

AIRDUSTER NON-FLAMMABLE

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

1.1 - Product identifier

Trade name/designation AIRDUSTER NON-FLAMMABLE

Chemical name

Product-type Mixture

Product code 723.400 / 743.300

UFI: R8JJ-U459-020C-DN78

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

Relevant identified uses

1.3 - Details of the supplier of the safety data sheet

ECS Cleaning Solutions GmbH

Wolfener Str. 32-34

D-12681 Berlin Germany

Telefon : +49 (0)30 / 36 46 40 36

gunnar.kleinmann@ecsag.com

1.4 - Emergency telephone number

- Germany: Intoxications Information Center; +49 761 19240

Switzerland: Swiss Toxicological Information Centre; +41 44 251 51 51

Austria: Intoxication information center; +43 1 406 43 43

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

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

Aerosol 3	Aerosol - Category 3
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2.2 - Label elements

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

Signal word : Warning

Pictograms : None

Hazard statements

H229 Pressurised container: May burst if heated

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
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/122 °F.
EUH-phrases	: None

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Regulation (EC) No. 648/2004 (Detergents regulation)

2.3 - Other hazards

<u>PBT-substance.</u>	- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<u>vPvB-substance.</u>	- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<u>Other hazards which do not result in classification</u>	- Refrigerated liquefied gas. Contact with the product can cause cold burns or frostbite. - Ingestion causes nausea, weakness and central nervous system effects.

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

Chemical name	No	%	Class(es)	Specific concentration limit
Trans-1,3,3,3-Tetrafluoroprop-1-ene	CAS No. : 29118-24-9 Index No. : EC No. :	> 50 - <= 100	Press. Gas	Not applicable

SECTION 4: First aid measures

4.1 - Description of first aid measures

<u>Following inhalation</u>	- Provide fresh air. - Medical examination necessary even merely on suspicion of intoxication.
<u>Following skin contact</u>	- When in doubt or if symptoms are observed, get medical advice.
<u>After eye contact</u>	- Rinse immediately carefully and thoroughly with eye-bath or water. - In case of eye irritation consult an ophthalmologist.
<u>After ingestion</u>	- When in doubt or if symptoms are observed, get medical advice.

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4.2 - Most important symptoms and effects, both acute and delayed

Symptoms and effects - Following inhalation - No information available.

Symptoms and effects - Following skin contact - No information available.

Symptoms and effects - After eye contact - No information available.

Symptoms and effects - After ingestion - No information available.

4.3 - Indication of any immediate medical attention and special treatment needed

- Treat symptomatically. Antidotal dispensation.

- In case an intoxication is suspected, National Poisons Information Centre should be addressed immediately, number of Emergency telephone see in section 1.4.

SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media

- ABC-powder
- Carbon dioxide (CO₂)
- Foam
- Extinguishing powder

Unsuitable extinguishing media - Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hazardous decomposition products

- Carbon dioxide (CO₂)
- Carbon monoxide
- Hydrogen fluoride
- Carbonyl difluoride

5.3 - Advice for firefighters

- Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
- Do not allow run-off from fire-fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Use personal protection equipment.
- Provide adequate ventilation.

For emergency responders - No information available.

6.2 - Environmental precautions

- Do not allow to enter into surface water or drains.
- Ensure waste is collected and contained.

6.3 - Methods and material for containment and cleaning up

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Methods and material for containment - Soak up inert absorbent and dispose as waste requiring special attention.

Methods and material for cleaning up

- Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
- Take up carefully when dry.
- Clear contaminated areas thoroughly.
- Clean contaminated articles and floor according to the environmental legislation.

Inappropriate techniques - No information available.

6.4 - Reference to other sections

- Disposal: see section 13
- Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation - Do not pierce or burn, even after use.

Advices on general occupational hygiene

- Wash hands before breaks and after work.
- When using do not eat, drink, smoke, sniff.

7.2 - Conditions for safe storage, including any incompatibilities

- Do not store together with: Food and feedingstuffs
- Keep container tightly closed in a cool, well-ventilated place.

7.3 - Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

Trans-1,3,3,3-Tetrafluoroprop-1-ene (29118-24-9)

IOELV TWA ppm (UE)	800 ppm
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DNEL / PNEC

Trans-1,3,3,3-Tetrafluoroprop-1-ene (29118-24-9)

Type	Value	User	Effect
DNEL long-term inhalative	3902 mg/m ³	Workers	Systemic
DNEL long-term inhalative	830 mg/m ³	Consumers	Systemic
PNEC aquatic, freshwater	0.1 mg/l		

8.2 - Exposure controls

Appropriate engineering controls - No information available.

Individual protection measures, such as personal protective equipment - Tested protective gloves must be worn



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- For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Suitable protective clothing: lab coat



- Eye glasses with side protection

- DIN EN 166

- If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Environmental exposure controls

- Further information: see technical data sheet.

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

<u>Physical state</u>	<u>Appearance</u>	<u>Aerosol</u>
<u>Colour</u>	<u>Odour</u>	<u>characteristic</u>
gaseous		
Odour threshold	No data available	
pH	No data available	
Melting point	No data available	
Freezing point	No data available	
Boiling point	No data available	
Flash point	No data available	
Evaporation rate	No data available	
flammability	No data available	
Lower explosion limit	No data available	
Upper explosion limit	No data available	
Vapour pressure	5 bar	
Vapour density	No data available	
Relative density	No data available	
Density	1.17 g/cm ³	
Solubility (Water)	0.373 g/l	
Solubility (Ethanol)	No data available	
Solubility (Acetone)	No data available	
Solubility (Organic solvents)	No data available	
Log KOC	1.6	
Auto-ignition temperature	368 °C	
Decomposition temperature	No data available	
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	

Particle characteristics

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Particle size	No data available
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9.2 - Other information

VOC content	-
Minimum ignition energy	No data available
Conductivity	No data available

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
- Frost

10.5 - Incompatible materials

- Alkaline earth metal

10.6 - Hazardous decomposition products

- Carbon dioxide
- Carbon monoxide
- Carbonyl difluoride

SECTION 11: Toxicological information

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

Acute toxicity - Not classified

Toxicity : Mixture

LD50 oral (rat)	No data available
LD50 dermal (rat)	No data available
LD50 dermal (rabbit)	No data available
LC50 inhalation (rat)	No data available
LC50 inhalation dusts and mists (rat)	No data available
LC50 inhalation vapours (rat)	No data available

- No information available.

Toxicity : Substances

Trans-1,3,3,3-Tetrafluoroprop-1-ene (29118-24-9)	
LC50 inhalation (rat)	> 207000 ppmV

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<u>Skin corrosion/irritation</u>	- Not classified
<u>Serious eye damage/eye irritation</u>	- Not classified
<u>Respiratory or skin sensitisation</u>	- Not classified
<u>Germ cell mutagenicity</u>	- Not classified
<u>Carcinogenicity</u>	- Not classified
<u>Reproductive toxicity</u>	- Not classified
<u>STOT-single exposure</u>	- Not classified
	- data lacking
<u>STOT-repeated exposure</u>	- Not classified
<u>Aspiration hazard</u>	- Not classified

11.2 - Information on other hazards

- This substance does not have endocrine disrupting properties with respect to humans.

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

EC50 48 hr crustacea	No data available
LC50 96 hr fish	No data available
ErC50 algae	No data available
ErC50 other aquatic plants	No data available
NOEC chronic fish	No data available
NOEC chronic crustacea	No data available
NOEC chronic algae	No data available
NOEC chronic other aquatic plants	No data available

Toxicity : Substances

Trans-1,3,3,3-Tetrafluoroprop-1-ene (29118-24-9)

EC50 48 hr crustacea	> 160 mg/l
LC50 96 hr fish ErC50 algae	> 117 mg/l
NOEC chronic fish	> 170 mg/l
NOEC chronic algae	> 117 mg/l
	> 170 mg/l

- The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

12.2 - Persistence and degradability

Biochemical oxygen demand (BOD)	No data available
Chemical oxygen demand (COD)	No data available
% of biodegradation in 28 days	No data available

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- No information available.

12.3 - Bioaccumulative potential

Bioconcentration factor (BCF)	No data available
Log KOC	1.6

- No indication of bioaccumulation potential.

12.4 - Mobility in soil

- No information available.

12.5 - Results of PBT and vPvB assessment

- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

- This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6 - Endocrine disrupting properties

12.7 - Other adverse effects

- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods

- Dispose of waste according to applicable legislation.

Sewage disposal

- No information available.

Special precautions for waste treatment

- Waste requires special monitoring.
- Collect the waste separately.
- Send to a hazardous waste incinerator facility under observation of official regulations.
- The waste is to be kept separate from other types of waste until its disposal.

Community or national or regional provisions

- packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

14.1 - UN number or ID number

<u>UN number (ADR)</u>	:	UN1950
<u>UN number (RID)</u>	:	UN1950
<u>UN number (ADN)</u>	:	Not applicable
<u>UN number (IMDG)</u>	:	UN1950
<u>UN number (IATA)</u>	:	UN1950

14.2 - UN proper shipping name

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UN proper shipping name (ADR) : AEROSOLS
UN proper shipping name (RID) : AEROSOLS
UN proper shipping name (IMDG) : AEROSOLS
UN proper shipping name (IATA) : AEROSOLS, NON-FLAMMABLE

14.3 - Transport hazard class(es)

Classification : 2.2

ADR/RID Label : Limited Quantity : 2.2 is not applicable.

14.4 - Packing group

Packing group :
Packing group (RID) :
Packing group (IMDG) :
Packing group (IATA) :

14.5 - Environmental hazards

Environmental hazards : -
Marine pollutant : -

14.6 - Special precautions for user

ADR Classification code: 5A
ADR Special provisions : 190+327+344+65
ADR Limited quantity (LQ) : 1L
ADR Excepted quantities : E0
ADR Packing instructions
ADR Special packing provisions
ADR Mixed packing provisions
Instructions for portable tanks and bulk containers
Special provisions for portable tanks and bulk containers
ADR tank code
ADR tanks special provisions
Vehicle for tank carriage
ADR Transport category
ADR Tunnel restriction code
ADR Special provisions loading, unloading and handling
Special provisions - Packages
Special provisions - Bulk
Special provisions - Operation
ADR Hazard identification number (Kemler No.)

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RID

Special provisions : 190 327 344
 Limited quantity (LQ) : 1L

IMDG

Special provisions : 63 190 277 327 344 381 959
 Limited quantity (LQ) :
 Excepted quantities : E0
 Packing instructions :
 Special packing provisions :
 IBC instruction(s) :
 IBC provisions :
 Instructions for portable tanks and bulk containers :
 Special provisions for portable tanks and bulk containers :
 EmS codes : F-D, S-U
 Stowage and handling : SW 1 SW22
 Segregation : SG69
 Properties and observations :

IATA

PCA - Excepted quantities : E0
 PCA - Limited Quantity - Packing Instructions : Y203
 PCA - Limited Quantity - Maximum Net Quantity per Package : 30kg
 PCA - Packing Instructions : 203
 PCA - Maximum Net Quantity per Package : 75kg
 CAO - Packing Instructions : 203
 CAO - Maximum Net Quantity per Package : 150kg
 Special Provisions : A98 A145 A167 A802
 ERG Code : -

14.7 - Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

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

Substances REACH candidates : None
Substances Annex XIV : None
Substances Annex XVII : None

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Regulation (EC) No. 648/2004 (Detergents regulation)

15.2 - Chemical Safety Assessment

Chemical safety assessment carried out for the product - No information available.

SECTION 16: Other information

SDS versions

Version	Issue date	Author	Description of the amendments
1	12/28/2022		

Texts of the regulatory sentences

Aerosol 3	Aerosol - Category 3
H229	Pressurised container: May burst if heated
Press. Gas	Gases under pressure

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