Safety Data Sheet

Section 1 – Identification of the Mixture and of the Company

Product Identification

Primary Identifier(s) Used on the Label
Berryman *B-12 Chemtool Carburetor, Choke & Throttle Body Cleaner*
Product Synonym(s)
blend "5M-C67"
Product Number(s)
0117-45

Relevant Identified Uses and Uses Advised Against

Recommended Uses
carburetor, choke, and air-intake/throttle body cleaning
Uses Advised Against
not for use in some states or 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
Flammable Aerosol – Category 1
Gases Under Pressure – Compressed Gas
Health Hazards
Skin Irritant – Category 2
Eye Irritant – Category 2A
Developmental – Category 2
Specific Target Organ Toxicity - Single Exposure – Category 3 (narcotic effects)
Specific Target Organ Toxicity - Repeated Exposure – Category 2 (central nervous system)
Aspiration Hazard – Category 1
Environmental Hazard - Acute – Category 2

Allocation of Label Elements

Chemical Identity
Berryman *Non-Chlorinated Brake Parts Cleaner*
Pictograms

Signal Word
DANGER
Hazard Statements
H222 – Extremely flammable aerosol.
H280 – Contains gas under pressure; may explode if heated.
H304 – May be fatal if swallowed and enters airways.
H315 – Causes skin irritation.
H319 – Causes serious eye irritation.
H321 – Specific treatment (see supplemental first aid instructions this label/document).
H336 – May cause drowsiness or dizziness.
H361d – Suspected of damaging the unborn child.
H373 – May cause damage to organs through prolonged or repeated exposure.
H401 – Toxic to aquatic life.
Prevention Precautionary Statements
P101 – Keep out of reach of children.
P102 – Read label before use.
P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P210 – Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
P211 – Do not spray on an open flame or other ignition source.
P251 – Do not pierce or burn, even after use.
P260 – Do not breathe 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.
P321 – Specific treatment available in this document in "Section 4 – First Aid Measures."
P331 – Do NOT induce vomiting.
P301/P310 – IF SWALLOWED: Immediately call POISON CONTROL CENTER, hospital emergency room, or doctor.
P302/P352 – IF ON SKIN: Wash with plenty of 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.
P308/P313 – If exposed or concerned, get medical advice/attention.
P332/P313 – 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
P405 – Store locked-up.
P410/P412 – Protect from sunlight. Do not expose to temperatures exceeding 122°F (50°C).
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

Component	CAS RN	Weight
Acetone	67-64-1	45-55%
Isohexane	107-83-5	15-30%
Toluene	108-88-3	10-20%
Carbon Dioxide	124-38-9	<10%
Heptane (mixed isomers)	426260-76-6	<10%

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 and lightheadedness; narcotic effects, including dizziness, drowsiness, and loss of coordination; nausea and 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, or spontaneous vomiting, 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, carbon monoxide, carbon dioxide, and organic oxygenates.

Special Protective Equipment and Precautions for Firefighters
Special Protective Equipment
Firefighters should employ SCBA and full protective gear, including shield, as product is comprised of low-boiling, flammable solvents and may vent, rupture, or explode violently at elevated temperatures.
Precautions and Procedures
Contains gas under pressure; may explode if heated. Vapors heavier than air. Remove product from area if safe to do so. Use water spray to cool nearby containers.

Section 6 – Accidental Release Measures

Personal and Environmental Precautions
Personal Precautions
Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, and hot surfaces. No smoking. Do not breathe 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. 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. Remediate affected area as necessary.

Large Spills

Keep upwind from spill. Remove source from area if safe to do so. Use explosion-proof 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 handle until all safety precautions have been read and understood. Do not breathe 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, and hot surfaces. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid release to the environment.

Conditions and Considerations for Safe Storage

Contains gas under pressure; may explode if heated. Protect from sunlight. Do not expose to temperatures exceeding 122°F (50°C). Store locked-up. Store according to NFPA Aerosol Level 3 recommendations.

Section 8 – Exposure Controls/Personal Protection

Component	CAS RN	OSHA PEL	ACGIH TLV
Acetone	67-64-1	1000 ppm	500 ppm
2-Methylpentane	107-83-5	NE	500 ppm
Toluene	108-88-3	200 ppm	20 ppm
Carbon Dioxide	124-38-9	5000 ppm	5000 ppm
Heptane	426260-76-6	500 ppm	400 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, colorless

Odor

mild, aromatic

Odor Threshold

1.6 ppm

pH

not relevant

Freezing Point

<-131°F

Boiling Range

133 - 232°F

Flash Point and Method

<20°F by closed-cup tester

Explosion Limits in Air

1.7 - 9.7% by volume

Evaporation Rate
4.8 (n-Butyl Acetate=1.0)
Vapor Pressure, as supplied
80 - 120 PSI (typical)
Vapor Density
>1.0
Specific Gravity
0.759 at 68°F
Density
6.32 lb/gal at 68°F
Water Solubility
insoluble
n-Octanol/Water Partition Coefficient (log P_{ow})
1.5 (composite)
Viscosity
0.4 cSt at 68°F
Volatility
100% by weight
Auto-ignition Temperature
770°F (composite)

Other Information

VOC Content
42% by weight (EPA Method 24)
42% by weight (consumer products)
VOC Composite Partial Pressure, PPC
65 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

none known

Conditions to Avoid

Avoid direct sunlight and excessive temperatures. Do not puncture, incinerate, or crush. Keep away from heat, sparks, open flames, and hot surfaces. No smoking. If practical, avoid temperatures exceeding flash point.

Incompatible Materials

strong acids; oxidizers; reducing agents

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
blurred vision, moderate eye irritation
Inhalation
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, temporary corneal damage
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, coma, death
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, fatigue, loss of consciousness

Long-Term Exposure

Potential Immediate Effects
none known
Potential Delayed Effects
brain/central nervous system (CNS) effects
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
possible developmental toxicant (Toluene)
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)
Repeated Exposure
brain/central nervous system (CNS) effects

Numerical Measures of Acute Toxicity

Oral (Rat)
LD_{50}: >5000 mg/kg (derived)
Dermal (Rabbit)
LD_{50}: >5000 mg/kg (derived)
Inhalation (Rat)
LC_{50}: 37 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
known aspiration hazard

Section 12 – Ecological Information

General Ecological Assessment/Overview

Toxic to aquatic life. Very mobile in soils which may lead to contamination of groundwater.

Aquatic Toxicity

Vertebrates (Fish)
Acute Toxicity
LC_{50}: 14 mg/L (derived)
Chronic Toxicity
NOEC: 5.6 mg/L (derived)
Invertebrates (Water Flea)
Acute Toxicity
LC_{50}: 12 mg/L (derived)
Chronic Toxicity
NOEC: 3.0 mg/L (derived)
Aquatic Plants (Freshwater Algae)
Acute Toxicity
EC_{50}: 8.6 mg/L (derived)
Chronic Toxicity
NOEC: not available

Terrestrial Toxicity

Invertebrate (Earthworm)
LC_{50}: >100 mg/L (derived)

Persistence and Degradability

Persistence
not expected to be persistent
Degradability
rapidly degradable

Bioaccumulative Potential

Bioaccumulation Potential Assessment
may bioaccumulate (Isohexane)
Bioaccumulation Factor
1,500 (Isohexane)

Mobility in Soils

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

Results of PBT and vPvB Assessment

not a persistent, bioaccumulative, toxic chemical (PBT); not very persistent and very bioaccumulative (vPvB)

Other Adverse Effects

none known

Section 13 – Disposal Considerations

General Assessment/Overview

Dispose of waste in accordance with all applicable regulations. Toxic to aquatic life—do not pour into waterways. Contains aggressive solvents, which may dissolve PVC pipes and fittings—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 F003 – spent non-halogenated solvent mixture containing acetone, methanol, and/or xylene

Section 14 – Transportation Information

Transportation by Ground – US Department of Transportation

Shipping Description

UN1950, Aerosols, 2.1

Exemption Eligibility

When shipped by ground, this product may be eligible for a "Limited Quantity" exception per §49 CFR 173.306.

Transportation by Air – ICAO/IATA

Shipping Description

UN1950, Aerosols, Flammable, 2.1

Transportation by Water – IMO/IMDG

Shipping Description

UN1950, Aerosols, 2.1

Exemption Eligibility

When shipped by water, this product may be eligible for a "Limited Quantity" exception.

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)

Acetone, Toluene

Section 311/312 – Hazard Categorization (40 CFR 370.40)

acute toxicity, chronic toxicity, fire hazard, sudden release of pressure

Section 313 – Toxic Chemicals (40 CFR 372.65)

Toluene

Clean Air Act (42 USC 7401, et seq.)

Section 112 – Hazardous Air Pollutants

Toluene

Section 183(e) – Commercial and Consumer Products – VOC Limit and Category (40 CFR 59 subpart C)

75% as "Carburetor and Choke Cleaner"

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: Extremely Flammable. Harmful or fatal if swallowed. Vapor harmful. Eye and skin irritant. Contents under pressure. 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" (does not comply)

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 subject to the labeling requirements of Proposition 65 – Safe Drinking Water and Toxic Enforcement Act of 1986 and must bear the cautionary statement: WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
Air Resources Board (ARB/CARB)
Regulation for Reducing Emissions from Consumer Products – VOC Limit and Category
10% as "Brake Cleaner" (does not comply)
Massachusetts
"Right-to-Know" Legislation – Substance List (105 CMR 670.000)
Acetone, Isohexane, Toluene, Carbon Dioxide, Heptane
New Jersey
"Right-to-Know" Legislation – Hazardous Substance List (34:5A-1, et seq.)
Acetone, 2-Methylpentane, Toluene, Carbon Dioxide, Heptane
Pennsylvania
"Right-to-Know" Legislation – Hazardous Substance List (Chapter 323)
2-Propanone, 2-Methylpentane, Methylbenzene, Carbon Dioxide, Heptane

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)

Health	*	2
Flammability		3
Reactivity		0
Protective Equipment		B

Hazard Index
Least - 0
Slight - 1
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_{50} – Median Effective Concentration
IATA – International Air Transport Association
ICAO – International Civil Aviation Organization
IMDG – International Maritime Dangerous Goods
IMO – International Maritime Organization
LC_{50} – Median Lethal Concentration
LD_{50} – 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 18, 2016

Date of Previous Revision

not applicable—initial Safety Data Sheet

Primary Revision Change(s)

not applicable

Document Applicability

This safety data sheet only applies to part number 0117-45 manufactured on or after June 1, 2016.

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.