



## Safety Data Sheet

according to UK REACH Regulation

### 589 Air Sanitiser 100ml B2

Revision date: 17.11.2022

Product code: 1106470

Page 1 of 11

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

### 1.1. Product identifier

589 Air Sanitiser 100ml B2

UFI: 68D3-P0YR-Q005-TN9W

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

#### Use of the substance/mixture

Air refreshener

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

Company name:	TUNAP GmbH & Co. KG	
Street:	Buergermeister-Seidl-Strasse 2	
Place:	D-82515 Wolfratshausen	
Telephone:	+49 (0) 8171/1600-0	Telefax: +49 (0) 8171/1600-40
e-mail:	sdb@tunap.com	
Internet:	www.tunap.com	

### 1.4. Emergency telephone number:

 111 NHS (National Health Service)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GB CLP Regulation

Aerosol 1; H222-H229  
Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

#### GB CLP Regulation

Signal word: Danger

Pictograms:



#### Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.

#### Precautionary statements

P102	Keep out of reach of children.
P101	If medical advice is needed, have product container or label at hand.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P280	Wear eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.



# Safety Data Sheet

according to UK REACH Regulation

## 589 Air Sanitiser 100ml B2

Revision date: 17.11.2022

Product code: 1106470

Page 2 of 11

P501 Dispose of contents/container according to the official regulations.

### Special labelling of certain mixtures

EUH208 Contains L-menthan-3-one. May produce an allergic reaction.

### 2.3. Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII. This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
64-17-5	ethanol			25 - < 50 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			
115-10-6	dimethyl ether			25 - < 50 %
	204-065-8	603-019-00-8		
	Flam. Gas 1, Liquefied gas; H220 H280			
14073-97-3	L-menthan-3-one			< 0.1 %
	237-926-1			
	Skin Irrit. 2, Skin Sens. 1B; H315 H317			

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
64-17-5	200-578-6	ethanol	25 - < 50 %
	inhalation: LC50 = 95,6 mg/l (vapours); dermal: LD50 = >20000 mg/kg; oral: LD50 = 6200 mg/kg Eye Irrit. 2; H319: >= 50 - 100		
14073-97-3	237-926-1	L-menthan-3-one	< 0.1 %
	dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 2000 mg/kg		

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

First aider: Pay attention to self-protection! Remove persons to safety. Never give anything by mouth to an unconscious person or a person with cramps.

#### After inhalation

Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical advice.

#### After contact with skin

Wash with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In all cases of doubt, or when symptoms persist, seek medical advice.



## Safety Data Sheet

according to UK REACH Regulation

### 589 Air Sanitiser 100ml B2

Revision date: 17.11.2022

Product code: 1106470

Page 3 of 11

#### After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an ophthalmologist.

#### After ingestion

Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Call a physician in any case!

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

Headache, nausea, dizziness, fatigue, skin irritation

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

Treat symptomatically. Call a POISON CENTER. Symptoms can occur only after several hours.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Water fog. Foam. Carbon dioxide (CO<sub>2</sub>). Extinguishing powder.

##### Unsuitable extinguishing media

Full water jet

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

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO<sub>2</sub>, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

#### 5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Move undamaged containers from immediate hazard area if it can be done safely. In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Danger of bursting container.

### SECTION 6: Accidental release measures

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

##### General advice

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

##### For non-emergency personnel

First aider: Pay attention to self-protection!

##### For emergency responders

Fight fire with normal precautions from a reasonable distance.

#### 6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

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

##### For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).

##### For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

##### Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated articles and floor according to the environmental legislation.

**Safety Data Sheet**

according to UK REACH Regulation

**589 Air Sanitiser 100ml B2**

Revision date: 17.11.2022

Product code: 1106470

Page 4 of 11

**6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Observe instructions for use.  
Dust must be exhausted directly at the point of origin. Vapours/aerosols must be exhausted directly at the point of origin. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.  
When using do not eat, drink, smoke, sniff.  
Wear personal protection equipment (refer to section 8).  
In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Heating causes rise in pressure with risk of bursting.

**Advice on general occupational hygiene**

Avoid exposure. Wear suitable protective clothing. Draw up and observe skin protection programme.

**Further information on handling**

Avoid contact with skin and eyes.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. Observe legal regulations and provisions.

**Hints on joint storage**

Do not store together with: Oxidizing agents. Pyrophoric or self-heating substances. Food and feedingstuffs.

**Further information on storage conditions**

Protect from frost. Protect from direct sunlight. Store in a cool dry place. Observe legal regulations and provisions.

**7.3. Specific end use(s)**

No information available.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
115-10-6	Dimethyl ether	400	766		TWA (8 h)	WEL
		500	958		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

**Additional advice on limit values**

a no restriction  
b End of exposure or end of shift  
c at long-term exposure:  
d before next shift

blood (B)



## Safety Data Sheet

according to UK REACH Regulation

### 589 Air Sanitiser 100ml B2

Revision date: 17.11.2022

Product code: 1106470

Page 5 of 11

Urine (U)

#### **8.2. Exposure controls**

##### **Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used.

##### **Individual protection measures, such as personal protective equipment**

##### **Eye/face protection**

Suitable eye protection: Tightly sealed safety glasses.

EN 166

##### **Hand protection**

Protect skin by using skin protective cream. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable material: NBR (Nitrile rubber) Breakthrough time: 480min

Thickness of the glove material 0,45 mm

EN ISO 374

##### **Skin protection**

Wear suitable protective clothing. Take off immediately all contaminated clothing and wash it before reuse.

##### **Respiratory protection**

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

When exceeding the relevant workplace exposure limits, note the following:

Suitable respiratory protective equipment: Combination filter device (DIN EN 141)..

Filtering device with filter or ventilator filtering device of type: AX

Observe the wear time limits as specified by the manufacturer.

Observe legal regulations and provisions.

##### **Environmental exposure controls**

Observe legal regulations and provisions.

## SECTION 9: Physical and chemical properties

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

Physical state:	Aerosol
Colour:	colorless, clear
Odour:	Menthol.

	Test method
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	-24,8 °C
Flammability	
Solid/liquid:	not applicable
Gas:	not applicable
Lower explosion limits:	2,7 vol. %
Upper explosion limits:	32 vol. %
Auto-ignition temperature:	240 °C
Decomposition temperature:	not determined
pH-Value (at 20 °C):	6,5 DIN 19268
Water solubility:	easily soluble
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined



## Safety Data Sheet

according to UK REACH Regulation

### 589 Air Sanitiser 100ml B2

Revision date: 17.11.2022

Product code: 1106470

Page 6 of 11

Density (at 20 °C): 0,85 g/cm<sup>3</sup> DIN 51757  
Relative vapour density: not determined

#### **9.2. Other information**

##### **Information with regard to physical hazard classes**

###### **Explosive properties**

Heating may cause an explosion.

###### **Oxidizing properties**

The product is not: oxidising.

##### **Other safety characteristics**

Evaporation rate: not determined

Solid content: not determined

Sublimation point: No information available.

Softening point: No information available.

Pour point: No information available.

##### **Further Information**

Data apply to technical substance: Relative density, Colour, Odour, Viscosity, pH.

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

Extremely flammable aerosol. Pressurized container: May burst if heated.

### **10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

### **10.3. Possibility of hazardous reactions**

Do not expose to temperatures above 50 °C. Heating causes rise in pressure with risk of bursting.

### **10.4. Conditions to avoid**

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

### **10.5. Incompatible materials**

Oxidizing agents. Pyrophoric or self-heating substances.

### **10.6. Hazardous decomposition products**

Incomplete combustion and thermolysis gases of different toxicity can occur. In the case of hydrocarbonaceous products such as CO, CO<sub>2</sub>, aldehydes and soot. These can be very dangerous if they are inhaled in high concentrations or in enclosed spaces.

##### **Further information**

Do not mix with other chemicals.

## **SECTION 11: Toxicological information**

### **11.1. Information on hazard classes as defined in GB CLP Regulation**

#### **Toxicokinetics, metabolism and distribution**

There are no data available on the mixture itself.

#### **Acute toxicity**

Based on available data, the classification criteria are not met.

**Safety Data Sheet**

according to UK REACH Regulation

**589 Air Sanitiser 100ml B2**

Revision date: 17.11.2022

Product code: 1106470

Page 7 of 11

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64-17-5	ethanol				
	oral	LD50 6200 mg/kg	Rat	IUCLID	
	dermal	LD50 >20000 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 95,6 mg/l	Rat	RTECS	
14073-97-3	L-menthan-3-one				
	oral	LD50 > 2000 mg/kg	Rat		
	dermal	LD50 > 5000 mg/kg	Rabbit		

**Irritation and corrosivity**

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

**Sensitising effects**

Contains L-menthan-3-one. May produce an allergic reaction.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

No indication of human carcinogenicity.

No indications of human germ cell mutagenicity exist.

No indications of human reproductive toxicity exist.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Specific effects in experiment on an animal**

No information available.

**Additional information on tests**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**Further information**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

**SECTION 12: Ecological information****12.1. Toxicity**

The product is not: Ecotoxic.

**Safety Data Sheet**

according to UK REACH Regulation

**589 Air Sanitiser 100ml B2**

Revision date: 17.11.2022

Product code: 1106470

Page 8 of 11

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
64-17-5	ethanol					
	Acute fish toxicity	LC50 mg/l	14200	96 h	Pimephales promelas (fathead minnow)	
	Acute crustacea toxicity	EC50 14221 mg/l	9268 -	48 h	Daphnia magna	IUCLID
115-10-6	dimethyl ether					
	Acute fish toxicity	LC50 mg/l	> 4100	96 h	Poecilia reticulata (Guppy)	
	Acute algae toxicity	ErC50 mg/l	> 154	96 h	Green Algae	
	Acute crustacea toxicity	EC50 mg/l	> 4400	48 h	Daphnia magna	
14073-97-3	L-menthan-3-one					
	Acute fish toxicity	LC50	>28 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50	58 mg/l	72 h	Desmodesmus subspicatus	
	Acute crustacea toxicity	EC50 mg/l	>100	48 h	Daphnia magna (Big water flea)	

**12.2. Persistence and degradability**

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
64-17-5	ethanol	-0,31
115-10-6	dimethyl ether	0,1

**12.4. Mobility in soil**

The product has not been tested.

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No information available.

**Further information**

Avoid release to the environment.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**



**Safety Data Sheet**

according to UK REACH Regulation

**589 Air Sanitiser 100ml B2**

Revision date: 17.11.2022

Product code: 1106470

Page 9 of 11

**Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

**List of Wastes Code - residues/unused products**

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

**List of Wastes Code - used product**

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

**List of Wastes Code - contaminated packaging**

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

**Contaminated packaging**

Completely emptied packages can be recycled.

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS
<b>14.3. Transport hazard class(es):</b>	2
<b>14.4. Packing group:</b>	-
Hazard label:	2.1
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0
Transport category:	2
Tunnel restriction code:	D

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS
<b>14.3. Transport hazard class(es):</b>	2
<b>14.4. Packing group:</b>	-
Hazard label:	2.1
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS
<b>14.3. Transport hazard class(es):</b>	2.1
<b>14.4. Packing group:</b>	-
Hazard label:	2.1
Marine pollutant:	no
Special Provisions:	63, 190, 277, 327, 344, 381, 959
Limited quantity:	1000 mL
Excepted quantity:	E0



## Safety Data Sheet

according to UK REACH Regulation

### 589 Air Sanitiser 100ml B2

Revision date: 17.11.2022

Product code: 1106470

Page 10 of 11

EmS: F-D, S-U

#### Air transport (ICAO-TI/IATA-DGR)

<b>14.1. UN number or ID number:</b>	UN 1950
<b>14.2. UN proper shipping name:</b>	AEROSOLS, FLAMMABLE
<b>14.3. Transport hazard class(es):</b>	2.1
<b>14.4. Packing group:</b>	-
Hazard label:	2.1
Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

#### 14.6. Special precautions for user

Warning: Flammable gases.

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

not applicable

## SECTION 15: Regulatory information

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

#### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): No information available.

Information according to 2012/18/EU (SEVESO III): P3a FLAMMABLE AEROSOLS

#### Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)  
Aerosol Directive (75/324/)

#### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 9,15,16.

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement

**Safety Data Sheet**

according to UK REACH Regulation

**589 Air Sanitiser 100ml B2**

Revision date: 17.11.2022

Product code: 1106470

Page 11 of 11

concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer  
(Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL/DMEL: Derived No Effect Level / Derived Minimal Effect Level

WEL (UK): Workplace Exposure Limits

TWA (EC): Time-Weighted Average

ATE: Acute Toxicity Estimate

STEL (EC) Short Term Exposure Limit

LC50: Lethal Concentration

EC50: half maximal Effective Concentration

ErC50: means EC50 in terms of reduction of growth rate

**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Eye Irrit. 2; H319	Bridging principle "Aerosols"

**Relevant H and EUH statements (number and full text)**

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
EUH208	Contains L-menthan-3-one. May produce an allergic reaction.

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*