

# SAFETY DATA SHEET

In accordance with 1907/2006 annex II and 1272/2008  
(All references to EU regulations and directives are abbreviated into only the numeric term)  
Issued 2022-11-29  
Version number 1.0



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

### 1.1. Product identifier

Trade name BurnOut

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

Identified uses Extinguishant

### 1.3. Details of the supplier of the safety data sheet

Company Plum Safety ApS  
Mandelalleen 1  
5610 Assens  
Denmark  
Telephone (+45) 6916 9600  
E-mail info@plum.eu

### 1.4. Emergency telephone number

Phone number for emergencies: 999 or 112. The numbers are available 24/7.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Aerosol 3, H229  
(See section 16)

### 2.2. Label elements

Hazard pictogram	Not applicable
Signal word	Warning
Hazard statement	
H229	Pressurised container: May burst if heated
Precautionary statements	
P102	Keep out of reach of children
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P251	Do not pierce or burn, even after use
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C

### 2.3. Other hazards

This product does not contain any substances that are assessed to be a PBT or a vPvB

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

Constituent	Classification	Concentration
<b>AMMONIUM CHLORIDE</b>		
CAS No: 12125-02-9 EC No: 235-186-4 Index No: 017-014-00-8	Acute Tox. 4, Eye Irrit. 2; H302, H319	1 - 3 %

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Generally

In case of concern, or if symptoms occur, call a doctor/physician.

#### Upon breathing in

Fresh air and rest. If symptoms persist seek medical advice.

#### Upon eye contact

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor/ophthalmologist.

#### Upon skin contact

Normal washing of the skin is considered sufficient; If nevertheless symptoms do occur, contact a physician.

#### Upon ingestion

Rinse nose, mouth and throat with water.

Get medical attention if you feel unwell.

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

#### Upon breathing in

High concentrations can displace the normal air and cause suffocation from lack of oxygen.

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

When contacting a physician, take this SDS with you.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Recommended extinguishing agents

Not applicable: the product is a fire extinguisher.

#### Unsuitable extinguishing agents

Do not extinguish with a direct water jet.

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

Aerosols may explode when heated to temperatures above 50°C.

### 5.3. Advice for firefighters

Protective measures should be taken regarding other material at the site of the fire.

The containers should be moved away from the place of fire, if this can take place without risks.

Cool closed containers that were exposed to fire with water.

Wear full protective clothing.

In case of fire use proper breathing apparatus.

## SECTION 6: Accidental release measures

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

- In case of spillage in protected water, call the emergency services immediately, tel. 112 (in Europe).
- Evacuate the accident area and call an ambulance, if relevant.
- Keep unauthorized and unprotected people at a safe distance.
- Avoid inhalation and exposure to skin and eyes.
- Switch off equipment which has an exposed flame, glows, or has a heat source of some other kind.
- Switch off power at the main switch. Do not use the power switch in the room where the spillage has occurred.
- Ensure good ventilation.
- Use recommended safety equipment, see section 8.
- Use breathing apparatus when oxygen levels are low or unknown.

### 6.2. Environmental precautions

- Avoid emissions into soil, water or air.
- Prevent from entering sewers, basements and pits, or any place where gas accumulation could be dangerous.
- Notify rescue services for larger spillage.

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

- Let the gas from the leaking gas cylinders evaporate outdoors.
- Smaller spills can be left to evaporate if ventilation is adequate.
- Ensure good ventilation after sanitation.

### 6.4. Reference to other sections

- See section 8 and 13 for personal protection equipment and disposal considerations.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Take the necessary preventive and protective measures for safe handling.
- Open fire, hot items, sparks or other ignition sources must not be present in the environment used for handling this product.
- Pressure containers: do not puncture or burn, not even empty containers. Protect from sunlight. Do not expose to temperatures in excess of 50 °C.
- Do not inhale the fumes and avoid exposure to skin, eyes and clothing.
- Store this product separately from food items and keep it out of the reach of children and pets.
- Do not eat, drink or smoke in premises where this product is handled.
- Wash your hands after using the product.
- Remove contaminated clothing.
- Wash contaminated clothing before reuse.
- Keep away from incompatible products.
- Use recommended safety equipment, see section 8.
- Implement appropriate engineering controls if necessary, see Section 8.

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

- The product should be stored in a manner which prevents hazards to health and the environment. Avoid exposure to humans and animals and do not discharge the product in a sensitive environment.
- Take the necessary preventive and protective measures for safe storage.
- Keep out of reach for children.
- Store separately from food and animal fodder, incl. utensils or surfaces which have been in contact with these things.
- Always use sealed and visibly labeled packages.
- Keep away from heat and sunlight.
- Store at maximum 50 °C.
- Keep well closed.
- Store in dry and cool area.
- Store in a well-ventilated space.
- Do not store close to incompatible materials (see section 10.5).

### 7.3. Specific end use(s)

- See identified uses in Section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1. National limit values

##### AMMONIUM CHLORIDE

United Kingdom (EH40/2005)

Time-weighted-average exposure limit (TWA) 10 mg/m<sup>3</sup>

Short term exposure limit (STEL) 20 mg/m<sup>3</sup>

#### DNEL

##### AMMONIUM CHLORIDE

	Type of exposure	Route of exposure	Value
Consumer	Chronic Systemic	Inhalation	9.4 mg/m <sup>3</sup>
Worker	Chronic Systemic	Dermal	128.9 mg/kg bw
Worker	Chronic Systemic	Inhalation	43.97 mg/m <sup>3</sup>
Consumer	Chronic Systemic	Oral	55.2 mg/kg bw
Consumer	Chronic Systemic	Dermal	55.2 mg/kg bw

#### PNEC

##### AMMONIUM CHLORIDE

Environmental protection target	PNEC value
Fresh water	0.25 mg/L
Freshwater sediments	0.9 mg/kg dw
Marine water	0.025 mg/L
Marine sediments	0.09 mg/kg dw
Microorganisms in sewage treatment	13.1 mg/L
Soil (agricultural)	50.7 mg/kg dw
Intermittent	0.43 mg/L

### 8.2. Exposure controls

The risks posed by the product or its constituents must be considered in the task specific risk assessment, in accordance with current working environment legislation. The risk assessment should be reviewed regularly and updated if necessary.

#### 8.2.1. Appropriate engineering controls

The ventilation in the workplace must ensure an air quality that meets the requirements of the current working environment legislation. Local exhaust ventilation should be used to remove airborne contaminants at the source.

#### Eye/face protection

Eye protection should be worn if there is any danger of direct exposure or splashing.

#### Skin protection

Use suitable protective clothing.

Wear protective gloves (EN 374) upon repeated or prolonged exposure.

During continuous contact use gloves with a minimum breakthrough time of at least 240 minutes, preferably over 480 minutes.

The most suitable protective glove should be chosen in consultation with the glove supplier, taking into account the risk assessment for the specific task and the properties of the chemicals involved. Note that the breakthrough time of the material is affected by the duration of the exposure, temperature conditions, abrasion, etcetera.

#### Respiratory protection

Use appropriate respiratory protective equipment in case of insufficient ventilation.

The most appropriate respiratory protective equipment should be decided in consultation with the appointed safety representative, taking into account the risk assessment for the specific task.

Based on the physical and chemical properties of the product, the following filter type(s) and/or filter combination(s) are recommended:

– P2.

Note that a breathing mask with a filter does not protect against lack of oxygen in the air.

Breathing apparatus may be required.

### 8.2.3. Environmental exposure controls

For limiting environmental exposure, see section 12.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

(a) Physical state	liquid Form: aerosol
(b) Colour	colourless
(c) Odour	like ammonia
(d) Melting point/freezing point	-5 °C
(e) Boiling point or initial boiling point and boiling range	<100 °C
(f) Flammability	Not indicated
(g) Lower and upper explosion limit	Not indicated
(h) Flash point	Not indicated
(i) Auto-ignition temperature	Not indicated
(j) Decomposition temperature	Not indicated
(k) pH	When supplied, pH is: 7.4
(l) Kinematic viscosity	Not indicated
(m) Solubility	Solubility in water: Soluble
(n) Partition coefficient n-octanol/water (log value)	Not indicated
(o) Vapour pressure	Not indicated
(p) Density and/or relative density	1.2 Water = 1
(q) Relative vapour density	Not indicated
(r) Particle characteristics	Not indicated

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

Not indicated

#### 9.2.2. Other safety characteristics

Not indicated

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product contains no substances which can lead to hazardous reactions at normal use.

### 10.2. Chemical stability

The product is stable at normal storage and handling conditions.

### 10.3. Possibility of hazardous reactions

No hazardous reactions known during normal use.

### 10.4. Conditions to avoid

Avoid heat, sparks and open flames.

Protect from heat and direct sunlight.

Do not expose to temperatures above 50 °C.

### 10.5. Incompatible materials

None known.

### 10.6. Hazardous decomposition products

None under normal conditions.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on possible health hazards are based on experience and / or toxicological properties of several components in the product.

#### Acute toxicity

The product is not classified as acutely toxic.

#### AMMONIUM CHLORIDE

LD50 rat 24h: > 2000 mg/kg Dermal

LD50 rat 24h: 1650 mg/kg Orally

#### Skin corrosion/irritation

The product is not classified for skin corrosion/irritation.

#### Serious eye damage/irritation

The product is not classified for serious eye damage/eye irritation.

#### Respiratory or skin sensitisation

The product is not classified as sensitising.

#### Germ cell mutagenicity

The product is not classified as mutagen.

#### Carcinogenicity

The product is not classified as carcinogenic.

#### Reproductive toxicity

The product is not classified as a reproductive toxicant.

#### STOT-single exposure

The product is not classified for specific organ toxicity after single exposure.

#### STOT-repeated exposure

The product is not classified for specific organ toxicity after repeated exposure.

#### Aspiration hazard

The product is not classified as being toxic for aspiration.

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No information is available.

#### 11.2.2. Other information

Not indicated.

## SECTION 12: Ecological information

### 12.1. Toxicity

The product is not to be labelled as an environmental hazard. However, it is not inconceivable that large emissions, or repeated small emissions, can have a harmful effect on the environment.

Prevent release on land, in water and drains.

#### AMMONIUM CHLORIDE

LC50 Rainbow trout (*Oncorhynchus mykiss*) 96h: 42.91 mg/l

EC50 Freshwater water flea (*Daphnia magna*) 48 h: 136.6 mg/L

EC50 14d: 163 mg/kg

EC50 *Ceriodaphnia dubia* 48h: 98.5 mg/l

### 12.2. Persistence and degradability

There is no information regarding persistence or degradability.

### 12.3. Bioaccumulative potential

There is no information regarding bioaccumulation.

### 12.4. Mobility in soil

The product is miscible with water and is therefore variable in soil and water.

### 12.5. Results of PBT and vPvB assessment

This product does not contain any substances that are assessed to be a PBT or a vPvB.

#### 12.6. Endocrine disrupting properties

No information is available.

#### 12.7. Other adverse effects

No known effects or hazards.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Waste handling of the product

Avoid discharge into sewers.

Product as well as packaging must be disposed of as hazardous waste.

Pressurized container: Do not pierce or burn, even after use.

See directive 2008/98/EC on waste. Observe national or regional provisions on waste management.

### SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

#### 14.1. UN number or ID number

1950

#### 14.2. UN proper shipping name

AEROSOLS

#### 14.3. Transport hazard class(es)

##### Class

2: Gases

##### Classification code (ADR/RID)

5A: Aerosols, asphyxiant

##### Labels



#### 14.4. Packing group

Not applicable

#### 14.5. Environmental hazards

Not applicable

#### 14.6. Special precautions for user

##### Tunnel restrictions

Tunnel category: E

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

#### 14.8 Other transport information

Transport category: 3; Maximum total quantity per transport unit: 1000 kgs or litres (ADR 1.1.3.6)

Stowage category A (IMDG)

Emergency Schedule (EmS) for FIRE (IMDG) F-D

Emergency Schedule (EmS) for SPILLAGE (IMDG) S-U

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Not indicated.

### 15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

## SECTION 16: Other information

### 16a. Indication of where changes have been made to the previous version of the safety data sheet

#### Revisions of this document

This is the first version

### 16b. Legend to abbreviations and acronyms used in the safety data sheet

#### Full texts for Hazard Class and Category Code mentioned in section 3

Acute Tox. 4 Acute toxicity (oral), Hazard Category 4 - Acute Tox. 4, H302 - Harmful if swallowed

Eye Irrit. 2 Serious eye damage/eye irritation, Hazard Category 2 - Eye Irrit. 2, H319 - Causes serious eye irritation

Aerosol 3 Aerosols, Hazard Category 3 - Aerosol 3, H229 - Pressurised container: May burst if heated

#### Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)

IATA The International Air Transport Association

Tunnel restriction code: E; Passage through category E tunnels is strictly forbidden

Transport category: 3; Maximum total quantity per transport unit: 1000 kgs or litres (ADR 1.1.3.6)

### 16c. Key literature references and sources for data

#### Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2022-11-29.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

#### Full texts for Regulations mentioned in this Safety Data Sheet

1907/2006 REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

1272/2008 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

2008/98/EC DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives

### 16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I, where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI.

### 16e. List of relevant hazard statements and/or precautionary statements

#### Full texts for hazard statements mentioned in section 3

H302 Harmful if swallowed

H319 Causes serious eye irritation



**16f. Advice on any training appropriate for workers to ensure protection of human health and the environment**

**Warning for misuse**

This product is not expected to cause severe harm to humans or the environment. However the manufacturer, the distributor or the supplier cannot be responsible for unusual or criminal use of the product.

**Other relevant information**

Not indicated

**Editorial information**



This material safety data sheet has been prepared and checked by KemRisk®, KemRisk Sweden AB, Platensgatan 8, SE-582 20 Linköping, Sweden, [www.kemrisk.se](http://www.kemrisk.se)