

Section 1 - Identification of the Material and Supplier

American Blasting Consumables 1262-B Greenbrier St. Charleston, WV 25311	Emergency Phone: 681-313-5000 (any time) Fax: 681-265-9125 General enquiries: 681-265-9123
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Chemical nature: Blend of HCF134a/HFC152a (87/13%) presented as an aerosol.

Trade Name: **BlastBag EVO**

Other names: Gas Bag, blast hole plug, blast hole blocker.

Product Use: Blast hole blocker, inflatable borehole plug.

Creation Date: **June, 2015**

This version issued: **June, 2015** and is valid for 5 years from this date.

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Not classified as hazardous.

Dangerous according to GHS, IATA and IMDG/IMSBC criteria.

Risk Phrases: Not Hazardous - No criteria found.

Safety Phrases: S23, S36, S24/25. Do not breathe vapours. Wear suitable protective clothing. Avoid contact with skin and eyes.

SUSMP Classification: None allocated.

DG Classification: Class 9: GASES UNDER PRESSURE – Liquefied gas.

UN Number: 3363

Hazard Pictogram:



GHS Signal word: WARNING

HAZARD STATEMENT:

H280: Contains gas under pressure; may explode if heated.

PREVENTION

P102: Keep out of reach of children.

P262: Do not get in eyes, on skin, or on clothing.

P281: Use personal protective equipment as required.

RESPONSE

P352: Wash with plenty of soap and water.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires.

STORAGE

P402: Store in a dry place.

P403: Store in a well-ventilated place.

P410+P412: Store below 30°C/86°F, protect from direct sunlight and do not expose to temperatures exceeding 50°C/125°F.

DISPOSAL

P501: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Emergency Overview

Physical Description & Colour: Clear, colourless, rapidly evaporating liquid.

Odour: Odourless.

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Major Health Hazards: no significant risk factors have been found for this product. May act as an asphyxiant in confined spaces.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m ³)	STEL (mg/m ³)
1,1,1,2 Tetrafluoroethane	811-97-2	=>87	4240	not set
1,1-difluoroethane	75-37-6	=<13	not set	not set

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

Section 4 - First Aid Measures

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 1-800-222-1222 from anywhere in the USA and is available at all times. Have this SDS with you when you call.

Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice. Apply artificial respiration if not breathing.

Skin Contact: Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.

Eye Contact: No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Ingestion: If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a doctor.

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances. While this product will not burn, this product may overheat causing the aerosol to explode, contributing to hazards while fighting a fire. Observe standard operating procedures for managing a blaze involving aerosols and chemicals which can emit toxic vapours.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: In case of fire, use carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires. Try to contain spills, minimise spillage entering drains or water courses.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is a danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is fully self-contained breathing apparatus, chemical resistant protective clothing, and face mask.

Flash point: Does not burn.

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

Autoignition temperature: 770°C

Flammability Class: Does not burn.

Section 6 - Accidental Release Measures

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern unless it occurs in confined spaces when asphyxiation may be a risk. Although no special

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protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Store in a cool (below 30°C/86°F), well ventilated area. Protect from direct sunlight and do NOT expose to temperatures above 50°C/125°F. Check containers and valves periodically for leaks. Check packaging - there may be further storage instructions on the label.

Product is fitted with a Chameleon™ temperature indicia

Section 8 - Exposure Controls and Personal Protection

SWA Exposure Limits	TWA (mg/m ³)	STEL (mg/m ³)
1,1,1,2 Tetrafluoroethane	4240	not set
1,1-difluoroethane	not set	not set

The device is fitted with a patented thermostat on the packaging to identify expiration, or hazardous use of overheated product. Avoid overheating the product through appropriate storage of the device. Store out of direct sunlight and convection heating, such as vehicle interiors, etc.

Ventilation: This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

Eye Protection: Eye protection such as protective glasses or goggles is recommended when product is being used.

Skin Protection: You should avoid contact even with mild skin irritants. Therefore you should wear suitable impervious elbow-length gloves and facial protection when handling this product. See below for suitable types.

Protective Material Types: We suggest that protective clothing be made from the following materials: butyl rubber, Teflon, PE/EVAL, Responder.

Respirator: Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.

Safety deluge showers should, if practical, be provided near to where this product is being handled commercially.

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Clear, colourless, rapidly evaporating liquid.
Odour:	Odourless
Boiling Point:	Approx -21°C at 100kPa
Freezing/Melting Point:	-101°C
Volatiles:	Completely volatile at 100°C.
Vapour Pressure:	530kPa at 25°C, 1282kPa at 50°C
Vapour Density:	No data.
Specific Gravity:	1.17 approx
Water Solubility:	1.5g/L (propellant);
pH:	Neutral
Volatility:	No data.
Odour Threshold:	No data.
Evaporation Rate:	No data.
Coeff Oil/water Distribution:	No data
Autoignition temp:	770°C

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: Store below 30°C, protect from direct sunlight and do not expose to temperatures exceeding 50°C. Containers should be kept dry. Keep containers and surrounding areas well ventilated.

Incompatibilities: No particular Incompatibilities.

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Fire Decomposition: Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form hydrogen fluoride gas and other compounds of fluorine. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Local Effects:

Target Organs: There is no data to hand indicating any particular target organs.

Potential Health Effects

Inhalation:

Short Term Exposure: Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort. Intentional misuse by deliberately concentrating and inhaling contents of aerosol containers can be harmful or fatal.

Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short Term Exposure: Major health effect from this product is misuse of the aerosol function. If sprayed continuously on skin or in eyes, it can cause frostbite.

Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short Term Exposure: If sprayed directly in the eye, this product will irritate. If spraying is prolonged, it may cause damage through frostbite.

Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short Term Exposure: Significant oral exposure is considered to be unlikely. However, this product may be irritating to mucous membranes but is unlikely to cause anything more than transient discomfort.

Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Classification of Hazardous Ingredients

Ingredient

Risk Phrases

No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.

Section 12 - Ecological Information

Insufficient data to be sure of status. Expected to not be an environmental hazard.

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Section 14 - Transport Information



Dangerous according to GHS, IATA and IMDG/IMSBC criteria.

UN Number: 3363, GASES UNDER PRESSURE – Liquefied gas

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Issued by: American Blasting Consumables

Emergency Phone: 681-313-5000

Poisons Information Centre: 1-800-222-1222

Hazchem Code: 2YE
Special Provisions: 136, A105
Limited quantities:
Dangerous Goods Class: Class 9
Packaging Method:

Section 15 - Regulatory Information

US Federal Regulations:
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): Not determined
SARA 311/312
Classification: Sudden release of pressure

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
CAS – Chemical Abstract Services
CFR – United States Code of Federal Regulations
CPR – Controlled Products Regulations
DSL – Domestic Substances List
GWP – Global Warming Potential
IARC – International Agency for Research on Cancer
ICAO – International Civil Aviation Organisation
Inh – Inhalation
LC – Lethal concentration
LD – Lethal dosage
NDSL – Non-Domestic Substances List
NIOSH – National Institute for Occupational Safety and Health
IARC - International Agency for Research on Cancer
NOS - Not otherwise specified
NTP - National Toxicology Program (USA)
R-Phrase - Risk Phrase
SUSMP - Standard for the Uniform Scheduling of Medicines & Poisons
UN Number - United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with

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caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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