

Safety Data Sheet

Section 1 - Identification of the Mixture and of the Company

Product Identification

Primary Identifier(s) Used on the Label

Berryman DIESEL AIR-BRAKE ANTIFREEZE

Product Synonym(s)

blend "DABA"

Product Number(s)

0520, 0520-01

Relevant Identified Uses and Uses Advised Against

Recommended Uses

multipurpose additive for diesel air brakes

Uses Advised Against

not for use in diesel fuels

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 2

Health Hazards

Acute Oral - Category 3

Acute Dermal - Category 3

Acute Inhalation - Category 3

Eye Irritant - Category 2A

Specific Target Organ Toxicity - Single Exposure - Category 3 (central nervous system, eyes/optic nerve)

Allocation of Label Elements

Chemical Identity

Berryman DIESEL AIR-BRAKE ANTIFREEZE

Pictograms





Signal Word DANGER

Hazard Statements

H225 - Highly flammable liquid and vapor.

H301 - Toxic if swallowed.

H311 – Toxic in contact with skin.

H320 – Causes eye irritation.

H331 - Toxic if inhaled.

H370 – Causes damage to organs.

<u>Prevention Precautionary Statements</u>

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.

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.

P270 – Do not eat, drink or smoke when using this product.

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

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.

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

P303/P361/P353/P3212 – IF ON SKIN (OR HAIR): Immediately take off all contaminated clothing. Rinse skin with soap and water or shower. Rinse skin.

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.

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

P361/364 – Immediately take off all 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

ComponentCAS RNWeightMethanol67-56-190-100%

Section 4 - First Aid Measures

Description of First Aid Measures

Inaestion

Immediately call poison control center, hospital emergency room, or doctor. Rinse mouth. Rinse mouth. Drink 1-2 glasses of milk or water.

Eve 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. Call poison control center, hospital emergency room, or doctor.

Description of First Aid Measures (cont'd)

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

headache and lightheadedness

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

Unsuitable Extinguishing Media

none known

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 solvents and may vent, rupture, or explode violently at elevated temperatures.

Precautions and Procedures

Highly 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 IB

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 mist, vapor, or spray. Wash thoroughly 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 area as necessary.

Materials and Methods for Cleanup (cont'd)

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 area as necessary.

Section 7 - Handling and Storage

Precautions for Safe Handling

Personal Precautions

Do not breathe 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. 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. Avoid release to the environment.

Conditions and Considerations for Safe Storage

Highly 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 IB recommendations.

Section 8 - Exposure Controls/Personal Protection

<u>Component</u>	<u>CAS RN</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Methanol	67-56-1	200 ppm	200 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 (butyl rubber, EVAL, neoprene, nitrile/Buna-N, 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

<u>Appearance</u>

clear, light green

<u>Odor</u>

very mild, pleasant

Odor Threshold

20 ppm

<u>Hq</u>

not relevant

Freezing Point

< -147°F

Boiling Range

148°F

Flash Point and Method

52°F by closed-cup tester

Explosion Limits in Air

5.5 - 37% by volume

Evaporation Rate

2.1 (n-Butyl Acetate=1.0)

Information on Basic Physical and Chemical Properties (cont'd)

Vapor Pressure, as supplied

92 mm of Hg at 68°F

Vapor Density

>1.0

Specific Gravity

0.792 at 68°F

Density

6.60 lb/gal at 68°F

Water Solubility

soluble in all proportions

n-Octanol/Water Partition Coefficient (log Pow)

-0.8

Viscosity

0.6 cSt at 68°F

Volatility

100% by weight

Auto-ignition temperature

850°F (composite)

Decomposition temperature

unknown

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

Keep away from heat, sparks, open flames, and hot surfaces. No smoking. If practical, avoid temperatures exceeding flash point (52°F/11°C).

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 nausea and vomiting, dizziness, drunkenness, and coma

Small Quantity/Incidental Contact

gastrointestinal disturbances, including nausea and vomiting, dizziness, and drunkenness

Skin Contact

virtually nontoxic after single skin contact

Eye Contact

Slight eye irritation

Inhalation

Headache and lightheadedness

Immediate, Delayed, and Chronic Effects

SHORT-TERM EXPOSURE

Potential Immediate Effects

Ingestion

drying, burning, or irritation of the mouth and throat, gastrointestinal disturbances, and blindness

Skin Contact

drying of the skin

Eye Contact

temporary corneal damage

Inhalation

headache, dizziness, loss of consciousness, and death

Potential Delayed Effects

Ingestion

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

none known

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 "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

eye/vision effects

Repeated Exposure

none known

Numerical Measures of Acute Toxicity

Oral (Human)

ATE: 100 mg/kg <u>Dermal (Rabbit)</u> ATE: 300 mg/kg <u>Inhalation (Rat)</u>

ATE: 3.0 mg/L

Additional Toxicological Information

Skin Irritation/Corrosion (Rabbit)

not irritating to skin

Serious Eye Damage/Irritation (Rabbit)

slight eye irritant

Additional Toxicological Information (cont'd)

Respiratory Sensitization

does not cause respiratory sensitization

Skin Sensitization

does not cause skin sensitization

Aspiration Hazard

not an aspiration hazard

Section 12 - Ecological Information

General Ecological Assessment/Overview

Harmful or fatal to animal life. Very mobile in soils which may lead to contamination of groundwater.

Aquatic Toxicity

Vertebrates (Fish)

Acute Toxicity

LC₅₀: >100 mg/L **Chronic Toxicity** NOEC: 24 mg/L

Invertebrates (Water Flea)

Acute Toxicity

LC₅₀: >100 mg/L **Chronic Toxicity** NOEC: not available

Aquatic Plants (Freshwater Algae)

Acute Toxicity EC₅₀: 22000 mg/L Chronic Toxicity NOEC: >100 mg/L

Terrestrial Toxicity

Invertebrate (Earthworm)

LC50: 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 relevant

Mobility in Soils

Mobility in Soils Assessment

very mobile in soils—may contaminate groundwater

Soil Organic Carbon/Water Partition Coefficient (log Koc)

1.0

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 or fatal to animal life—do not pour on ground. Highly 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 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

UN1230, Methanol, 3, PG II

Exemption Eligibility

When shipped by ground, part #0520 may be eligible for a "Limited Quantity" exception per §49 CFR 173.150.

Transportation by Air – ICAO/IATA

Shipping Description

UN1230, Methanol, 3 (6.1), PG II

Exemption Eligibility

When shipped by air, part #0520 may be eligible for a "Limited Quantity" exception.

Transportation by Water - IMO/IMDG

Shipping Description

UN1230, Methanol, 3 (6.1), PG II

Exemption Eligibility

When shipped by water, part #0520 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)

Methanol

SARA Title III (42 USC 9601, et seq.) (cont'd.)

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

acute toxicity, chronic toxicity, fire hazard

Section 313 - Toxic Chemicals (40 CFR 372.65)

Methanol

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

Section 112 – Hazardous Air Pollutants

Methanol

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 \$\frac{1}{2}\$ POISON: Flammable. May be fatal or cause blindness if swallowed. Vapor harmful. Eye irritant. Keep out of the reach of children.

United States – Select Regional Considerations

Ozone Transport Commission (OTC) - Model Rule VOC Limit and Category

N/A—not regulated

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

N/A—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 ("Prop 65")

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 symbol and statement: **A WARNING!** Reproductive Harm - www.P65Warnings.CA.gov

Air Resources Board (ARB/CARB)

Regulation for Reducing Emissions from Consumer Products – VOC Limit and Category

N/A—not regulated

Massachusetts

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

Methanol

New Jersey

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

Methyl Alcohol

Pennsylvania

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

Methyl Alcohol

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.

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)



Hazard Index
Least - 0
Slight - 1
Moderate - 2
High - 3
Extreme - 4

Index of Abbreviations

ACGIH - American Council of Governmental and Industrial Hygienists

ATE – Acute Toxicity Estimate

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)

SDS – Safety Data Sheet

TLV – Threshold Limit Value (as recommended by ACGIH)

VOC - Volatile Organic Compound

Relevant Dates and Applicability

Date of Issuance

January 11, 2023

Date of Previous Revision

N/A—initial SDS

Primary Revision Change(s)

N/A

Document Applicability

This safety data sheet applies to part #s 0520 and 0520-01 manufactured on or after December 1, 2022.

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.