1. Identification

Product identifier: CDA 35, 200 Proof

Other means of identification: None.

Recommended use: General purpose solvent.

Recommended restrictions: Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Greenfield Global USA Inc.

Company Name

1101 Isaac Shelby Drive

Address

Shelbyville, KY 40065

USA

Telephone

502.232.7600

Fax

502.633.6100

Greenfield Global USA Inc.

Company Name

58 Vale Road

Address

Brookfield, CT 06804

USA

Telephone

203.740.3471

Fax

203.740.3481

Emergency phone number

USA

CHEMTREC: 1.800.424.9300 (CCN 17213)

International

CHEMTREC: +1.703.527.3887 (CCN 17213)

2. Hazard(s) identification

Physical hazards: Flammable liquids Category 2

Health hazards: Serious eye damage/eye irritation Category 2

Specific target organ toxicity, single exposure Category 3 narcotic effects

OSHA defined hazards: Not classified.

Label elements

Signal word

Danger

Hazard statement

Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness.

Precautionary statement

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist/vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection.

Response

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. In case of fire: Use appropriate media to extinguish.
3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol</td>
<td>64-17-5</td>
<td>70.27 - 77.07</td>
</tr>
<tr>
<td>Ethyl acetate</td>
<td>141-78-6</td>
<td>22.93 - 25.07</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>0.00 - 4.66</td>
</tr>
</tbody>
</table>

Composition comments: All concentrations are in percent by weight unless otherwise indicated.

4. First-aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

Skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed: May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information: Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media: Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. Combustion products may include: carbon oxides.

Special protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions: In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards: Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. The product is completely soluble in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Avoid discharge into drains, water courses or onto the ground.

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acetate (CAS 141-78-6)</td>
<td>PEL</td>
<td>1400 mg/m3</td>
</tr>
<tr>
<td>Ethyl alcohol (CAS 64-17-5)</td>
<td>PEL</td>
<td>1900 mg/m3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acetate (CAS 141-78-6)</td>
<td>TWA</td>
<td>400 ppm</td>
</tr>
<tr>
<td>Ethyl alcohol (CAS 64-17-5)</td>
<td>STEL</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acetate (CAS 141-78-6)</td>
<td>TWA</td>
<td>1400 mg/m3</td>
</tr>
<tr>
<td>Ethyl alcohol (CAS 64-17-5)</td>
<td>TWA</td>
<td>1900 mg/m3</td>
</tr>
</tbody>
</table>

No biological exposure limits noted for the ingredient(s).

Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

Chemical goggles are recommended.

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.
Skin protection
Other
Wear appropriate chemical resistant clothing.

Respiratory protection
If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: Chemical respirator with organic vapor cartridge.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
- Physical state: Liquid.
- Form: Liquid.
- Color: Clear liquid; invisible vapor.
- Odor: Characteristic.
- Odor threshold: Not available.
- pH: Not available.

Melting point/freezing point
- -173.2 °F (-114 °C)

Initial boiling point and boiling range
- 172.9 °F (78.3 °C) at 760 mmHg

Flash point
- 57.2 - 62.6 °F (14.0 - 17.0 °C) Closed Cup

Evaporation rate
- 3.3 (butyl acetate = 1)

Flammability (solid, gas)
- Not applicable.

Upper/lower flammability or explosive limits
- Flammability limit - lower (%): 3.3 % v/v (100% Ethyl alcohol)
- Flammability limit - upper (%): 19 % v/v (100% Ethyl alcohol)

Vapor pressure
- 44.6 mm Hg (68 °F (20 °C))

Vapor density
- 1.6 (air = 1)

Relative density
- Not available.

Solubility(ies)
- Solubility (water): Completely soluble.
- Partition coefficient (n-octanol/water): Not available.

Auto-ignition temperature
- 685.4 °F (363 °C) (100% Ethyl alcohol)

Decomposition temperature
- Not available.

Viscosity
- Not available.

Other information
- Bulk density: 6.63 - 6.96 lb/gal (at 15.56°C (60°F))
- Explosive properties: Not explosive.
- Oxidizing properties: Not oxidizing.

10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials
11. Toxicological information

Information on likely routes of exposure

**Inhalation**
May cause drowsines and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.

**Skin contact**
Prolonged skin contact may cause temporary irritation.

**Eye contact**
Causes serious eye irritation.

**Ingestion**
Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics**
May cause drowsines and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Coughing.

Information on toxicological effects

**Acute toxicity**
Not expected to be acutely toxic.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl acetate (CAS 141-78-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 18000 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>58.6 mg/l, 4 hours</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>10170 mg/kg</td>
</tr>
<tr>
<td>Ethyl alcohol (CAS 64-17-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>117 - 125 mg/l, 4 Hours</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>10470 mg/kg</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**
Causes serious eye irritation.

**Respiratory or skin sensitization**

**Respiratory sensitization**
Not a respiratory sensitizer.

**Skin sensitization**
This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
Not classifiable as to carcinogenicity to humans.

**IARC Monographs. Overall Evaluation of Carcinogenicity**
Not listed.

**NTP Report on Carcinogens**
Not listed.

Not regulated.

**Reproductive toxicity**
This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**
May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure**
Not classified.

**Aspiration hazard**
Not an aspiration hazard.
Chronic effects

Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl alcohol (CAS 64-17-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>EC10  Freshwater algae</td>
<td>11.5 mg/l, 72 hours</td>
</tr>
<tr>
<td></td>
<td>EC50  Freshwater algae</td>
<td>275 mg/l, 72 hours</td>
</tr>
<tr>
<td></td>
<td>NOEC  Marine water algae</td>
<td>1900 mg/l</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50  Freshwater fish</td>
<td>11200 mg/l, 24 hours</td>
</tr>
<tr>
<td></td>
<td>NOEC  Freshwater fish</td>
<td>250 mg/l</td>
</tr>
<tr>
<td>Invertebrate</td>
<td>EC50  Freshwater invertebrate</td>
<td>5012 mg/l, 48 hours</td>
</tr>
<tr>
<td></td>
<td>NOEC  Marine water invertebrate</td>
<td>857 mg/l, 48 hours</td>
</tr>
<tr>
<td>Other</td>
<td>EC50  Lemna minor</td>
<td>4432 mg/l, 7 days</td>
</tr>
<tr>
<td></td>
<td>NOEC  Lemna minor</td>
<td>280 mg/l, 7 days</td>
</tr>
<tr>
<td>Micro-organisms</td>
<td>LC50  Micro-organisms</td>
<td>5800 mg/l, 4 hours</td>
</tr>
<tr>
<td>Terrestrial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant</td>
<td>EC50  Terrestrial plant</td>
<td>633 mg/kg dw</td>
</tr>
</tbody>
</table>

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available for this product.

Mobility in soil

The product is completely soluble in water.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Flammable liquids, n.o.s. (Ethyl alcohol; Ethyl acetate RQ = 19944 LBS)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>Class 3</td>
</tr>
<tr>
<td></td>
<td>Subsidiary risk -</td>
</tr>
<tr>
<td></td>
<td>Label(s) 3</td>
</tr>
<tr>
<td></td>
<td>Packing group II</td>
</tr>
</tbody>
</table>
Environmental hazards
Marine pollutant No.
Environmental hazards
Read safety instructions, SDS and emergency procedures before handling.
Special precautions for user
IB2, T7, TP1, TP8, TP28
Special provisions
Packaging exceptions 150
Packaging non bulk 202
Packaging bulk 242

IATA
UN number UN1993
UN proper shipping name Flammable liquid, n.o.s. (Ethyl alcohol; Ethyl acetate)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group II
Environmental hazards No.
ERG Code 3H
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG
UN number UN1993
UN proper shipping name FLAMMABLE LIQUID, N.O.S. (Ethyl alcohol; Ethyl acetate)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group II
Environmental hazards No.
Marine pollutant No.
EmS F-E, S-E
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information
US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)
Ethyl acetate (CAS 141-78-6) Listed.
SARA 304 Emergency release notification
Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not regulated.

Toxic Substances Control Act (TSCA)
All components of the mixture on the TSCA 8(b) inventory are designated “active”.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.
SARA 311/312 Hazardous chemical
Yes

Classified hazard categories
Flammable (gases, aerosols, liquids, or solids)
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)
Not regulated.
Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
- Ethyl acetate (CAS 141-78-6) Low priority
- Ethyl alcohol (CAS 64-17-5) Low priority

US state regulations

US. Massachusetts RTK - Substance List
- Ethyl acetate (CAS 141-78-6)
- Ethyl alcohol (CAS 64-17-5)

US. New Jersey Worker and Community Right-to-Know Act
- Ethyl acetate (CAS 141-78-6)
- Ethyl alcohol (CAS 64-17-5)

US. Pennsylvania Worker and Community Right-to-Know Law
- Ethyl acetate (CAS 141-78-6)
- Ethyl alcohol (CAS 64-17-5)

US. Rhode Island RTK
- Ethyl acetate (CAS 141-78-6)
- Ethyl alcohol (CAS 64-17-5)

California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
  Ethyl acetate (CAS 141-78-6)

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*“Yes” indicates this product complies with the inventory requirements administered by the governing country(s).
“A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

Issue date 03-October-2018
Revision date 06-February-2019
Version # 02
HMIS® ratings Health: 2
                Flammability: 3
                Physical hazard: 0
Disclaimer

This product is subject to Greenfield Global USA Inc.'s terms and conditions, which can be found at http://www.greenfield.com/tc-po-us/. Greenfield cannot anticipate all conditions under which this information and this product, or the products of other manufacturers in combination with this product, may be used. The user is responsible for the proper and safe use, handling, storage and disposal of the product, and assumes liability for any loss, injury, damage or expense arising from any failure to do so. The data in this sheet is based on information and experience available at the time of writing.