Air Spray 400ml

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

1.1. Product identifier

Trade name/designation:

Air Spray 400ml

Article No.:
T900017

UFI:
N33G-60YA-CP6Y-8T1J

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

Use of the substance/mixture:
Compressed air

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

Supplier:

KANDO Service GmbH
Hartleitnerstraße 3
4653 Eberstalzell
Austria
Telephone: +43 (0) 7241 213 79
E-mail: msds@kando.eu

1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
aerosol dispensers and lighters *(Aerosol 1)*	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	

2.2. Label elements

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

Hazard pictograms:

GHS02
Flame

Signal word: Danger

Hazard components for labelling:
propane

Hazard statements for physical hazards	
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.

Supplemental hazard information: none

Precautionary statements Prevention	
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.

Precautionary statements Storage	
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.3. Other hazards

Other adverse effects:

Based on the available information, the product does not contain SVHC substances in percentages ≥ 0.1%.

The product does not contain any substances with endocrine-disrupting properties in concentrations of ≥ 0.1%.

SECTION 3: Composition/information on ingredients

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3.2. Mixtures

Additional information:

Percentage of blowing agents: 100,00%

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 74-98-6 EC No.: 200-827-9 Index No.: 601-003-00-5 REACH No.: 01-2119486944-21	**propane** Flam. Gas 1A (H220), Press. Gas (Liq.) (H280) Danger **Acute Toxicity Estimate** ATE (oral) 5,840 mg/kg ATE (dermal) 13,900 mg/kg ATE (inhalation, gases) > 25 ppmV ATE (inhalation, vapour) ≥ 50 mg/L	≥ 45 – 49 Vol-%
CAS No.: 106-97-8 EC No.: 203-448-7 Index No.: 601-004-00-0 REACH No.: 01-2119474691-32	**butane** Flam. Gas 1A (H220), Press. Gas (Liq.) (H280) Danger **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, gases) 658 ppmV ATE (inhalation, vapour) > 800,000 mg/L	≥ 37 – 41 Vol-%
CAS No.: 75-28-5 EC No.: 200-857-2 Index No.: 601-004-00-0 REACH No.: 01-2119485395-27	**isobutane** Flam. Gas 1A (H220), Press. Gas (Liq.) (H280) Danger **Acute Toxicity Estimate** ATE (oral) > 15,000 mg/kg ATE (dermal) > 5,000 mg/kg ATE (inhalation, vapour) > 4,951 mg/L	≥ 15 – 17.5 Vol-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

There are no known cases of damage to the health of personnel handling the product. In case of emergency, the following general measures should be taken.

Following inhalation:

A doctor must be consulted immediately. The person concerned shall be carried outside, away from the scene of the accident. If breathing stops, artificial respiration shall be given.

In case of skin contact:
Soiled, soaked clothing must be taken off. One must take a shower immediately. A doctor must be consulted immediately.

After eye contact:
Any contact lenses must be removed. One must immediately and extensively wash with water for at least 30 / 60 minutes, opening the eyelids well. A doctor must be consulted immediately.

Following ingestion:
A doctor must be consulted immediately. Vomiting may only be induced on the doctor's orders. Nothing may be administered orally without the doctor's order or if the person concerned is unconscious.

4.2. Most important symptoms and effects, both acute and delayed
There is no known specific information on symptoms and effects caused by this product.

4.3. Indication of any immediate medical attention and special treatment needed
No further details.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Carbon dioxide, Foam, Extinguishing powder, Water mist

Unsuitable extinguishing media:
No information available.

5.2. Special hazards arising from the substance or mixture
If overheated, there is a risk that aerosol containers will deform, burst and be hurled a considerable distance. Before approaching the fire, one must put on a protective helmet. Avoid inhalation of combustion products.

5.3. Advice for firefighters
The containers shall be cooled with water jets to prevent the decomposition of the product and the formation of potentially harmful substances. Complete fire protective clothing shall be worn at all times. Extinguishing water that is not allowed to enter the sewage pipes shall be collected. The water used for extinguishing and the fire residues shall be taken up in accordance with the regulations in force.

Personal protection:
Normal firefighting clothing, e.g. an open-circuit compressed air respirator (EN 137) firefighting kit (EN469), firefighting gloves (EN 659) and firefighting boots (HO A 29 or A30)

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Personal precautions:
Any source of ignition (cigarettes, flames, sparks, etc.) or heat must be disposed of from the area where the product has been spilled. Remove persons without protective clothing from the site. Wear protective gloves/protective clothing/eye protection/face protection.

6.1.2. For emergency responders
No data available

6.2. Environmental precautions
Prevent the product from entering waste water, surface water, ground water.

6.3. Methods and material for containment and cleaning up
Other information:
The spilled product must be sucked into a suitable container. The container to be used shall be tested for compatibility with the product, subject to section 10. The residual product shall be absorbed with inert absorbent material. Adequate ventilation of the affected area shall be provided. Contaminated material must be disposed of in accordance with the regulations in section 13.

6.4. Reference to other sections
See section 7 for further information on safe handling.
For further information on personal protective equipment: see section 8.
For further information on disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:
Accumulation of electrostatic charges must be avoided. It must not be sprayed into flames or onto glowing bodies. Vapours can ignite with an explosion, so prevent accumulation by keeping doors and windows open with a draught. Do not eat, drink or smoke when using the product. Do not inhale aerosol.

Advices on general occupational hygiene
Wash hands before breaks and after work.
Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:
It must be kept in a well-ventilated area, away from direct sunlight, at temperatures below 50°C / 122°F and away from any source of combustion.
Storage class (TRGS 510, Germany): 2B – Aerosol dispensers and lighters

7.3. Specific end use(s)

Recommendation:
No further details.

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT)	**propane** CAS No.: 74-98-6 EC No.: 200-827-9	② 2,000 ppm (3,600 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
MAK (AT)	**propane** CAS No.: 74-98-6 EC No.: 200-827-9	① 1,000 ppm (1,800 mg/m³)
MAK (AT)	**butane** CAS No.: 106-97-8 EC No.: 203-448-7	① 800 ppm (1,900 mg/m³)
MAK (AT)	**butane** CAS No.: 106-97-8 EC No.: 203-448-7	② 1,600 ppm (3,800 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
MAK (AT)	**isobutane** CAS No.: 75-28-5 EC No.: 200-857-2	② 1,600 ppm (3,800 mg/m³) ⑤ (max. 3x60 min./SchichtMomentanwert)
MAK (AT)	**isobutane** CAS No.: 75-28-5 EC No.: 200-857-2	① 800 ppm (1,900 mg/m³)

8.1.2. Biological limit values
No data available

8.1.3. DNEL-/PNEC-values
No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls
Considering that appropriate protective measures should always take precedence over personal protective clothing, ensure that the workplace is well ventilated by effective local exhaust ventilation. For the selection of personal protective equipment, the trusted chemical manufacturers may need to be consulted. The personal protective equipment must be CE marked to indicate its suitability for the applicable regulations.

8.2.2. Personal protection equipment

Eye/face protection:
The use of penetration-proof goggles is recommended (ref. standard EN 16321).

Skin protection:
Hand protection:
Not required.

Body protection:
Work clothing with long sleeves and category I accident protection shoes must be worn (see Regulation 2016/425 and standard EN ISO 20344). After taking off the protective clothing, one must wash with soap and water.

Respiratory protection:
If the threshold value (e.g. TLV-TWA) of the substance or one or more substances contained in the product is exceeded, it is recommended to wear a mask with filter type AX in combination with a filter type P (ref. standard EN 14387).
If the technical measures taken are not sufficient to reduce the exposure of the worker to the thresholds considered, the use of respiratory protective devices is necessary. The protection provided by the mask is limited in any case.

8.2.3. Environmental exposure controls
Emissions from manufacturing processes, including those from ventilation equipment, should be checked for compliance with environmental legislation.

SECTION 9: Physical and chemical properties

*

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Colour: white
Odour: characteristic
flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	*No data available*		
Melting point	*No data available*		
Freezing point	*No data available*		
Initial boiling point and boiling range	*No data available*		
Flash point	*No data available*		
Evaporation rate	*No data available*		
Auto-ignition temperature	*No data available*		
Upper/lower flammability or explosive limits	*No data available*		
Vapour pressure	*No data available*		
Vapour density	*No data available*		
Density	0.56 kg/L	20 °C	
Bulk density	*not applicable*		
Water solubility	easily soluble	20 °C	

Air Spray 400ml

Parameter	Value	at °C	① Method ② Remark
Partition coefficient: n-octanol/water	*not applicable*		
Dynamic viscosity	*No data available*		
Kinematic viscosity	*No data available*		

particle characteristics:
not applicable

9.2. Other information
The product is not explosive.
Flammable.

SECTION 10: Stability and reactivity

10.1. Reactivity
No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability
The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions
No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid
Avoid heating.

10.5. Incompatible materials
Strong reducing and oxidising agents, strong bases and acids, materials at high temperatures.

10.6. Hazardous decomposition products
No further relevant information available.

SECTION 11: Toxicological information

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

propane CAS No.: 74-98-6 EC No.: 200-827-9
LD_{50} oral: 5,840 mg/kg (Rat)
LD_{50} dermal: 13,900 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (gas): >25 ppmV 4 h (Rat)
LC_{50} Acute inhalation toxicity (vapour): ≥50 mg/L 4 h (Rat)
butane CAS No.: 106-97-8 EC No.: 203-448-7
LD_{50} oral: >2,000 mg/kg
LD_{50} dermal: >2,000 mg/kg
LC_{50} Acute inhalation toxicity (gas): 658 ppmV (Rat)
LC_{50} Acute inhalation toxicity (vapour): >800,000 mg/L (Rat)
isobutane CAS No.: 75-28-5 EC No.: 200-857-2
LD_{50} oral: >15,000 mg/kg
LD_{50} dermal: >5,000 mg/kg
LC_{50} Acute inhalation toxicity (vapour): >4,951 mg/L

Acute oral toxicity:
Based on available data, the classification criteria are not met.

Acute dermal toxicity:
Based on available data, the classification criteria are not met.

Acute inhalation toxicity:
Based on available data, the classification criteria are not met.

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

Serious eye damage/irritation:
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation:
Based on available data, the classification criteria are not met.

Germ cell mutagenicity:
Based on available data, the classification criteria are not met.

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

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

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.

Additional information:
According to the available data, the product does not contain any substances included in the main European lists of potential or suspected endocrine disruptors with effects on human health to be assessed.

11.2. Information on other hazards

Endocrine disrupting properties:
None of the ingredients are included.

SECTION 12: Ecological information

*

12.1. Toxicity

propane CAS No.: 74-98-6 EC No.: 200-827-9
LC_{50}: 9,640 mg/L 4 d (fish, Pimephales promelas)
LC_{50}: 0.41 mg/L 4 d (fish, Oncorhynchus mykiss)
LC_{50}: 49.9 mg/L 4 d (fish)
EC_{50}: >100 mg/L (Algae/water plant, Bacteria)
EC_{50}: 0.17 mg/L 3 d (Algae/water plant, Selenastrum capricornutum)
EC_{50}: 69.43 mg/L 2 d (crustaceans, Daphnia) Calculation with the ECOSAR programme v1.00.
NOEC: 0.017 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)
ErC_{50}: 19.37 mg/L 4 d (Algae/water plant, Algae) Calculation with the ECOSAR programme v1.00.
LOEC: 1,000 mg/L (Algae/water plant, Algae)
LOEC: 1,000 mg/L (Algae/water plant, Alge)
IC_{50}: 11.3 mg/L 3 d (Algae/water plant)
butane CAS No.: 106-97-8 EC No.: 203-448-7
LC_{50}: 49.9 mg/L 4 d (fish)
LC_{50}: 24.11 mg/L (fish)
EC_{50}: 69.43 mg/L 2 d (crustaceans, Daphnia sp.)
EC_{50}: 7.71 mg/L 4 d (Algae/water plant)
ErC_{50}: 19.37 mg/L 4 d (Algae/water plant)

isobutane CAS No.: 75-28-5 EC No.: 200-857-2
LC_{50}: 91.42 mg/L 4 d (fish, Fish, no other information)
LC_{50}: 100 mg/L 4 d (fish, Danio rerio)
LC_{50}: 91.42 mg/L 4 d (fish)
EC_{50}: 69.43 mg/L 2 d (crustaceans, Daphnia sp.)
EC_{50}: 1,000 mg/L 2 d (fish, Daphnia magna)
EC_{50}: 69.43 mg/L 2 d (crustaceans, Daphnia) Calculation with the ECOSAR programme v1.00.
ErC_{50}: 19.37 mg/L 4 d (Algae/water plant, Algae)
ErC_{50}: 19.37 mg/L 4 d (Algae/water plant) Calculation using ECOSAR Program v1.00.

Assessment/classification:
No further relevant information available.

12.2. Persistence and degradability

propane CAS No.: 74-98-6 EC No.: 200-827-9
Biodegradation: Yes, rapidly
butane CAS No.: 106-97-8 EC No.: 203-448-7
Biodegradation: Yes, rapidly

Additional information:
No further relevant information available.

12.3. Bioaccumulative potential

propane CAS No.: 74-98-6 EC No.: 200-827-9
Log K_{OW}: 1.09
butane CAS No.: 106-97-8 EC No.: 203-448-7
Log K_{OW}: 1.09
isobutane CAS No.: 75-28-5 EC No.: 200-857-2
Log K_{OW}: 1.09

Partition coefficient: n-octanol/water:
not applicable

12.4. Mobility in soil
No further details.

12.5. Results of PBT and vPvB assessment

propane CAS No.: 74-98-6 EC No.: 200-827-9
Results of PBT and vPvB assessment: —
butane CAS No.: 106-97-8 EC No.: 203-448-7
Results of PBT and vPvB assessment: —
isobutane CAS No.: 75-28-5 EC No.: 200-857-2
Results of PBT and vPvB assessment: —

Based on the available information, the product does not contain any PBT or vPvB substances in content percentages ≥ 0.1%.

12.6. Endocrine disrupting properties
According to the available data, the product does not contain any substances included in the main European lists of potential or suspected endocrine disruptors with effects on human health to be assessed.

12.7. Other adverse effects
No further details.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Reuse if possible. Product residues are to be considered as hazardous waste. The hazardousness of the waste partially containing this product must be evaluated on the basis of the legal provisions in force. Disposal must be entrusted to a company authorised for waste management, taking into account national and, where applicable, local regulations.

Waste treatment options

Appropriate disposal / Package:

Contaminated packaging material must be sent for recycling or disposal in accordance with the country's waste management regulations.

13.2. Additional information

The transport of the waste may be subject to ADR.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name			
AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, FLAMMABLE
14.3. Transport hazard class(es)			
 2.1	 2.1	 2.1	 2.1
14.4. Packing group			
		-	
14.5. Environmental hazards			
No	No	No	No
14.6. Special precautions for user			
Special Provisions: 190 | 327 | 344 | 625 **Limited quantity (LQ):** 1 L **Excepted Quantities (EQ):** E0 **Classification code:** 5F **Tunnel restriction code:** (D)	**Special Provisions:** 190 | 327 | 344 | 625 **Limited quantity (LQ):** 1 L **Excepted Quantities (EQ):** E0 **Classification code:** 5F	**Special Provisions:** 63 | 190 | 277 | 327 | 344 | 381 | 959 **Limited quantity (LQ):** Siehe SV277 **Excepted Quantities (EQ):** E0 **EmS-No.:** F-D, S-U	**Special Provisions:** A145 | A167 | A802 **Limited quantity (LQ):** Y203 **Excepted Quantities (EQ):** E0 **Remark:** IATA-Verpackungsanweisung - Cargo: 203 IATA Maximum Quantity - Cargo: 150 KG IATA Packing Instructions - Passenger: 203 IATA Maximum Quantity - Passenger: 75 KG

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**

15.1.1. EU legislation

Restrictions on use:

Restrictions on the product or substances according to Annex XVII Regulation (EC) 1907/2006
Product 40

Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive], Hazard categories:
• P3a 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids

Named dangerous substances:
• Liquefied flammable gases, Category 1 or 2 (including liquefied petroleum gas) and natural gas
Regulation (EU) 2019/1148 (marketing and use of explosives precursors)
Restricted explosives precursor The acquisition, transfer, possession or use by members of the general public of the restricted explosives precursor in question shall be subject to a restriction in accordance with Article 5(1) and (3). Restricted explosives precursors shall not be made available to, transferred to, possessed by or used by members of the general public. The acquisition, transfer, possession or use of the regulated explosives precursor in question by members of the general public shall be subject to reporting requirements in accordance with Article 9. All suspicious transactions and significant disappearances and thefts must be reported to the relevant national contact point.

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:

Volatile organic compounds (VOC) content in percent by weight: 560 g/L

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

* **16.1. Indication of changes**

1.3.	Details of the supplier of the safety data sheet
3.2.	Mixtures
8.1.	Control parameters
9.1.	Information on basic physical and chemical properties
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
15.3.	Additional information
16.1.	Indication of changes

Limit value / limit values updated

16.2. Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ASTM	American Society for Testing and Materials
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DNEL	derived no-effect level
EC_{50}	Effective Concentration 50%
EN	European Standard

ES	Exposure scenario
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
SCL	Specific concentration limit
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations
VOC	Volatile organic compounds
ZNS	central nervous system

16.3. Key literature references and sources for data
No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
aerosol dispensers and lighters *(Aerosol 1)*	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.

16.6. Training advice
No data available

16.7. Additional information
To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.