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*;
Berryman *B-12 Chemtool Throttle Body, Carburetor & Choke Cleaner*

Product Synonym(s)
blend "1AA-1"

Product Number(s)
0110, 0117, and 0120

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 applications or states

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
Acute Oral – Category 4
Acute Dermal – Category 4
Acute Inhalation – Category 3
Skin Irritant – Category 2
Eye Irritant – Category 2A
Developmental – Category 2
Specific Target Organ Toxicity - Single Exposure – Category 1 (central nervous system, eyes)
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 *B-12 Chemtool Carburetor, Choke & Throttle Body Cleaner*;
Berryman *B-12 Chemtool Throttle Body, Carburetor & Choke Cleaner*

Pictograms

Signal Word

DANGER

Hazard Statements

H222 – Extremely flammable aerosol.
H280 – Contains gas under pressure; may explode if heated.
H302 – Harmful if swallowed.
H304 – May be fatal if swallowed and enters airways.
H312 – Harmful in contact with skin.
H315 – Causes skin irritation.
H319 – Causes serious eye irritation.
H321 – Specific treatment (see supplemental first aid instructions this label/document).
H331 – Toxic if inhaled.
H361d – Suspected of damaging the unborn child.
H370 – Causes damage to organs.
H373 – May cause damage to blood/blood system and central nervous system 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 fumes, gas, mist, vapor, or spray.
P264 – Wash thoroughly with soap and water after handling.
P270 – Do not eat, drink or smoke when using this product.
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

P311 – Call POISON CONTROL CENTER, hospital emergency room, or doctor.
P321 – Specific treatment available in this document in “Section 4 – First Aid Measures.”
P330 – Rinse mouth.
P331 – Do NOT induce vomiting.
P301/P310 – IF SWALLOWED: Immediately call POISON CONTROL CENTER, hospital emergency room, or doctor.
P303/P361/P353/P312 – IF ON SKIN (OR HAIR): Immediately take off all contaminated clothing. Rinse skin with soap and water or shower. Call POISON CONTROL CENTER, hospital emergency room, or doctor if you feel unwell.
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/P311 – If exposed or concerned, call POISON CONTROL CENTER, hospital emergency room, or doctor.
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.

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
Toluene	108-88-3	40-50%
Acetone	67-64-1	20-25%
Methanol	67-56-1	20-25%
Carbon Dioxide	124-38-9	4-6%
Methyl Ethyl Ketone	78-93-3	1-5%
2-Butoxyethanol	111-76-2	1-5%
2-Propanol	67-63-0	1-5%

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. Rinse mouth. 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

Immediately take off all contaminated clothing. Rinse skin with soap and water or shower.

Inhalation

Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms, call poison control center, hospital emergency room, or doctor.

Most Important Symptoms and Effects

Acute/Immediate

headache and lightheadedness; 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, 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, 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 fumes, gas, mist, vapor, or spray. Wash thoroughly with soap and water after handling. Do not eat, drink or smoke when using this product. 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

Use large socks/absorbent booms or other inert barrier to form dam/dike in order to contain large spills 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 this product until all safety precautions have been read and understood. 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. Do not eat, drink or smoke when using this product.

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
Toluene	108-88-3	200 ppm	20 ppm
Acetone	67-64-1	1000 ppm	500 ppm
Methanol	67-56-1	200 ppm	200 ppm
Carbon Dioxide	124-38-9	5000 ppm	5000 ppm
Methyl Ethyl Ketone	78-93-3	200 ppm	200 ppm
2-Butoxyethanol	111-76-2	50 ppm	20 ppm
2-Propanol	67-63-0	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, PVC, or Viton) is recommended.

Eye Protection

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

Exposure Controls (cont'd.)

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
aromatic (toluene)

Odor Threshold
0.5 ppm

pH
not relevant

Freezing Point
< -107°F

Boiling Range
133 - 343°F

Flash Point and Method
< 20°F by closed-cup tester

Explosion Limits in Air
2.5 - 16.2% by volume (composite)

Evaporation Rate
2.7 (n-Butyl Acetate=1.0)

Vapor Pressure, as supplied
80-120 PSI (typical)

Vapor Density
>1.0

Specific Gravity
0.831 at 68°F

Density
6.92 lb/gal at 68°F

Water Solubility
practically insoluble

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

Viscosity
0.5 cSt at 68°F

Volatility
100% by weight

Auto-ignition temperature
880°F (composite)

Decomposition temperature
unknown

Other Information

VOC Content
71% by weight (EPA Method 24)
71% by weight (consumer products)

VOC Composite Partial Pressure, PPC
33 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

Chemical Stability under Normal Conditions of Use (cont'd.)

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
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, blindness

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, death

Potential Delayed Effects

Ingestion
aspiration pneumonitis, cyanosis, coma, and 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
fatigue

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 "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 and Methanol)

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
non-specific effects

Repeated Exposure
brain/central nervous system (CNS) effects

Numerical Measures of Acute Toxicity

Oral (Rat)
LD_{50}: 460 mg/kg (acute toxicity estimate)

Dermal (Rabbit)
LD_{50}: 1100 mg/kg (derived)

Inhalation (Rat)
LC_{50}: 9.2 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

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

Aquatic Toxicity

Vertebrates (Fish)

Acute Toxicity
LC_{50}: 73 mg/L (derived)

Chronic Toxicity
NOEC: 2.9 mg/L (derived)

Invertebrates (Water Flea)

Acute Toxicity
LC_{50}: 7.2 mg/L (derived)

Chronic Toxicity
NOEC: 1.1 mg/L (derived)

Aquatic Plants (Freshwater Algae)

Acute Toxicity
EC_{50}: 4.7 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

does not bioaccumulate

Bioaccumulation Factor

90 (Toluene)

Mobility in Soils

Mobility in Soils Assessment

very mobile in soils—may contaminate groundwater

Soil Organic Carbon/Water Partition Coefficient (log K_{OC})

1.9 (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. Harmful to animal life—do not pour on ground. 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.

Outside the United States

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, containing substances in Division 6.1, Packing Group III, 2.1 (6.1)

Exemption Eligibility

When shipped by air, this product may be eligible for a “Limited Quantity” exception.

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)

Toluene, Acetone, Methanol, and Methyl Ethyl Ketone

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, Methanol, and 2-Butoxyethanol ("certain glycol ethers")

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

Section 112 – Hazardous Air Pollutants

Toluene, Methanol, Methyl Ethyl Ketone

Section 183(e) – Commercial and Consumer Products – VOC Limit and Category (70 FR 69759)

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: DANGER ☠ POISON: Extremely Flammable. May be fatal or cause blindness 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 with Model Rule)

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

45% as "Carburetor or Fuel-injection Air Intake Cleaner" (does not comply with Model Rule)

UNITED STATES – SELECT STATE REGULATIONS

California

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" (does not comply)

Massachusetts

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

Toluene, Acetone, Methanol, Carbon Dioxide, Methyl Ethyl Ketone (MEK), 2-Butoxyethanol, 2-Propanol

New Jersey

"Right-to-Know" Legislation – Hazardous Substance List (34:5A-1, et seq.)

Toluene, Acetone, Methyl Alcohol, Carbon Dioxide, Isopropyl Alcohol, Methyl Ethyl Ketone, 2-Butoxyethanol

Pennsylvania

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

Methylbenzene, 2-Propanone, Methyl Alcohol, Carbon Dioxide, 2-Butanone, 2-Butoxyethanol, 2-Propanol

INTERNATIONAL – SELECT REGULATIONS

Canada

Environment Canada – Domestic Substances List (DSL)

All chemicals known to be present in this product are listed on the DSL.

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 listed on the IECSC.

INTERNATIONAL – SELECT REGULATIONS (cont'd.)

European Union

European Chemical Agency – European Inventory of Existing Chemical Substances (EINECS)

All chemicals known to be present in this product are listed on the EINECS.

Chemical Safety Assessment

has not been conducted on product, as-supplied

Section 16 – Other Information

Hazardous Materials Information System (HMIS)

Health	*	3
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

February 8, 2018

Date of Previous Revision

February 2, 2018

Primary Revision Change(s)

Section 14 – Transportation Information

Document Applicability

This safety data sheet applies to part numbers 0110, 0117, and 0120 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.