

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form	: Mixture
Product name	: Aero-Duster
Product code	: MS-222N
Type of product	: Aerosol
Vaporizer	: Aerosol
Product group	: Trade product
Other means of identification	: MS-222T MS-222F Aero-Duster

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Main use category	: Industrial use,Professional use
Industrial/Professional use spec	: Industrial For professional use only
Use of the substance/mixture	: Aerosol can
Function or use category	: Aerosol propellants

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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Roosstrasse 53
CH-8832 Wollerau - Switzerland
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info@ecsag.com - www.ecsag.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Switzerland	Schweizerisches Toxikologisches Informationszentrum Centre Suisse d'Information Toxicologique, Centro Svizzero d'informazione tossicologica	Freiestrasse 16 Postfach CH-8028 Zurich	145 (24 h) aus dem Ausland: +41 44 251 51 51	

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Aerosol, Category 3 H229
Hazardous to the aquatic environment — Chronic Hazard, Category 3 H412
Full text of H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

R52/53
Full text of R-phrases: see section 16

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Signal word (CLP)	: Warning
Hazard statements (CLP)	: H229 - Pressurised container: May burst if heated. H412 - Harmful to aquatic life with long lasting effects
Precautionary statements (CLP)	: 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

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P273 - Avoid release to the environment
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F
P501 - Dispose of contents/container to an approved waste disposal plant

Child-resistant fastening : No
Tactile warning : No

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,1,1,2-Tetrafluoroethane	(CAS No) 811-97-2 (EC no) 212-377-0	100	Not classified	Liquefied gas, H280

Full text of R- and H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Allow breathing of fresh air. Allow the victim to rest.
First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Reactivity in case of fire : pressure rise and possible bursting of container.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Do not pierce or burn, even after use.
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Do not expose to temperatures exceeding 50 °C/122 °F.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.
Materials for protective clothing : Impermeable clothing
Hand protection : Wear protective gloves. Solvent-resistant gloves
Eye protection : Chemical goggles or safety glasses
Skin and body protection : Impermeable clothing
Respiratory protection : In case of inadequate ventilation wear respiratory protection

Device	Filter type	Condition	Standard
Breathing apparatus with filter	Filter AX (brown)	Gas protection	EN 14387



Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Colourless.
Odour : characteristic. Ethers.
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Aerosol can., Non flammable
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 1.21 g/cm³

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Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Not classified Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	: Not classified Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure)	: Not classified Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified Based on available data, the classification criteria are not met

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Vaporizer	Aerosol
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Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life with long lasting effects.

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12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 1950

UN-No. (IMDG) : 1950

UN-No. (IATA) : 1950

UN-No. (ADN) : 1950

UN-No. (RID) : 1950

14.2. UN proper shipping name

Proper Shipping Name (ADR) : AEROSOLS

Proper Shipping Name (IMDG) : UN 1950 AEROSOLS, 2.2, (E)

Proper Shipping Name (IATA) : UN 1950 AEROSOLS, 2.2, (E)

Proper Shipping Name (ADN) : UN 1950 AEROSOLS, 2.2, (E)

Proper Shipping Name (RID) : UN 1950 AEROSOLS, 2.2, (E)

Transport document description (ADR) : UN 1950 AEROSOLS, 2.2, (E)

Transport document description (IMDG) : UN 1950 UN 1950 AEROSOLS, 2.2, (E), 2

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 2.2

Danger labels (ADR) : 2.2



IMDG

Transport hazard class(es) (IMDG) : 2.2

Danger labels (IMDG) : 2.2



IATA

Transport hazard class(es) (IATA) : 2.2

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Hazard labels (IATA) : 2.2



ADN

Transport hazard class(es) (ADN) : 2.2

Danger labels (ADN) : 2.2



RID

Transport hazard class(es) (RID) : 2.2

Danger labels (RID) : 2.2



14.4. Packing group

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

Packing group (ADN) : Not applicable

Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : 5A

Special provisions (ADR) : 190, 327, 344, 625

Limited quantities (ADR) : 1I

Excepted quantities (ADR) : E0

Transport category (ADR) : 3

Tunnel restriction code (ADR) : E

- Transport by sea

MFAG-No : 126

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : 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.

Other information : None.

Full text of R-, H- and EUH-statements:

Liquefied gas	Gases under pressure : Liquefied gas
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated
H412	Harmful to aquatic life with long lasting effects
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product