1. Identification

Dencoat
E-mail: info@dencoat.com
Website: www.dencoat.com

TRANSPORTATION EMERGENCY
CALL CHEMTREC: (800) 424-9300
INTERNATIONAL: (703) 527-3887

NON-TRANSPORTATION
Emergency Phone: Call Chemtrec
Information Phone: (844) 646-0545

Product Name:	Denspartic CC
Material Number:	05465931
Chemical Family:	Aspartic Ester
Use:	Raw material for coatings, inks, adhesives, sealants, or elastomers in industrial applications
Restrictions on use:	Do-It-Yourself Applications

2. Hazards Identification

GHS Classification
Skin sensitisation: Category 1

GHS Label Elements
Hazard pictograms:

Signal word: Warning

Hazard statements: May cause an allergic skin reaction.

Precautionary statements:

Prevention:
Wear protective gloves.
Avoid breathing dust, mist, gas, vapors or spray.
Contaminated work clothing must not be allowed out of the workplace.
Avoid breathing dust, mist, gas, vapors or spray.
Contaminated work clothing must not be allowed out of the workplace.
Response:
IF ON SKIN: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical attention.
Wash contaminated clothing before reuse.

Disposal:
Dispose of contents and container in accordance with existing federal, state, and local environmental control laws.

3. Composition/Information on Ingredients

Hazardous Components

Concentration	Components	CAS-No.
95 - 100%	Aspartic Ester	136210-30-5
1 - 5%	Aliphatic Carboxylic Ester	623-91-6

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

4. First Aid Measures

Most Important Symptom(s)/Effect(s)

Acute: May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash., May cause skin irritation with symptoms of reddening, itching, and swelling., May cause eye irritation with symptoms of reddening, tearing, stinging, and swelling., May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

Eye Contact
In case of contact, flush eyes with plenty of lukewarm water. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Get medical attention if irritation develops.

Skin Contact
In case of skin contact, wash affected areas with soap and water. Immediately remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Inhalation
If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if irritation develops.

Ingestion
If ingested, do not induce vomiting unless directed to do so by medical personnel. Give two glasses of water for dilution. Call a physician immediately. Never give anything by mouth to an unconscious person.

5. Firefighting Measures

Suitable Extinguishing Media: All extinguishing media are suitable.

Unsuitable Extinguishing Media No Data Available

Fire Fighting Procedure
Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.

Hazardous Decomposition Products
By Fire and Thermal Decomposition: Carbon oxides, Nitrogen oxides (NOx), Amines, other aliphatic fragments which have not been determined, Ammonia gas may be liberated at high temperatures.

Unusual Fire/Explosion Hazards
Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

6. Accidental Release Measures

Spill and Leak Procedures
Evacuate and keep unnecessary people out of spill area. Cleanup personnel must use appropriate personal protective equipment. Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal. Prevent from entering open drains and waterways. Ventilate area to remove vapors or dust.

7. Handling and Storage

Handling/Storage Precautions
Avoid contact with skin or clothing. Avoid contact with eyes. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use. Do not breathe vapours or spray mist. Store in a dry place away from excessive heat. Material is hygroscopic and may absorb small amounts of atmospheric moisture. Do not reseal container if contamination is suspected.

Storage Period:
6 Months: Following day of shipment

Storage Temperature

Minimum:	0 °C (32 °F)
Maximum:	30 °C (86 °F)

Storage Conditions
Store separate from food products.

Employee education and training in the safe use and handling of this product are required under the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Substances to Avoid
Oxidizing agents, Acids, Isocyanates

8. Exposure Controls/Personal Protection

The recommendations in this section should not be a substitute for a personal protective equipment (PPE) assessment performed by the employer as required by 29 CFR 1910 Subpart I.

Exposure Limits

Any component which is listed in section 3 and is not listed in this section does not have a known ACGIH TLV, OSHA PEL or supplier recommended occupational exposure limit.

Industrial Hygiene/Ventilation Measures
General dilution and local exhaust ventilation as necessary to control airborne vapors, aerosols (e.g., dusts, mists) and thermal decomposition products. Heating may result in generation of airborne vapors and/or

aerosols.

Respiratory Protection
If vapors form, respiratory protection is recommended., The use of a positive pressure supplied air respirator is recommended if the airborne concentration is unknown or if spraying is performed in a confined space or area with limited ventilation., In spray applications, an organic vapor/particulate respirator or air supplied unit is necessary.

Hand Protection
Ensure gloves remain in good condition during use and replace if any deterioration is observed.

Permeation resistant gloves., Viton gloves., 4H laminate gloves., Butyl rubber gloves., Nitrile rubber gloves.

Eye Protection
Chemical safety goggles or safety glasses with side-shields., Chemical safety goggles in combination with a full face shield if a splash hazard exists.

Skin Protection
Avoid all skin contact. Depending on the conditions of use, cover as much of the exposed skin area as possible with appropriate clothing to prevent skin contact., Where spray mist/vapor is anticipated, permeation resistant clothing is recommended.

Additional Protective Measures
Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

9. Physical and Chemical Properties

State of Matter:	liquid
Color:	Light yellow
Odor:	Mild
Odor Threshold:	No Data Available
pH:	not established
Melting Point:	ca. -2 °C (28.4 °F) (EG A1)
Boiling Point:	@ 1,013 hPa (EG A2) not applicable, decomposition
Flash Point:	ca. 100 °C (212 °F) @ 1,013 hPa (DIN EN 22719)
Evaporation Rate:	No Data Available
Lower explosion limit:	No Data Available
Upper Explosion Limit:	No Data Available
Vapor Pressure:	Approximately 20 mbar @ 55 °C (131 °F) Approximately 17 mbar @ 50 °C (122 °F) Approximately 8 mbar @ 20 °C (68 °F)
Vapor Density:	No Data Available
Density:	ca. 1.08 g/cm³ @ 20 °C (68 °F) (DIN 51757)
Relative Vapor Density:	No Data Available
Specific Gravity:	No Data Available
Solubility in Water:	Insoluble
Partition Coefficient: n-octanol/water:	logPow: ca. 5.16 @ 20 °C (68 °F) (value calculated)
Auto-ignition Temperature:	ca. 375 °C (707 °F) @ 1,013 hPa (DIN 51794)
Decomposition Temperature:	ca. 234 °C (453.2 °F)
Unblocking Temperature:	No Data Available

Dynamic Viscosity:	850 - 1,800 mPa.s @ 25 °C (77 °F) (ISO 3219)
Kinematic Viscosity:	No Data Available
Bulk Density:	No Data Available
Molecular Weight:	No Data Available
Corrosion of Metals:	Not corrosive to metals.
Self Ignition:	not applicable

10. Stability and Reactivity

Hazardous Reactions
Hazardous polymerisation does not occur.

Stability
Stable

Materials to Avoid
Oxidizing agents, Acids, Isocyanates

Conditions to Avoid
Avoid extreme heat.

Hazardous Decomposition Products
By Fire and Thermal Decomposition: Carbon oxides, Nitrogen oxides (NOx), Amines, other aliphatic fragments which have not been determined, Ammonia gas may be liberated at high temperatures.

11. Toxicological Information

Likely Routes of Exposure:
Skin Contact
Eye Contact
Inhalation
Ingestion

Health Effects and Symptoms

Acute: May cause allergic skin reaction with symptoms of reddening, itching, swelling, and rash., May cause skin irritation with symptoms of reddening, itching, and swelling., May cause eye irritation with symptoms of reddening, tearing, stinging, and swelling., May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.
Chronic: Not expected to cause adverse chronic health effects.

Toxicity Data for: Denspartic CC

Acute Oral Toxicity
Acute toxicity estimate: > 5,000 mg/kg (Calculation method)

Toxicity Data for: Aspartic Ester

Toxicity Note
Toxicity data is based on a similar product.

Acute Oral Toxicity
LD50: > 2,000 mg/kg (rat) (Directive 67/548/EEC, Annex V, B.1.)
Studies of a comparable product.

Acute Inhalation Toxicity
LC50: > 4.224 mg/l, 4 h, dust/mist (rat, male/female) (OECD Test Guideline 403)
Toxicological studies of a comparable product.

Acute Dermal Toxicity
LD50: > 2,000 mg/kg (rat) (Directive 67/548/EEC, Annex V, B.3.)
Studies of a comparable product.

Skin Irritation
OECD Test Guideline 404, slight irritant

Eye Irritation
rabbit, OECD Test Guideline 405, Slightly irritating
Toxicological studies of a comparable product.

Rat,
Effect on the respiratory tract:slight irritant

Sensitization
Skin sensitisation according to Magnusson/Kligmann (maximizing test):: positive (Guinea pig, OECD Test Guideline 406)
Toxicological studies of a comparable product.

Repeated Dose Toxicity
Subacute oral toxicity: NOAEL: > 1,000 mg/kg, (rat, Male/Female)
Toxicological studies of a comparable product.

Mutagenicity
Genetic Toxicity in Vitro:
Chromosome aberration test in vitro: negative
Toxicological studies of a comparable product.
Salmonella/microsome test (Ames test): No indication of mutagenic effects.
Toxicological studies of a comparable product.

Genetic Toxicity in Vivo:
Micronucleus test: negative (Mouse)
Toxicological studies of a comparable product.
negative

Toxicity to Reproduction/Fertility
Two-generation study, Oral, (rat, male/female) Toxicological studies of a comparable product.

Developmental Toxicity/Teratogenicity
rat, female, Oral, NOAEL (teratogenicity): 1,000 mg/kg, NOAEL (maternal): 1,000 mg/kg, Studies of a comparable product.

Toxicity Data for: Aliphatic Carboxylic Ester

Acute Oral Toxicity
LD50: 1,367 mg/kg (rat, female) (OECD Test Guideline 401)

Skin Irritation
reconstructed human epidermis (RhE), irritating
Studies at the product.

Eye Irritation
In vitro test system, Non-irritating

Sensitization
positive (In vitro test system, OECD Test Guideline 442E)

positive (In vitro test system, OECD Test Guideline 442D)

positive (In vitro test system, OECD Test Guideline 442C)

Repeated Dose Toxicity
6 weeks, Oral: NOAEL: < 11 mg/kg, (rat, male/female)

Mutagenicity
Genetic Toxicity in Vitro:
Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)
Chromosome aberration test: positive (Chinese hamster cells, Metabolic Activation: with/without)

Toxicity to Reproduction/Fertility
Fertility Screening, Oral, (rat, male/female) NOAEL (parental): 11 mg/kg,

Carcinogenicity:
No carcinogenic substances as defined by IARC, NTP and/or OSHA

12. Ecological Information

Ecological Data for: Denspartic CC

Data on the product is not available.Please find the data available for the components.

Ecological Data for Aspartic Ester
Biodegradation
13 %, Exposure time: 28 d, i.e. not readily degradable
Ecotoxicological reports on a comparable product

0 %, Exposure time: 28 d, i.e. not inherently degradable
Ecotoxicological studies of the product

Bioaccumulation
value calculated, 1,872 BCF
The substance hydrolyzes rapidly in water. An accumulation in aquatic organisms is not to be expected.

Acute and Prolonged Toxicity to Fish
LC50: 66 mg/l (Danio rerio (zebra fish), 96 h)
Ecotoxicological reports on a comparable product

Acute Toxicity to Aquatic Invertebrates
EC50: 88.6 mg/l (Daphnia magna (Water flea), 48 h)
Studies of a comparable product.

Toxicity to Aquatic Plants
IC50: 113 mg/l, (scenedesmus subspicatus, 72 h)
Ecotoxicological reports on a comparable product

Toxicity to Terrestial Plants
NOEC: >= 100 mg/kg, End Point: seedling emergence (Avena sativa (oats))
Studies of a comparable product.

NOEC: >= 100 mg/kg, End Point: seedling emergence (Allium cepa (onion))
Studies of a comparable product.

NOEC: >= 100 mg/kg, End Point: seedling emergence (Brassica napus (rape))
Studies of a comparable product.

Toxicity to Microorganisms
EC50: 3,110 mg/l, (activated sludge, 3 h)
Ecotoxicological reports on a comparable product

Ecological Data for Aliphatic Carboxylic Ester
Biodegradation
92 - 95 %, i.e. readily biodegradable

Acute and Prolonged Toxicity to Fish
LC50: 38 mg/l (Fathead minnow (Pimephales promelas), 96 h)

13. Disposal Considerations

Waste Disposal Method
Waste disposal should be in accordance with existing federal, state and local environmental control laws.

Empty Container Precautions
Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning. Empty containers retain product residue (dust, liquid, vapor and/or gases) and can be dangerous. Do not heat or cut container with electric or gas torch.

14. Transportation Information

Land transport (DOT)
Non-Regulated

Sea transport (IMDG)
Non-Regulated

Air transport (ICAO/IATA)
Non-Regulated

15. Regulatory Information

United States Federal Regulations
US. Toxic Substances Control Act: Listed on the Active Portion of the TSCA Inventory.

No substances are subject to TSCA 12(b) export notification requirements.

US. EPA CERCLA Hazardous Substances (40 CFR 302) Components:
None

SARA Section 311/312 Hazard Categories:
Refer to hazard classification information in Section 2.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) Components:
None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required Components:
None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):
Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

State Right-To-Know Information
The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:

Concentration	Components	CAS-No.
60 - 100%	Aspartic Ester	136210-30-5
1 - 5%	Aliphatic Carboxylic Ester	623-91-6

California Proposition 65 List:
None.

CFATS (Chemical Facility Anti-Terrorism Standards) Chemicals
To the best of our knowledge, this product does not contain Appendix A Chemicals of Interest (COI), at or above the Screening Threshold Quantity (STQ), as defined by the Department of Homeland Security Chemical Facility Anti-terrorism Standard (CFATS, 6 CFR Part 27).

Based on information provided by our suppliers, this product is considered “DRC Conflict Free” as defined by the SEC Conflict Minerals Final Rule (Release No. 34-67716; File No. S7-40-10; Date: 2012-08-22).

16. Other Information

The method of hazard communication for Dencoat™ is comprised of product labels and safety data sheets. Safety data sheets for all of our products and general product declarations are available for download at www.productsafetyfirst.covestro.com.

The handling of two component systems containing reactive aspartic esters in combination with isocyanate hardeners requires appropriate protective measures referred to in this SDS. These systems are therefore recommended only for use in industrial or trade (commercial) applications. They are not suitable for use in Do-It-Yourself applications.

Contact: Product Safety Department
Telephone: +45 88442227
Version Date: 05/06/2022

SDS Version: 2.14

Information contained in this SDS is believed to be accurate but is furnished without warranty, express or implied, including warranties of merchantability or fitness for a particular purpose. The information relates only to the specific material designated herein. Dencoat™ assumes no legal responsibility for use of or reliance upon the information in this SDS and such information shall in no case be considered a part of our terms and conditions of sale. The user is responsible for determining whether the Dencoat product is suitable for user's method of use or application. Dencoat is not liable for any failure to observe the precautionary measures described in this SDS or for any misuse of the product.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.