Safety Data Sheet

Section 1 – Identification of the Mixture and of the Company

Product Identification

Primary Identifier(s) Used on the Label
Berryman CHEM-DIP CARBURETOR & PARTS CLEANER

Product Synonym(s)
blend “CD-A-INT”

Product Number(s)
0996

Relevant Identified Uses and Uses Advised Against

Recommended Uses
immersion cleaner for carburetor and related parts

Uses Advised Against
not for use in some applications

Manufacturer/Supplier Details
Berryman Products, Inc.
3800 E Randol Mill Rd
Arlington, TX  76011
(800) 433-1704 (USA/Canada)
(817) 640-2376 (international)
www.BerrymanProducts.com

Emergency 24-Hour Telephone Number(s) – InfoTrac, Inc.
(800) 535-5053 (USA/Canada)
(352) 323-3500 (international)

Section 2 – Hazards Identification

Classification of the Substance or Mixture (29 CFR 1910.1200)

Physical Hazards
none classifiable

Health Hazards
Skin Irritant – Category 2
Eye Irritant – Category 2A
Specific Target Organ Toxicity - Repeated Exposure – Category 2 (blood/blood system)

Allocation of Label Elements

Chemical Identity
Berryman CHEM-DIP CARBURETOR & PARTS CLEANER

Pictograms

Signal Word
WARNING

Hazard Statements
H315 – Causes skin irritation.
H319 – Causes serious eye irritation.
H373 – May cause damage to blood/blood system through prolonged or repeated exposure.
Prevention Precautionary Statements
P101 – Keep out of reach of children.
P102 – Read label before use.
P260 – Do not breathing fumes, gas, mist, vapor, or spray.
P264 – Wash thoroughly after handling.
P271 – Use only outdoors or in a well-ventilated area.
P280 – Wear protective gloves, protective clothing, and eye or face protection.

Response Precautionary Statements
P312 – Call POISON CONTROL CENTER, hospital emergency room, or doctor if you feel unwell.
P304/P340 – IFINALED: Remove person to fresh air and keep comfortable for breathing.
P305/P351/P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P332/P337 – If skin irritation occurs, get medical advice/attention.
P337/P313 – If eye irritation persists, get medical advice/attention.
P362/364 – Take off contaminated clothing and launder before reuse.

Storage Precautionary Statements
none

Disposal Precautionary Statements
P501 – Dispose of contents/container in accordance with local, regional, national, and international regulations, as applicable.

Hazards Not Otherwise Classified
none known

Ingredients of unknown acute toxicity
none

Section 3 – Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS RN</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>40-55%</td>
</tr>
<tr>
<td>Heterocyclic Amine Derivatives</td>
<td>mixture</td>
<td>15-20%</td>
</tr>
<tr>
<td>2-(Butoxyethoxy)ethanol</td>
<td>112-34-5</td>
<td>8-15%</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>8-10%</td>
</tr>
<tr>
<td>Ethoxylated Alkyl Amines</td>
<td>mixture</td>
<td>1-5%</td>
</tr>
</tbody>
</table>

Section 4 – First Aid Measures

Description of First Aid Measures

Ingestion
Drink 1-2 glasses of fruit juice or water. Call poison control center, hospital emergency room, or doctor if you feel unwell.

Eye Contact
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.

Skin Contact
Wash with plenty of water or shower.

Inhalation
Remove person to fresh air and keep comfortable. If experiencing respiratory symptoms or if breathing is difficult, administer oxygen and call poison control center, hospital emergency room, or doctor.

Most Important Symptoms and Effects

Acute/Immediate
none known

Delayed
drying, cracking, or defatting of the skin

Indications of Need for Immediate Medical Attention and Specific Treatment Required

Indications of Need for Immediate Medical Attention
In the event of spontaneous vomiting, severe headache, or loss of consciousness, seek immediate medical attention.

Specific Treatment and Notes to Physician
If spontaneous vomiting occurs, keep head below hips to avoid aspiration.

Section 5 – Firefighting Measures

Fire Extinguishing Media

Support for Combustion
Product does not support combustion as-supplied.
Fire Extinguishing Media (cont’d.)

Suitable Extinguishing Media
water jet/spray, water fog, dry chemical, alcohol-resistant foam, or carbon dioxide

Unsuitable Extinguishing Media
none known

Special Hazards/Considerations

Combustion Products
Combustion of dehydrated material in the presence of air may yield various hydrocarbons, organic oxygenates, ammonia, amines, and oxides of carbon and nitrogen.

Special Protective Equipment and Precautions for Firefighters

Special Protective Equipment
Firefighters should employ SCBA and full protective gear, including shield, as product may vent, rupture, or explode violently at elevated temperatures.

Precautions and Procedures
Vapors heavier than air. Remove product from area if safe to do so. Use water spray to cool nearby containers.

Additional Information
National Fire Protection Association (NFPA)
Flammable Liquid Classification
none—product does not support combustion, as-supplied

Section 6 – Accidental Release Measures

Personal and Environmental Precautions

Personal Precautions
Avoid breathing fumes, gas, mist, vapor, or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing, and eye or face protection.

Environmental Precautions
Avoid release to the environment. Prevent contamination of ground water.

Materials and Methods for Containment

Small Spills
Use socks/absorbent mini-booms or other inert barrier if necessary to contain small spills.

Large Spills
Utilize large socks/absorbent booms or other inert barrier to form dam/dike in order to contain spill and prevent further loss.

Materials and Methods for Cleanup

Small Spills
Remove source from area if safe to do so. Use granular sorbent, gel sorbent, vermiculite, cat litter, dirt/earth, pads/rolls, or pillows to absorb spilled material. Other useful supplies may include a mop and mop bucket. Remediate affected area as necessary.

Large Spills
Keep upwind from spill. Remove source from area if safe to do so. Use a mop and mop bucket or mechanical transfer equipment to recover spilled material. Use granular sorbent, gel sorbent, vermiculite, cat litter, dirt/earth, pads/rolls, or pillows to absorb residual material. Remediate affected area as necessary.

Section 7 – Handling and Storage

Precautions for Safe Handling

Personal Precautions
Avoid breathing fumes, gas, mist, vapor, or spray. Use only outdoors or in a well-ventilated area. Wear protective gloves, protective clothing, and eye or face protection. Wash thoroughly after handling.

Environmental Precautions

Conditions and Considerations for Safe Storage
Keep out of reach of children.

Section 8 – Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS RN</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(Butoxyethoxy)ethanol</td>
<td>112-34-5</td>
<td>NE</td>
<td>10 ppm</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>50 ppm</td>
<td>20 ppm</td>
</tr>
</tbody>
</table>
Exposure Controls

Appropriate Engineering Controls
If practical, use outside with adequate ventilation to minimize exposure.

PPE Overview

Hand Protection
Use of impermeable gloves is recommended.

Eye Protection
Use of safety glasses with wrap-around lens or goggles is recommended.

Respiratory Protection
If necessary, use respiratory protection sufficient to reduce exposure to permissible limits.

Additional Protection
For industrial settings, access to a chemical safety shower with eye wash station is strongly recommended.

Section 9 – Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Physical State
liquid

Appearance
clear, dark amber to dark brown

Odor
mild, solvent

Odor Threshold
0.5 ppm

pH
9.5 - 10.5

Freezing Point
< 0°F

Boiling Range
212 - 720°F

Flash Point and Method
none, as supplied, by closed-cup tester

Explosion Limits in Air
1.1 - 12.5% by volume (composite)

Evaporation Rate
0.2 (n-Butyl Acetate=1.0)

Vapor Pressure, as supplied
9.4 mm of Hg at 68°F

Vapor Density
>1.0

Specific Gravity
1.04 at 68°F

Density
8.66 lb/gal at 68°F

Water Solubility
completely soluble

n-Octanol/Water Partition Coefficient (log P_{ow})
-1.7 (composite)

Viscosity
3 cSt at 68°F

Volatility
70 - 80% by weight

Auto-ignition temperature
unknown

Other Information

VOC Content
10% by weight (for consumer products)
20% by weight (EPA Method 24)

VOC Composite Partial Pressure, PP_{C}
0.1 mm of Hg at 68°F
Section 10 – Stability and Reactivity

Chemical Stability under Normal Conditions of Use

**Chemical Stability**
Stable under normal conditions of use.

**Conditions Affording Instability**
none known

Reactivity
not expected

Possibility of Hazardous Reactions
May form peroxides in the presence of air.

Conditions to Avoid
none specific

Incompatible Materials
incompatible with strong acids; oxidizers; reducing agents; metallic aluminum and aluminum alloys; and powered zinc, aluminum, magnesium, potassium, and sodium

Hazardous Decomposition Products
none known

Section 11 – Toxicological Information

Likely Routes of Exposure
ingestion, skin contact, eye contact, inhalation

Symptoms Related to Physical, Chemical, and Toxicological Characteristics

**Ingestion**

**Large Quantity**
gastrointestinal disturbances, including upset stomach, cramping, nausea, vomiting, and diarrhea

**Small Quantity/Incidental Contact**
virtually nontoxic after single ingestion of small quantity

**Skin Contact**
moderate irritation

**Eye Contact**
moderate eye irritation

**Inhalation**
virtually nontoxic by short-term inhalation

Immediate, Delayed, and Chronic Effects

**SHORT-TERM EXPOSURE**

Potential Immediate Effects

**Ingestion**
drying, burning, or irritation of the mouth and throat; gastrointestinal disturbances

**Skin Contact**
drying of the skin

**Eye Contact**
temporary corneal damage

**Inhalation**
shortness of breath or difficulty breathing, headache, dizziness, nausea and vomiting, loss of consciousness, and death

Potential Delayed Effects

**Ingestion**
none known

**Skin Contact**
defatting of the skin, drying and cracking of the skin, aggravation of pre-existing skin conditions

**Eye Contact**
temporary corneal damage

**Inhalation**
nausea and vomiting, loss of consciousness
**LONG-TERM EXPOSURE**

**Potential Immediate Effects**
none known

**Potential Delayed Effects**
none known

**Potential Chronic Health Effects**
Carcinogenicity
- International Agency for Research on Cancer (IARC) Monographs
  not listed
- National Toxicology Program (NTP) Report on Carcinogens
  not listed
- Occupational Safety & Health Administration (OSHA)
  not listed

**Mutagenicity / Genetic Toxicity**
not suspected of being a human mutagen / genetic toxicant

**Teratogenicity**
not suspected of being a human teratogen

**Developmental Effects**
not suspected of being a developmental toxicant

**Fertility Effects**
not suspected of being a reproductive/fertility toxicant

**Effects on Lactation**
not suspected of affecting lactation

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**SPECIFIC TARGET ORGAN TOXICITY (STOT)**

**Single Exposure**
none known

**Repeated Exposure**
blood/blood system effects

**Numerical Measures of Acute Toxicity**

- **Oral (Rat)**  
  LD₅₀: 4800 mg/kg (derived)

- **Dermal (Rabbit)**
  LD₅₀: 3210 mg/kg (derived)

- **Inhalation (Rat)**
  LC₅₀: 13 mg/L (derived)

**Additional Toxicological Information**

- **Skin Irritation/Corrosion (Rabbit)**
  skin irritant

- **Serious Eye Damage/Irritation (Rabbit)**
  eye irritant

- **Respiratory Sensitization**
  does not cause respiratory sensitization

- **Skin Sensitization**
  does not cause skin sensitization

- **Aspiration Hazard**
  not an aspiration hazard

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**Section 12 – Ecological Information**

**General Ecological Assessment/Overview**
Very mobile in soils which may lead to contamination of groundwater.

**Aquatic Toxicity**

- **Vertebrates (Fish)**
  Acute Toxicity
  LC₅₀: >100 mg/L (derived)

- **Invertebrates (Water Flea)**
  Acute Toxicity
  LC₅₀: >100 mg/L (derived)

- **慢性 Toxici**
  NOEC: >100 mg/L (derived)
Aquatic Plants (Freshwater Algae)

Acute Toxicity
EC\textsubscript{50}: >100 mg/L (derived)

Chronic Toxicity
NOEC: >100 mg/L (derived)

Terrestrial Toxicity
Invertebrate (Earthworm)
LC\textsubscript{50}: not available

Persistence and Degradability
Persistence
not expected to be persistent
Degradability
rapidly degradable

Bioaccumulative Potential
Bioaccumulation Potential Assessment
does not bioaccumulate
Bioaccumulation Factor
not available

Mobility in Soils
Mobility in Soils Assessment
very mobile in soils—may contaminate groundwater
Soil Organic Carbon/Water Partition Coefficient (log K\textsubscript{OC})
1.6 (composite)

Results of PBT and vPvB Assessment
not a persistent, bioaccumulative, toxic chemical (PBT)
not very persistent or very bioaccumulative (vPvB)

Other Adverse Effects
none known

Section 13 – Disposal Considerations

General Assessment/Overview
Dispose of waste in accordance with all applicable regulations.

RCRA Hazardous Waste Code(s) (40 CFR 261.20-33)
may not be regulated as RCRA hazardous waste based on composition and flammability characteristics

Section 14 – Transportation Information

Transportation by Ground – US Department of Transportation
Shipping Description
not regulated by DOT

Transportation by Air – ICAO/IATA
Shipping Description
not regulated by ICAO

Transportation by Water – IMO/IMDG
Shipping Description
not regulated by IMO

Section 15 – Regulatory Information

Safety, Health, and Environmental Regulations/Legislation

United States – Select Federal Regulations

Environmental Protection Agency (EPA)
Toxic Substances Control Act (TSCA) (15 USC 2601, et seq.)
All chemicals known to be present in this product are either listed on the TSCA inventory or are not required to be.
Berryman Products, Inc. – part # 0996

SARA Title III (42 USC 9601, et seq.)
Section 302 – Extremely Hazardous Substances (40 CFR 355)
none
Section 304 – Emergency Release Notification (40 CFR 302.4)
none
Section 311/312 – Hazard Categorization (40 CFR 370.40)
acute toxicity
Section 313 – Toxic Chemicals (40 CFR 372.65)
2-(Butoxyethoxy)ethanol ("certain glycol ethers") and 2-Butoxyethanol ("certain glycol ethers")

Clean Air Act (42 USC ch. 85 § 7401, et seq.)
Section 112 – Hazardous Air Pollutants
none
Section 183(e) – Commercial and Consumer Products – VOC Limit and Category (40 CFR 59 subpart C)
75% as "Carburetor and choke cleaner" (complies)

Occupational Safety & Health Administration (OSHA)
Hazard Communication Standard
This safety data sheet (SDS) is provided for compliance with applicable regulations of the Hazard Communication Standard of 2012 (HCS/HAZCOM 2012) found in §29 CFR 1910.1200. Federal law requires persons receiving this document to study it carefully, become aware of the hazards of this product, and notify all employees, visitors, agents, and contractors of the information contained herein.

Consumer Product Safety Commission
Federal Hazardous Substances Act
This product is regulated under the Federal Hazardous Substances Act, is subject to the labeling requirements of 16 CFR 1500, and must include at minimum the following cautionary statements: WARNING: Eye and skin irritant. Keep out of the reach of children.

UNITED STATES – SELECT REGIONAL CONSIDERATIONS

Ozone Transport Commission (OTC) – Model Rule VOC Limit and Category
10% as "Carburetor or Fuel-injection Air Intake Cleaner" (complies)

Lake Michigan Air Directors Consortium (LADCO) – Model Rule VOC Limit and Category
45% as "Carburetor or Fuel-injection Air Intake Cleaner" (complies)

UNITED STATES – SELECT STATE REGULATIONS

California
Office of Environmental Health Hazard Assessment (OEHHA)
Proposition 65 – Safe Drinking Water and Toxic Enforcement Act of 1986
This product is not subject to the labeling requirements of Proposition 65 – Safe Drinking Water and Toxic Enforcement Act of 1986.

Air Resources Board (ARB/CARB)
Regulation for Reducing Emissions from Consumer Products – VOC Limit and Category
10% as "Carburetor or Fuel-injection Air Intake Cleaner" (complies)

Massachusetts
"Right-to-Know" Legislation – Substance List (105 CMR 670.000)
2-Butoxyethanol

New Jersey
"Right-to-Know" Legislation – Hazardous Substance List (34:5A-1, et seq.)
2-(Butoxyethoxy)ethanol, 2-Butoxyethanol

Pennsylvania
"Right-to-Know" Legislation – Hazardous Substance List (Chapter 323)
2-(Butoxyethoxy)ethanol, 2-Butoxyethanol

INTERNATIONAL – SELECT REGULATIONS

Canada
Environment Canada – Domestic Substances List (DSL)
All chemicals known to be present in this product are either listed on the DSL or are not required to be.

China
Ministry of Environmental Protection – Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)
All chemicals known to be present in this product are either listed on the IECSC or are not required to be.

European Union
European Chemical Agency – European Inventory of Existing Chemical Substances (EINECS)
All chemicals known to be present in this product are either listed on the EINECS or are not required to be.

Chemical Safety Assessment
has not been conducted on product, as-supplied
Section 16 – Other Information

Hazardous Materials Information System (HMIS)

<table>
<thead>
<tr>
<th>Health</th>
<th>2</th>
<th>Least</th>
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<tbody>
<tr>
<td>Flammability</td>
<td>0</td>
<td>Slight</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td>Moderate</td>
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<tr>
<td>Protective Equipment</td>
<td>B</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extreme</td>
</tr>
</tbody>
</table>

Hazard Index

Index of Abbreviations

- ACGIH – American Council of Governmental and Industrial Hygienists
- CAS RN – Chemical Abstracts Service Registry Number
- EC50 – Median Effective Concentration
- IATA – International Air Transport Association
- ICAO – International Civil Aviation Organization
- IMDG – International Maritime Dangerous Goods
- IMO – International Maritime Organization
- LC50 – Median Lethal Concentration
- LD50 – Median Lethal Dose
- N/A – Not Applicable
- NE – Not Established
- NOEC – No Observable Exposure Concentration
- PEL – Permissible Exposure Limit (as required by OSHA)
- TLV – Threshold Limit Value (as recommended by ACGIH)
- VOC – Volatile Organic Compound

Relevant Dates and Applicability

- Date of Issuance: July 8, 2016
- Date of Previous Revision: May 28, 2015
- Primary Revision Change(s): general update

Document Applicability

This safety data sheet only applies to part number 0996 manufactured on or after January 1, 2015.

Document Author

Dan Nowlan

Legal Disclaimer

The information contained in this document is, to the best of Berryman Products, Inc.’s knowledge, complete and accurate but is not warranted. All materials may present unknown hazards and should be used with caution. It is the responsibility of the user to evaluate the information in a prudent manner and to use it in a manner consistent with its intended purpose. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.