fire from a safe distance.
- Flammability Classification (OSHA):** Non-flammable

NFPA Rating





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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: 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. not applicable

6.2. Environmental precautions

Prevent releases to soils, drains, sewers, and waterways.

6.3. Methods and material for containment and cleaning up

Containment Techniques and Clean-up Procedures: Stop the flow of material, if this is without risk. For small spills, use suitable absorbent material and collect for later disposal.

Special Reporting Requirements: Not applicable.

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: Not applicable.

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.

Special Handling Equipment: Not applicable.

7.2. Conditions for safe storage, including any incompatibilities

Storage Precautions & Recommendations: Use with adequate ventilation. Keep container closed when not in use.

Dangerous Incompatibility Reactions: None Known

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

Exposure Limits (United States): OSHA PEL: Not established ACGIH TLV: Not established



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8.2. Exposure controls

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

Personal Protective Equipment:	Impervious gloves, boots, and clothing, chemical goggles or face shield where necessary, and a NIOSH approved chemical cartridge respirator or supplied air breathing apparatus.
Respirator Caution:	Observe OSHA regulations for respirator use (29 CFR 1910.134). Air-purifying respirators must not be used in oxygen-deficient atmospheres.
Ventilation:	All operations should be conducted in well-ventilated conditions. Local exhaust ventilation should be provided. If user operations generate dust, fume, or mist, use ventilation to maintain operator comfort.
Other Engineering Controls:	All appropriate engineering controls should be used to minimize exposure potential. Use exhaust ventilation to keep airborne concentrations below exposure limits.
Thermal Hazards:	Not applicable.
Additive or Synergistic Effects:	None known.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance, State & Odor (ambient temperature):	Off white solid @ 77°F.		
Molecular Formula:	Not available.	Molecular Weight:	522.88 g/mol
Vapor Pressure:	Not available.	Evaporation Rate:	2-10 (n-Butyl acetate = 1)
Specific Gravity or Density:	1.1	Vapor Density (air = 1):	Heavier than air.
Boiling Point:	Not available.	Freezing / Melting Point:	81 °F
Solubility in Water:	Insoluble.	Octanol / Water Coefficient:	Not available.
pH:	Not available.	Odor Threshold:	N
Viscosity:	Solid @ 77°F	Autoignition Temperature:	Not available.
Flash Point and Method:	485°F (252°C) (Closed Cup)	Flammable Limits:	Not applicable. (LEL) – Not applicable. (UEL)

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	None Known
10.6. Hazardous decomposition	Carbon dioxide, Carbon monoxide Smoke



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products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute Oral LD ₅₀ :	Oral LD50 (rat) > 5000 mg/kg
Acute Dermal LD ₅₀ :	Not available.
Acute Inhalation LC ₅₀ :	Not available.
Skin Irritation:	Non-irritating to skin.
Skin Sensitization:	No data available.
Eye Irritation:	Non-irritating to eyes.
Target Organs:	No organs known to be damaged from exposure to this product.
Carcinogenicity:	No data available.
Teratogenicity:	No data available.
Reproduction:	No data available.
Neurotoxicity:	No data available.
Mutagenicity:	No data available.
Additional Toxicity Information:	Eye irritation, rabbit: 10.0/110.0 - non-irritating. Skin irritancy, rabbit: 0.08/8.0 - non-irritating

SECTION 12: Ecological information

<u>12.1. Toxicity</u>	Not available.
<u>12.2. Persistence and degradability</u>	No data No data available.
<u>12.3. Bioaccumulative potential</u>	No data
<u>12.4. Mobility in soil</u>	No data
<u>12.5. Results of PBT and vPvB assessment</u>	Not available.
<u>12.6. Other adverse effects</u>	No data available. Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

US EPA Waste Number:	Not applicable
Waste Classification: (per US	Wastes must be tested using methods described in 40 CFR Part 261 to determine if it meets



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regulations) applicable definitions of hazardous wastes.
NOTE: Generator is responsible for proper waste characterization. State (USA) hazardous waste regulations may differ substantially from federal (USA) regulations.

Waste Disposal: Dispose of this material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable international, national, regional, state or local laws. Do NOT dump into any sewers, on the ground, or into any body of water. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used. Note that disposal regulations may also apply to empty containers and equipment rinsates.

SECTION 14: Transport information

14.1. UN number Not applicable
14.2. UN proper shipping name Chemicals, n.o.s. (Ricinoleic acid, cetyl ester)
14.3. Transport hazard class(es) Not applicable
14.4. Packing group Not applicable
14.5. Environmental hazards Not applicable
14.6. Special precautions for user Not available.
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

OSHA Hazards: Not applicable. Presents little or no immediate significant hazard if spilled or involved in a fire.

WHMIS Classification: This product is not classified as a controlled product under Canadian Controlled Products Regulations.

Chemical Inventory Lists: Status

TSCA:	Not Listed
EINECS:	233-864-4
Canada(DSL/NDSL):	DSL
Japan:	(2)-2719
Korea:	KE-18493
Australia:	Present
New Zealand:	Present
China:	Present
Philippines:	Unknown
Switzerland:	Unknown

New Zealand GHS Classification: Not classified by this country.

Japan GHS Classification: Not classified by this country.



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Korea (MOL) GHS Classification:	Not classified by this country.
Australia GHS Classification:	Not classified by this country.
Taiwan GHS Classification:	Not classified by this country.
Indonesia GHS Classification:	Not classified by this country.
SARA 313:	Not listed
Reportable Quantities:	None
State Regulations:	Not applicable.
Other Regulatory Listings:	This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory.

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

Full text of R phrases in Section 3: Not applicable



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Legend of abbreviations:

ACGIH = American Conference on Governmental Industrial Hygienists.
CAS = Chemical Abstracts Service.
CERCLA = Comprehensive Environmental, Response, Compensation and Liability Act (1990).
CFR = Code of Federal Regulations.
DSL/NDL = Domestic Substances List/Non-Domestic Substances List.
EC = European Community.
EEC = European Economic 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.
MOL = Ministry of Labor.
NEMA = National Emergency Management Agency.
NFPA = National Fire Protection Association.
NIOSH = National Institute of Occupational Safety and Health.
NTP = National Toxicological 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.

Precautionary Statement: 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.

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