1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Name VDISTILL™ DV63 Distilled Canola Fatty Acid

Other means of identification
Product Code DV-63

Recommended use of the chemical and restrictions on use.
Recommended Use Commercial product.

Details of the supplier of the safety data sheet
Manufacturer Address Vantage Oleochemicals, Inc.
4650 South Racine Avenue
Chicago, IL 60609 USA

Emergency Telephone Number
Company Phone Number +1-773-376-9000
Emergency Telephone Number CHEMTREC International +1-703-527-3887
CHEMTREC USA: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard.

This is not a dangerous substance or mixture according to the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

Label Elements

EMERGENCY OVERVIEW

Color Light yellow Physical State Liquid Odor Faint

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty acids, C14-22 and C16-22-unsaturated</td>
<td>68002-85-7</td>
<td>100</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

FIRST AID MEASURES

Eye contact Consult a physician. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin contact
Wash exposed skin with soap and plenty of water. Consult a physician if irritation occurs.

Inhalation
Remove to fresh air and keep at rest in a position comfortable for breathing. Consult a physician if breathing is difficult or other respiratory symptoms develop.

Ingestion
DO NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed
Symptoms
None identified.

Indication of any immediate medical attention and special treatment needed
Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Dry powder, Foam, Carbon dioxide, Water fog.

Unsuitable extinguishing media
Do not use a solid water stream as it may scatter and spread fire.

Explosion Data
Sensitivity to Mechanical Impact
None.

Sensitivity to Static Discharge
None.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions
Use personal protective equipment.

Environmental precautions

Environmental precautions
Prevent release to surface water.

Methods and material for containment and cleaning up

Methods for Containment
Dike to collect large liquid spills.

Methods for Cleaning Up
Absorb with an inert material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid generation of mist/aerosol.

Conditions for safe storage, including any incompatibilities

Storage
Keep containers tightly closed in a cool, well-ventilated place.

Packaging Material
Store tightly closed in original container.

Incompatible materials
Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Control parameters

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face Protection
Safety glasses with side-shields.

Skin and Body Protection
Impervious gloves.

Respiratory Protection
Use NIOSH/MSHA approved respirator if ventilation is not sufficient to control mist/aerosol.

Hygiene Measures
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Light yellow</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Faint</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>&gt; 260 °C / 500 °F</td>
<td>@10 hPa</td>
</tr>
<tr>
<td>Flash Point</td>
<td>209 °C / 408 °F</td>
<td>PMCC</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>May burn if exposed to open flame.</td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>&lt; 1 mm Hg</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Insoluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Other Information

10. STABILITY AND REACTIVITY

Reactivity
Not reactive

Chemical stability
Stable under recommended storage conditions.

### Possibility of Hazardous Reactions
None under normal processing.

### Hazardous Polymerization
Hazardous polymerization does not occur.

### Conditions to Avoid
Extremes of temperature and direct sunlight.

### Incompatible materials
Strong oxidizing agents.

### Hazardous Decomposition Products
None known based on information supplied.

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**
Product does not present an acute toxicity hazard based on known or supplied information

- **Inhalation**
  There is no data available for this product.

- **Eye contact**
  Not irritating to eyes.

- **Skin contact**
  Not irritating to skin.

- **Ingestion**
  No known hazard by swallowing.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatty acids, C14-22 and C16-22-unsaturated 68002-85-7</td>
<td>&gt; 5g/kg</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Information on toxicological effects**

**Symptoms**
No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

- **Skin corrosion/irritation**
  Not irritating to skin.

- **Serious eye damage/eye irritation**
  Not irritating to eyes.

- **Sensitization**
  Not a skin sensitizer.

- **Mutagenic Effects**
  Negative in the Ames test.

- **Carcinogenicity**
  This substance is not classified as a carcinogen by IARC, OSHA, ACGIH, or NTP.

**Reproductive Toxicity**
This product does not contain any known or suspected reproductive hazards.

- **Developmental Toxicity**
  No known hazard.

- **Teratogenic**
  No known hazard.

- **STOT - single exposure**
  None under normal use conditions.

- **STOT - repeated exposure**
  No known hazard.

- **Aspiration hazard**
  No known hazard.

**Numerical measures of toxicity**

**Product Information**
Not determined

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Persistence and degradability**
Readily biodegradable.

**Bioaccumulation/Accumulation**
Not expected to be bioaccumulative.

Mobility
No data available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method Dispose of in accordance with applicable regulations.
Contaminated Packaging Dispose of in accordance with applicable regulations.

14. TRANSPORT INFORMATION

DOT Not regulated
TDG Not regulated
MEX Not regulated
ICAO Not regulated
IATA Not regulated
IMDG / IMO Not regulated
RID Not regulated
ADR Not regulated
ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
NDSL Complies
EINECS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372
SARA 311/312 Hazard Categories

- Acute health hazard: No
- Chronic Health Hazard: No
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

U.S. State Regulations

U.S. State Right-to-Know Regulations

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>n/a</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

Prepared by Product Steward
Issuing Date 04-Mar-2015
Revision Date 04-Mar-2015
Revision Note Initial Issue

Disclaimer
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End of MSDS