

# BlazeCut Automatic Fire Suppression System

## Safety Data Sheet

### *Nitrogen*

*According to Regulation (EU) No. 1907/2006 (REACH), Annex II  
(COMMISSION REGULATION (EU) No 453/2010)*

Version: SDS-N2-2310-EN  
Product name: Nitrogen

Compilation date: 2014-02-24  
Revision date: 2023-10-31

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### **1.1 Product identifier**

Product name:	Nitrogen
REACH Reg. No.:	Listed in Annex IV / V REACH, exempted from registration
CAS No.:	7727-37-9
EINECS No.:	231-783-9
Chemical formula:	N <sub>2</sub>

##### **1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses:	Extrusion gas.
Uses advised against:	No information available.

##### **1.3 Details of the supplier of the SDS**

Supplier:	BlazeCut Pty Ltd.
Address:	45 Evans St, Balmain NSW 2041 Australia
E-mail:	technical@blazecutgroup.com
Telephone:	+61 2 8006 1300

Distributor:	To be input
Address:	To be input
E-mail:	To be input
Telephone:	To be input

##### **1.4 Emergency telephone number**

+61 403 006 070 or call local emergency number

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008[CLP]

Gases under pressure, Compressed gas; H280

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008[CLP]

Hazard pictogram(s):



Signal word:

Warning

Hazard statement(s):

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

Precautionary statement(s):

Storage:

P403: Store in a well-ventilated place.

### 2.3 Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.1 Substance/Preparation information

Name	Concentration	CAS	EINECS	Classification (CLP)
Nitrogen	100 %	7727-37-9	231-783-9	Press. Gas (H280)

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General notes:

In all cases of doubt, or when symptoms persist, seek medical attention.

#### Following inhalation:

Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

#### Following skin contact:

Adverse effects not expected from this product.

#### Following eye contact:

Adverse effects not expected from this product.

## Following ingestion:

Ingestion is not a normal route of exposure for gases.

### **4.2 Most important symptoms and effects, both acute and delayed**

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation.

### **4.3 Indication of the immediate medical attention and special treatment needed**

No information available.

## SECTION 5: Fire-fighting measures

### **5.1 Extinguishing media**

**Suitable extinguishing media:** Water spray or fog.

**Unsuitable extinguishing media:** Do not use water jet to extinguish.

### **5.2 Special hazards arising from the substance or mixture**

Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode. Cool the containers exposed to heat with water from a safe distance.

Hazardous combustion products: none

### **5.3 Advice for fire-fighters**

Specific methods:

Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat radiation may cause gas receptacles to rupture. Cool endangered receptacles with water spray jet from a protected position. Prevent water used in emergency cases from entering sewers and drainage systems. If possible, stop flow of product. Use water spray or fog to knock down fire fumes if possible. Move containers away from the fire area if this can be done without risk.

Special protective equipment for fire fighters:

In confined space use self-contained breathing apparatus.

Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters.

Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full face mask.

Standard EN 469 - Protective clothing for firefighters. Standard - EN 659: Protective gloves for firefighters

## SECTION 6: Accidental release measures

### **6.1 Personal precautions, protective equipment and emergency procedures**

Ensure ventilation of the working area. Prevent access to the contaminated area or workplace, until full ventilation. Use self-contained breathing apparatus. Evacuate personnel to a safe uncontaminated zone. When entering the contaminated area, wear self-contained breathing apparatus. Check oxygen level.

### **6.2 Environmental precautions**

Stop gas leak.

### **6.3 Methods and material for containment and cleaning up**

Ventilate the contaminated area.

### **6.4 Reference to other SECTIONS**

See SECTION 7 for information on safe handling.

See SECTION 8 for information on personal protection equipment.

See SECTION 13 for information on disposal.

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Safe use of the product:

The product must be handled in accordance with good industrial hygiene and safety procedures.

Only experienced and properly instructed persons should handle gases under pressure.

Consider pressure relief device(s) in gas installations.

Ensure the complete gas system was (or is regularly) checked for leaks before use.

Do not smoke while handling product.

Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.

Avoid suck back of water, acid and alkalis.

Do not breathe gas.

Avoid release of product into atmosphere.

Safe handling of the gas receptacle: Refer to supplier's container handling instructions.

Do not allow back feed into the container.

Protect cylinders from physical damage; do not drag, roll, slide or drop.

When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders.

Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use.

If user experiences any difficulty operating cylinder valve discontinue use and contact supplier.

Never attempt to repair or modify container valves or safety relief devices.

Damaged valves should be reported immediately to the supplier.

Keep container valve outlets clean and free from contaminants particularly oil and water.

Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnected from equipment.

Close container valve after each use and when empty, even if still connected to equipment.

Never attempt to transfer gases from one cylinder/container to another.

Never use direct flame or electrical heating devices to raise the pressure of a container.

Do not remove or deface labels provided by the supplier for the identification of the cylinder contents.

Suck back of water into the container must be prevented.

Open valve slowly to avoid pressure shock.

### **7.2 Conditions for safe storage, including any incompatibilities**

Observe all regulations and local requirements regarding storage of containers.

Containers should not be stored in conditions likely to encourage corrosion.

Container valve guards or caps should be in place.

Containers should be stored in the vertical position and properly secured to prevent them from falling over. Stored containers should be periodically checked for general condition and leakage.

Keep container below 50°C in a well-ventilated place.

Store containers in location free from fire risk and away from sources of heat and ignition.  
Keep away from combustible materials.

### 7.3 Specific end use(s)

None

## SECTION 8 : Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values:

Not established.

#### DNEL (Derived No Effect Level) for workers and the general population:

Not available.

#### PNEC (Predicted No Effect Concentration) values:

Not available.

### 8.2 Exposure controls

#### Appropriate engineering controls:

Provide adequate ventilation. Do not smoke during work.

#### Personal protective equipment:

Eye and face protection:	Safety glasses with side shields.
Skin protection:	Suitable protective clothing. When handling the cylinders wear only boots with reinforced toe.
Respiratory protection:	Self-contained breathing apparatus if necessary

#### Environmental exposure controls:

None

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Gaseous substance at 20°C
Colour:	colourless
Odour:	inodorous
pH:	Not applicable
Melting point:	-210 °C
Boiling point:	-195.79 °C
Critical temperature:	-147 °C
Molecular weight:	28 g/mol
Flash point:	Not applicable
Evaporation rate:	Not applicable
Flammability (solid, gas):	Not flammable.



<b>Vapour pressure:</b>	Not applicable
<b>Density:</b>	0.967 (air = 1)
<b>Solubility (ies):</b>	Not available.
<b>Partition coefficient:</b>	Not available
<b>Auto-ignition temperature:</b>	Not available.
<b>Viscosity:</b>	Not available.
<b>Explosive properties:</b>	Not explosive
<b>Oxidizing properties:</b>	none

## 9.2 Other information

No data available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended storage and handling conditions (see SECTION 7, handling and storage).

### 10.2 Chemical stability

Stable under normal conditions of use.

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

Temperatures above 50°C

### 10.5 Incompatible materials

Strong oxidizing materials.

### 10.6 Hazardous decomposition products

None

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

<b>Acute toxicity:</b>	None known
<b>Skin corrosion/irritation:</b>	No information available.
<b>Serious eye damage/irritation:</b>	No information available.
<b>Respiratory or skin sensitization:</b>	No information available.
<b>Germ cell mutagenicity:</b>	No information available.
<b>Carcinogenicity:</b>	No information available.

<b>Reproductive toxicity:</b>	No information available.
<b>STOT-single exposure:</b>	No information available.
<b>STOT-repeated exposure:</b>	No information available.
<b>Aspiration hazard:</b>	No information available.

## SECTION 12: Ecological information

### 12.1 Toxicity

<b>Ecotoxicity</b>	<b>Fish, LC<sub>50</sub>:</b>	No data available.
	<b>Crustacea, EC<sub>50</sub>:</b>	No data available.
	<b>Algae, EC<sub>50</sub>:</b>	No data available.

### 12.2 Persistence and degradability

No information available.

### 12.3 Bioaccumulative potential

No data available.

### 12.4 Mobility in soil

Partition to soil is unlikely.

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment information is not available.

### 12.6 Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Gas can be tried only in well-ventilated areas.

Do not empty into drains or closed areas if there is risk of dangerous concentration.

Close the residual gas in the cylinder and give to the supplier.

List of hazardous waste codes (from Commission Decision 2001/118/EC): 16 05 05: Gases in pressure containers other than those mentioned in 16 05 04.

## SECTION 14: Transport information

### 14.1 Land transport (ADR)

Proper Shipping Name:	NITROGEN, COMPRESSED
Class:	2.
UN-No.:	1066
Packaging instructions:	P200

### 14.2 Sea transport (IMDG)

Proper Shipping Name:	NITROGEN, COMPRESSED
Class:	2.2
UN-No.:	1066
Packaging instructions:	P200
Marine pollutant:	No

### 14.3 Air transport (IATA)

Proper Shipping Name:	Nitrogen, compressed
Class:	2.2
UN-No.:	1066
Packaging instructions:	200

### 14.4 Additional information

Mark/Label(s) for transport:



Before transporting of cylinder:

- Fix the cylinders,
- Make sure that the cylinder valve is closed and not leaking,
- Make sure that the cap nut or the plug is mounted correctly onto the connections of the valve (where provided)
- Place devices for valve protection correctly (where provided)
- Ensure adequate ventilation,
- Ensure compliance with applicable regulations.

## SECTION 15: Regulatory information

### EU regulation:

Authorisations: No information available.

Restrictions on use: No information available.

### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this product.



## SECTION 16: Other information

### 16.1 Revision Information

2014-02-24	1.0/EN	BM	First Compiled
2018-06-15	1.1/EN	BM	Revision
2019-07-18	1.2/EN	BM	Revision of REACH registration number
2020-01-15	1.3/EN	TD	Revision
2021-08-13	SDSN-2108-EN	DF	Revision
2022-07-07	SDSN-2207-EN	MS	Revision
2022-10-31	SDS-N2-2310-EN	MS	Current Version

### 16.2 Abbreviations and acronyms

ATE - Acute Toxicity Estimate  
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  
EINECS - European Inventory of Existing Commercial Chemical Substances  
CAS# - Chemical Abstract Service number  
PPE - Personal Protection Equipment  
LC50 - Lethal Concentration to 50 % of a test population RMM - Risk Management Measures  
PBT - Persistent, Bioaccumulative and Toxic  
vPvB - Very Persistent and Very Bioaccumulative  
STOT- SE : Specific Target Organ Toxicity - Single Exposure  
CSA - Chemical Safety Assessment  
EN - European Standard  
UN - United Nations  
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road  
IATA - International Air Transport Association  
IMDG code - International Maritime Dangerous Goods  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
WGK - Water Hazard Class

### 16.4 Relevant R-phrases/H-statements

Press. Gas (Comp.): Gases under pressure: Compressed gas  
H280 Contains gas under pressure; may explode if heated.

### 16.5 Training advice

Provide adequate information, instruction and training for operators.

### 16.6 Declare to reader

The information in this SDS is provided all the relevant data fully and truly. However, the information is provided without any warranty on their absolute extensiveness and accuracy. This SDS was prepared to provide safety preventive measures for the users who have got professional training. The personal user who obtained this SDS should make independent judgment for the applicability of this SDS under special conditions. In these special cases, we do not assume responsibility for the damage. According to REACH Article 31(5), the SDS shall be supplied in an official language of the Member State(s) where the substance or mixture is placed on the market, unless the recipient Member State(s) concerned provide otherwise. It should also be noted that this SDS is applicable to the countries with English as an official language.

# AUTOMATIC FIRE SUPPRESSION SYSTEMS



-----End of the SDS-----