



# Safety Data Sheet

## Section 1 – Identification of the Mixture and of the Company

### Product Identification

#### Primary Identifier(s) Used on the Label

Berryman OIL CHANGE FLUSH

#### Product Synonym(s)

blend "OCF"

#### Product Number(s)

1216

### Relevant Identified Uses and Uses Advised Against

#### Recommended Uses

gasoline and diesel engine/crankcase flush

#### Uses Advised Against

none specific

### 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

Flammable Liquid – Category 3

#### Health Hazards

Acute Dermal – Category 4

Acute Inhalation – Category 4

Skin Irritant – Category 2

Eye Irritant – Category 2B

Specific Target Organ Toxicity - Single Exposure – Category 3 (respiratory tract irritant and narcotic effects)

Specific Target Organ Toxicity - Repeated Exposure – Category 2 (blood/blood system)

Aspiration Hazard – Category 1

Environmental Hazard - Acute – Category 2

Environmental Hazard - Chronic – Category 3

### Allocation of Label Elements

#### Chemical Identity

Berryman OIL CHANGE FLUSH

#### Pictograms



**Signal Word**

DANGER

**Hazard Statements**

H226 – Flammable liquid and vapor.

H304 – May be fatal if swallowed and enters airways.

H312 – Harmful in contact with skin.

H315 – Causes skin irritation.

H320 – Causes eye irritation.

H321 – Specific treatment (see supplemental first aid instructions this label/document).

H332 – Harmful if inhaled.

H335 – May cause respiratory irritation.

H336 – May cause drowsiness or dizziness.

H373 – May cause damage to blood/blood system through prolonged or repeated exposure.

H410 – Very toxic to aquatic life with long-lasting effects.

**Prevention Precautionary Statements**

P101 – Keep out of reach of children.

P102 – Read label before use.

P210 – Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

P235 – Keep cool.

P240 – Ground/bond container and receiving equipment. Special precautions may be necessary for non-conductive containers.

P241 – Use explosion-proof electrical, ventilation, and lighting equipment.

P242 – Use only non-sparking tools, such as brass or bronze.

P243 – Take precautionary measures against static discharge.

P260 – Do not breathe fumes, gas, mist, vapor, or spray.

P264 – Wash thoroughly with soap and water after handling.

P271 – Use only outdoors or in a well-ventilated area.

P273 – Avoid release to the environment.

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.

P314 – Get medical advice/attention if you feel unwell.

P321 – Specific treatment available in this document in “Section 4 – First Aid Measures.”

P331 – Do NOT induce vomiting.

P391 – Collect spillage.

P301/P310 – IF SWALLOWED: Immediately call POISON CONTROL CENTER, hospital emergency room, or doctor.

P303/P361/P353 – IF ON SKIN (OR HAIR): Immediately take off all contaminated clothing. Rinse skin with soap and water or shower.

P304/P340 – IF INHALED: 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/P313 – If skin irritation occurs, get medical advice/attention.

P337/P313 – If eye irritation persists, get medical advice/attention.

P361/364 – Immediately take off all contaminated clothing and launder before reuse.

P362/364 – Take off contaminated clothing and launder before reuse.

P370/P378 – In case of fire, use water fog, dry chemical, alcohol-resistant foam, or carbon dioxide to extinguish.

**Storage Precautionary Statements**

P405 – Store locked-up.

P403/P233 – Store in a well-ventilated place. Keep container tightly closed.

**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**

<u>Component</u>	<u>CAS RN</u>	<u>Weight</u>
Petroleum Distillates	64742-88-7	50-60%
Petroleum Oil	64742-52-5	20-30%
2-Butoxyethanol	111-76-2	10-15%
Polybutylene Succinimide	not available	2-5%

## Section 4 – First Aid Measures

### Description of First Aid Measures

#### Ingestion

Immediately call poison control center, hospital emergency room, or doctor. Do NOT induce vomiting. Drink 1-2 glasses of milk or water.

#### 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 soap and 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

respiratory tract irritation; headache, lightheadedness; narcotic effects, including drowsiness, loss of coordination; nausea, vomiting

#### 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 shortness of breath, difficulty breathing, spontaneous vomiting, severe headache, or loss of consciousness, seek immediate medical attention.

#### Specific Treatment and Notes to Physician

If performing lavage, endotracheal and/or esophageal control is recommended. If spontaneous vomiting occurs, keep head below hips to avoid aspiration.

## Section 5 – Firefighting Measures

### Fire Extinguishing Media

#### Support for Combustion

Product supports combustion.

#### Suitable Extinguishing Media

water fog, dry chemical, alcohol-resistant foam, or carbon dioxide

#### Unsuitable Extinguishing Media

water jet/spray (may cause product to float to surface and reignite)

### Special Hazards/Considerations

#### Combustion Products

Combustion in the presence of air may yield hydrocarbons; organic oxygenates and sulfides; ammonia and amino compounds; mercaptans; and oxides of carbon, nitrogen and sulfur.

### 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

Flammable liquid and vapor. 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 II

## Section 6 – Accidental Release Measures

### Personal and Environmental Precautions

#### Personal Precautions

Keep away from heat, sparks, open flames, and hot surfaces. No smoking. Take precautionary measures against static discharge. Ground/bond container and receiving equipment. Special precautions may be necessary for non-conductive containers. Use explosion-proof electrical, ventilation, and lighting equipment. Use only non-sparking tools, such as brass or bronze. Do not breathe fumes, gas, mist, vapor, or spray. Wash thoroughly with soap and water 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.

**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**

Do not breathe 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 with soap and water after handling.

**Environmental Precautions**

Keep away from heat, sparks, open flames, hot surfaces. No smoking. Take precautionary measures against static discharge. Ground or bond container and receiving equipment. Special precautions may be necessary for non-conductive containers. Use explosion-proof electrical, ventilation, and lighting equipment. Use only non-sparking tools, such as brass or bronze. Avoid release to the environment.

**Conditions and Considerations for Safe Storage**

Flammable liquid and vapor. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Keep out of reach of children. Store locked-up and in accordance with NFPA flammable liquid classification II recommendations.

**Section 8 – Exposure Controls/Personal Protection**

<u>Component</u>	<u>CAS RN</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Petroleum Distillates (Stoddard Solvent)	64742-88-7	500 ppm	500 ppm
Petroleum Oil (as oil mist)	64742-52-5	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
2-Butoxyethanol	111-76-2	50 ppm	20 ppm

**Exposure Controls****Appropriate Engineering Controls**

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

**PPE Overview****Hand Protection**

Use of chemical-resistant gloves (EVAL, neoprene, nitrile/Buna-N, PVA, PVC, or Viton) 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, yellow to light amber

**Odor**

mild, solvent

**Odor Threshold**

<1 ppm

**pH**

not relevant

**Freezing Point**

<-94°F

**Boiling Range**

300 - 1400°F

**Flash Point and Method**

105°F by closed-cup tester

**Explosion Limits in Air**

0.8 - 7.8% by volume

**Evaporation Rate**

0.1 (n-Butyl Acetate=1.0)

**Vapor Pressure, as supplied**

0.6 mm of Hg at 68°F

**Vapor Density**

>1.0

**Specific Gravity**

0.84 at 68°F

**Density**

7.0 lb/gal at 68°F

**Water Solubility**

insoluble

**n-Octanol/Water Partition Coefficient (log P<sub>ow</sub>)**

not available

**Viscosity**

4-6 cSt at 68°F

**Volatility**

60-70% by weight

**Auto-ignition temperature**

590°F (composite)

## **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**

Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

### **Incompatible Materials**

strong acids; oxidizers; reducing agents; metallic aluminum

### **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**

gastrointestinal disturbances, including upset stomach and cramping

**Skin Contact**

moderate irritation

**Eye Contact**

blurred vision, slight eye irritation

**Inhalation**

respiratory tract irritation; headache, lightheadedness; narcotic effects, including dizziness, drowsiness, and loss of coordination; nausea and vomiting

**Immediate, Delayed, and Chronic Effects*****SHORT-TERM EXPOSURE*****Potential Immediate Effects****Ingestion**

drying, burning, or irritation of the mouth and throat; gastrointestinal disturbances; nausea and vomiting

**Skin Contact**

drying of the skin

**Eye Contact**

blurred vision

**Inhalation**

shortness of breath or difficulty breathing, headache, dizziness, nausea and vomiting, drowsiness, fatigue, loss of consciousness, and death

**Potential Delayed Effects****Ingestion**

aspiration pneumonitis, cyanosis, death

**Skin Contact**

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

**Eye Contact**

none known

**Inhalation**

nausea and vomiting, fatigue, 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**

all components either “Group 3 – Not Classifiable as to Human Carcinogenicity” or 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

***SPECIFIC TARGET ORGAN TOXICITY (STOT)*****Single Exposure**

central nervous system (narcotic effects); respiratory tract (irritation)

**Repeated Exposure**

blood/blood system effects

**Numerical Measures of Acute Toxicity****Oral (Rat)**

LD<sub>50</sub>: 3000 mg/kg (derived)

**Dermal (Rabbit)**

LD<sub>50</sub>: 1550 mg/kg (derived)

**Inhalation (Rat)**

LC<sub>50</sub>: 12 mg/L (derived)

**Additional Toxicological Information****Skin Irritation/Corrosion (Rabbit)**

skin irritant

**Serious Eye Damage/Irritation (Rabbit)**

slight eye irritant

**Respiratory Sensitization**

does not cause respiratory sensitization

**Skin Sensitization**

does not cause skin sensitization

**Aspiration Hazard**

known aspiration hazard

## **Section 12 – Ecological Information**

### **General Ecological Assessment/Overview**

Acutely toxic to aquatic life. Harmful to aquatic life with long-lasting effects.

### **Aquatic Toxicity**

**Vertebrates (Fish)**

**Acute Toxicity**

LC<sub>50</sub>: 32 mg/L (derived)

**Chronic Toxicity**

NOEC: not available

**Invertebrates (Water Flea)**

**Acute Toxicity**

LC<sub>50</sub>: 5.9 mg/L (derived)

**Chronic Toxicity**

NOEC: not available

**Aquatic Plants (Freshwater Algae)**

**Acute Toxicity**

EC<sub>50</sub>: 8.4 mg/L (derived)

**Chronic Toxicity**

NOEC: not available

### **Terrestrial Toxicity**

**Invertebrate (Earthworm)**

LC<sub>50</sub>: not available

### **Persistence and Degradability**

**Persistence**

insufficient persistence data available

**Degradability**

non-rapidly degradable

### **Bioaccumulative Potential**

**Bioaccumulation Potential Assessment**

does not bioaccumulate

**Bioaccumulation Factor**

not available

### **Mobility in Soils**

**Mobility in Soils Assessment**

not mobile in soils

**Soil Organic Carbon/Water Partition Coefficient (log K<sub>oc</sub>)**

not available

### **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. Very toxic to aquatic life with long-lasting effects—do not pour into waterways. Flammable liquid and vapor—do not pour down drain.

### **RCRA Hazardous Waste Code(s) (40 CFR 261.20-33)**

Based on this material as-supplied, used or unwanted product may be subject to RCRA regulations and classified as D001 – ignitable waste

## Section 14 – Transportation Information

### Transportation by Ground – US Department of Transportation

#### Shipping Description

UN1993, Flammable Liquids, n.o.s., (contains Petroleum Distillates and 2-Butoxyethanol), 3, PG III

### Transportation by Air – ICAO/IATA

#### Shipping Description

UN1993, Flammable Liquids, n.o.s., (contains Petroleum Distillates and 2-Butoxyethanol), 3, PG III

### Transportation by Water – IMO/IMDG

#### Shipping Description

UN1993, Flammable Liquids, n.o.s., (contains Petroleum Distillates and 2-Butoxyethanol), 3, PG III

## 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.

##### **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, chronic toxicity, fire hazard

##### **Section 313 – Toxic Chemicals (40 CFR 372.65)**

2-Butoxyethanol

##### **Clean Air Act (42 USC 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)**

not regulated

#### 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: DANGER: Combustible. Harmful or fatal if swallowed. 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**

not regulated

##### **Lake Michigan Air Directors Consortium (LADCO) – Model Rule VOC Limit and Category**

not regulated

#### *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**

not regulated

##### **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-Butoxyethanol

Pennsylvania

"Right-to-Know" Legislation – Hazardous Substance List (Chapter 323)

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)**

<b>Health</b>	<b>* 2</b>	<b>Hazard Index</b>
<b>Flammability</b>	<b>2</b>	Least - 0
<b>Reactivity</b>	<b>0</b>	Slight - 1
<b>Protective Equipment</b>	<b>B</b>	Moderate - 2
		High - 3
		Extreme - 4

**Index of Abbreviations**

ACGIH – American Council of Governmental and Industrial Hygienists

CAS RN – Chemical Abstracts Service Registry Number

EC<sub>50</sub> – Median Effective Concentration

IATA – International Air Transport Association

ICAO – International Civil Aviation Organization

IMDG – International Maritime Dangerous Goods

IMO – International Maritime Organization

LC<sub>50</sub> – Median Lethal ConcentrationLD<sub>50</sub> – Median Lethal Dose

N/A – Not Applicable

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 13, 2015

**Date of Previous Revision**

June 26, 2015

**Primary Revision Change(s)**

Section 2 – Hazards Identification; Section 6 – Accidental Release Measures; Section 7 – Handling and Storage; Section 9 – Physical and Chemical Properties

**Document Applicability**

This safety data sheet only applies to part number 1216 manufactured on or after March 18, 2015.

**Document Author**

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**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.