



Barnes Defense Buckshot

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 8/26/2021 Revision date: 8/26/2021 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Article
Product name : Barnes Defense Buckshot

1.2. Recommended use and restrictions on use

Recommended use : Ammunition
Restrictions on use : Uses other than listed on the manufacturer product label

1.3. Supplier

Barnes Bullets, LLC
38 North Frontage Road
Mona, UT, 84645
T 435-856-1000

1.4. Emergency telephone number

Emergency number : CHEMTEL 1-800-255-3924

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Explosive Category 1.4 H204 Fire or projection hazard
Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : H204 - Fire or projection hazard
Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240 - Ground/Bond container and receiving equipment.
P250 - Do not subject to grinding/shock/friction.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P370+P380 - In case of fire: Evacuate area.
P372 - Explosion risk in case of fire.
P373 - DO NOT fight fire when fire reaches explosives.
P374 - Fight fire with normal precautions from a reasonable distance.
P401 - Store in accordance with local regulations on explosives.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available.

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2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Lead	CAS-No.: 7439-92-1	35 – 85	Carc. 1B, H350 Repr. 1A, H360
Copper	CAS-No.: 7440-50-8	0 – 25	Aquatic Acute 1, H400
Nitroglycerin	CAS-No.: 55-63-0	0.5 – 5.5	Unst. Expl., H200 Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 STOT RE 2, H373 Aquatic Chronic 2, H411
Arsenic	CAS-No.: 7440-38-2	0 – 1.5	Acute Tox. 2 (Oral), H300 Acute Tox. 3 (Inhalation:dust,mist), H331 Carc. 1A, H350 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Rosin	CAS-No.: 8050-09-7	< 0.25	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Sens. 1, H317
lead 2,4,6-trinitro-m-phenylene dioxide, lead 2,4,6-trinitroresorcinoxide, lead styphnate (≥ 20 % phlegmatizer)	CAS-No.: 15245-44-0	< 0.25	Expl. 1.1, H201 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Repr. 1A, H360 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.
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4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Not determined.

5.2. Specific hazards arising from the chemical

Explosion hazard : Explosion risk in case of fire.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Evacuate area. Do not fight fire when fire reaches explosives. Fight fire with normal precautions from a reasonable distance.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Do not subject to grinding, shock, friction. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.
Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Barnes Defense Buckshot	
No additional information available.	
Lead (7439-92-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.05 mg/m ³
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA - ACGIH - Biological Exposure Indices	
BEI (BLV)	200 µg/l Parameter: Lead - Medium: blood - Sampling time: not critical (Note: Persons applying this BEI are encouraged to counsel female workers of child-bearing age about the risk of delivering a child with a PbB (lead in blood level) over the current CDC reference value.)
Copper (7440-50-8)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.2 mg/m ³ (fume)
Nitrocellulose (9004-70-0)	
No additional information available.	
Antimony (7440-36-0)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.5 mg/m ³
Nitroglycerin (55-63-0)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	0.05 ppm
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
Cellulose (9004-34-6)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 mg/m ³
Arsenic (7440-38-2)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.01 mg/m ³
ACGIH chemical category	Confirmed Human Carcinogen
USA - ACGIH - Biological Exposure Indices	
BEI (BLV)	35 µg As/L Parameter: Inorganic arsenic plus methylated metabolites - Medium: urine - Sampling time: end of workweek (background)

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Rosin (8050-09-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.001 mg/m ³ (inhalable particulate matter)
ACGIH chemical category	dermal sensitizer
lead 2,4,6-trinitro-m-phenylene dioxide, lead 2,4,6-trinitroresorcinoxide, lead styphnate (≥ 20 % phlegmatizer) (15245-44-0)	
No additional information available.	

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Protective gloves
Eye protection:
Chemical goggles or safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Solid (various forms).
Color	: Metallic
Odor	: Odorless
Odor threshold	: No data available.
pH	: No data available.
Melting point	: No data available.
Freezing point	: Not applicable
Boiling point	: No data available.
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available.
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available.
Relative vapor density at 20 °C	: No data available.
Relative density	: No data available.
Solubility	: No data available.
Partition coefficient n-octanol/water (Log Pow)	: No data available.
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available.
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available.
Explosion limits	: Not applicable
Explosive properties	: No data available.

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Oxidizing properties : No data available.

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Fire or projection hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified.

Acute toxicity (dermal) : Not classified.

Acute toxicity (inhalation) : Not classified.

Nitroglycerin (55-63-0)	
LD50 oral rat	100 mg/kg
LD50 dermal rabbit	> 280 mg/kg
ATE US (oral)	5 mg/kg body weight
ATE US (dermal)	5 mg/kg body weight
ATE US (dust, mist)	0.05 mg/l/4h
Arsenic (7440-38-2)	
LD50 oral rat	15 mg/kg
ATE US (oral)	15 mg/kg body weight
ATE US (dust, mist)	0.5 mg/l/4h
Rosin (8050-09-7)	
LD50 oral rat	7600 mg/kg
LD50 dermal rabbit	> 2500 mg/kg

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Rosin (8050-09-7)	
LC50 Inhalation - Rat	1.5 mg/l/4h
ATE US (oral)	7600 mg/kg body weight
ATE US (vapors)	1.5 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
lead 2,4,6-trinitro-m-phenylene dioxide, lead 2,4,6-trinitroresorcinoxide, lead styphnate (≥ 20 % phlegmatizer) (15245-44-0)	
ATE US (oral)	500 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
Skin corrosion/irritation	: Not classified.
Serious eye damage/irritation	: Not classified.
Respiratory or skin sensitization	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Not classified.
Lead (7439-92-1)	
IARC group	2A - Probably carcinogenic to humans
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
In OSHA Hazard Communication Carcinogen list	Yes
Arsenic (7440-38-2)	
IARC group	1 - Carcinogenic to humans
National Toxicity Program (NTP) Status	Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list	Yes
lead 2,4,6-trinitro-m-phenylene dioxide, lead 2,4,6-trinitroresorcinoxide, lead styphnate (≥ 20 % phlegmatizer) (15245-44-0)	
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
In OSHA Hazard Communication Carcinogen list	Yes
Reproductive toxicity	: Not classified.
STOT-single exposure	: Not classified.
STOT-repeated exposure	: Not classified.
Nitroglycerin (55-63-0)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
lead 2,4,6-trinitro-m-phenylene dioxide, lead 2,4,6-trinitroresorcinoxide, lead styphnate (≥ 20 % phlegmatizer) (15245-44-0)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified.
Viscosity, kinematic	: Not applicable
Symptoms/effects	: Not expected to present a significant hazard under anticipated conditions of normal use.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Lead (7439-92-1)	
LC50 - Fish [1]	0.44 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 - Crustacea [1]	600 µg/l (Exposure time: 48 h - Species: water flea)
LC50 - Fish [2]	1.17 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
Copper (7440-50-8)	
LC50 - Fish [1]	0.0068 – 0.0156 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 - Crustacea [1]	0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 - Fish [2]	< 0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
Nitroglycerin (55-63-0)	
LC50 - Fish [1]	0.87 – 3.25 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
EC50 - Crustacea [1]	46 – 55 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	0.87 – 2.21 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 - Crustacea [2]	38 – 55 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
Rosin (8050-09-7)	
EC50 - Crustacea [1]	3.8 – 5.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and degradability

No additional information available.

12.3. Bioaccumulative potential

No additional information available.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

DOT NA No : UN0012

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UN-No. (IMDG) : 0012
UN-No. (IATA) : 0012

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Cartridges, small arms
Proper Shipping Name (TDG) : CARTRIDGES, SMALL ARMS
Proper Shipping Name (IMDG) : CARTRIDGES, SMALL ARMS
Proper Shipping Name (IATA) : Cartridges, small arms

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 1.4S

IMDG

Transport hazard class(es) (IMDG) : 1.4S
Hazard labels (IMDG) : 1.4S



IATA

Transport hazard class(es) (IATA) : 1.4S
Hazard labels (IATA) : 1.4S



14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT
UN-No.(DOT) : UN0012
DOT Packaging Exceptions (49 CFR 173.xxx) : 63
DOT Packaging Non Bulk (49 CFR 173.xxx) : 62
DOT Packaging Bulk (49 CFR 173.xxx) : None
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 25 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 100 kg
DOT Vessel Stowage Location : 01 - The material may be stowed "on deck" or "under deck" on a cargo vessel (up to 12 passengers) and on a passenger vessel.
DOT Vessel Stowage Other : 25 - Protected from sources of heat

IMDG

Special provision (IMDG) : 364
Limited quantities (IMDG) : 5 kg

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Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P130
EmS-No. (Fire)	: F-B - FIRE SCHEDULE Bravo - EXPLOSIVE SUBSTANCES AND ARTICLES
EmS-No. (Spillage)	: S-X - SPILLAGE SCHEDULE X-Ray - EXPLOSIVE ITEMS AND ARTICLES
Stowage category (IMDG)	: 01
Properties and observations (IMDG)	: See glossary of terms in appendix B.

IATA

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: 130
PCA max net quantity (IATA)	: 25kg
CAO packing instructions (IATA)	: 130
CAO max net quantity (IATA)	: 100kg
Special provision (IATA)	: A802
ERG code (IATA)	: 3L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Barnes Defense Buckshot

SARA Section 311/312 Hazard Classes	Physical hazard - Flammable (gases, aerosols, liquids, or solids)
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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Lead	CAS-No. 7439-92-1	35 – 85%
Copper	CAS-No. 7440-50-8	0 – 25%
Antimony	CAS-No. 7440-36-0	0 – 5%
Nitroglycerin	CAS-No. 55-63-0	0.5 – 5.5%
Arsenic	CAS-No. 7440-38-2	0 – 1.5%

Lead (7439-92-1)

CERCLA RQ	10 lb no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm
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Copper (7440-50-8)

CERCLA RQ	5000 lb no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm
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Nitroglycerin (55-63-0)

CERCLA RQ	10 lb
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Arsenic (7440-38-2)

CERCLA RQ

1 lb no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm

15.2. International regulations

Arsenic (7440-38-2)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on the NCI (National Chemicals Inventory)

15.3. US State regulations



WARNING:

This product can expose you to Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Lead(7439-92-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S. - Pennsylvania - RTK (Right to Know) List
Copper(7440-50-8)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S. - Pennsylvania - RTK (Right to Know) List
Nitroglycerin(55-63-0)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S. - Pennsylvania - RTK (Right to Know) List
Arsenic(7440-38-2)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List; U.S. - Massachusetts - Right To Know List; U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
lead 2,4,6-trinitro-m-phenylene dioxide, lead 2,4,6-trinitroresorcinoxide, lead styphnate (≥ 20 % phlegmatizer)(15245-44-0)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

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Full text of H-phrases

H200	Unstable explosive
H201	Explosive; mass explosion hazard
H204	Fire or projection hazard
H300	Fatal if swallowed
H302	Harmful if swallowed
H310	Fatal in contact with skin

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Full text of H-phrases	
H317	May cause an allergic skin reaction
H330	Fatal if inhaled
H331	Toxic if inhaled
H332	Harmful if inhaled
H350	May cause cancer
H360	May damage fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

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