# SAFETY DATA SHEET Flammable Air Duster 400ml

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

## 1. Identification

**Product identifier** 

Product name Flammable Air Duster 400ml

Product number 2.974.929, ZP

Internal identification AHFC400LYR\_EU

Recommended use of the chemical and restrictions on use

**Application** Cleaning agent.

**Uses advised against**No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Supplier LYRECO

Rue du 19 mars 1962, F-59770,

Marly, France

msds@lyreco.com +33 (0) 3 27 23 64 00

Emergency telephone number

Emergency telephone +1 202 464 2554 (USA only)

+44 1235 239670

## 2. Hazard(s) identification

## Classification of the substance or mixture

Physical hazards Flam. Aerosol 1 - H222 Press. Gas, Compressed - H280

Health hazards Not Classified

Environmental hazards Not Classified

Label elements

Pictogram





Signal word Danger

**Hazard statements** H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

**Precautionary statements** P210 Keep away from heat, sparks, open flames and hot surfaces. No smoking.

P211 Do not spray on an open flame or other ignition source. P251 Pressurized container: Do not pierce or burn, even after use P410+P403 Protect from sunlight. Store in a well-ventilated place. P412 Do not expose to temperatures exceeding 50°C/122°F.

P102 Keep out of reach of children.

## Other hazards

This product does not contain any substances classified as PBT or vPvB.

## Flammable Air Duster 400ml

## 3. Composition/information on ingredients

#### **Mixtures**

Petroleum gases, liquefied 60-100%

CAS number: 68476-85-7

Classification

Flam. Gas 1 - H220

Press. Gas, Liquefied - H280

The full text for all hazard statements is displayed in Section 16.

## 4. First-aid measures

## Description of first aid measures

General information Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

Inhalation Remove affected person from source of contamination. Move affected person to fresh air and

keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on

their side in the recovery position and ensure breathing can take place.

Ingestion Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water

or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing

such as collar, tie or belt.

**Skin Contact** Rinse with water.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 10 minutes.

**Protection of first aiders**First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information See Section 11 for additional information on health hazards. The severity of the symptoms

described will vary dependent on the concentration and the length of exposure.

**Inhalation** Spray/mists may cause respiratory tract irritation.

**Ingestion** Due to the physical nature of this product, it is unlikely that ingestion will occur.

**Skin contact** Repeated exposure may cause skin dryness or cracking.

**Eye contact** May be slightly irritating to eyes. May cause discomfort.

Indication of immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

## 5. Fire-fighting measures

## Extinguishing media

Suitable extinguishing media The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder

or water fog. Use fire-extinguishing media suitable for the surrounding fire.

## Flammable Air Duster 400ml

Unsuitable extinguishing

media

Do not use water jet as an extinguisher, as this will spread the fire.

## Special hazards arising from the substance or mixture

Specific hazards

Containers can burst violently or explode when heated, due to excessive pressure build-up. If aerosol cans are ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant.

Hazardous combustion products

Thermal decomposition or combustion products may include the following substances:

Harmful gases or vapors.

Advice for firefighters

Protective actions during firefighting

Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

## 6. Accidental release measures

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

Personal precautions

No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Evacuate area. Risk of explosion. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.

**Environmental precautions** 

**Environmental precautions** 

Avoid discharge into drains or watercourses or onto the ground.

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

Methods for cleaning up

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Do not allow material to enter confined spaces, due to the risk of explosion. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

Reference to other sections

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## 7. Handling and storage

## Precautions for safe handling

## Flammable Air Duster 400ml

## Usage precautions

Keep out of the reach of children. Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Avoid exposing aerosol containers to high temperatures or direct sunlight. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Spray will evaporate and cool rapidly and may cause frostbite or cold burns if in contact with skin. Avoid contact with eyes. Avoid inhalation of vapors and spray/mists.

## Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

## Conditions for safe storage, including any incompatibilities

**Storage precautions** Keep away from oxidizing materials, heat and flames. Keep only in the original container.

Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Protect from sunlight. Do not store near heat sources or expose to high temperatures. Do not expose to temperatures exceeding 50°C/122°F. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor

should be leak-tight, jointless and not absorbent.

Storage class Chemical storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

## 8. Exposure Controls/personal protection

#### Control parameters

Occupational exposure limits

Petroleum gases, liquefied

Long-term exposure limit (8-hour TWA): OSHA 1000 ppm 1800 mg/m³

OSHA = Occupational Safety and Health Administration.

Petroleum gases, liquefied (CAS: 68476-85-7)

Immediate danger to life and health

2000 ppm

#### **Exposure controls**

## Protective equipment







## Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimize worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimize exposure.

## Flammable Air Duster 400ml

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133. Unless the assessment indicates a higher degree of protection

is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if

> a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon

as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard

should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures Provide eyewash station and safety shower. Contaminated work clothing should not be

allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried

out. Warn cleaning personnel of any hazardous properties of the product.

Respiratory protection Respiratory protection complying with an approved standard should be worn if a risk

assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable

filter cartridges should comply with OSHA 1910.134.

**Environmental exposure** 

Keep container tightly sealed when not in use.

controls

Color

## 9. Physical and Chemical Properties

## Information on basic physical and chemical properties

Colorless.

**Appearance** Aerosol.

Odor Characteristic.

Odor threshold Not available.

pΗ Not available.

Melting point Not available.

Initial boiling point and range Not available.

Flash point -40°C CC (Closed cup).

**Evaporation rate** Not available. **Evaporation factor** Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or

explosive limits

Lower flammable/explosive limit: 1.8

## Flammable Air Duster 400ml

Other flammability Not available. Not available. Vapor pressure Not available. Vapor density Relative density Not available. **Bulk density** Not available. Solubility(ies) Not available. Partition coefficient Not available. **Auto-ignition temperature** Not available. **Decomposition Temperature** Not available. Viscosity Not applicable. **Explosive properties** Not available.

## 10. Stability and reactivity

Oxidizing properties

**Reactivity** There are no known reactivity hazards associated with this product.

Stable at normal ambient temperatures and when used as recommended. Stable under the

prescribed storage conditions.

Not available.

Possibility of hazardous

reactions

The following materials may react strongly with the product: Oxidizing agents.

Conditions to avoid Avoid exposing aerosol containers to high temperatures or direct sunlight. Pressurised

container: may burst if heated

Materials to avoid No specific material or group of materials is likely to react with the product to produce a

hazardous situation.

Hazardous decomposition

products

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

#### 11. Toxicological information

## Information on toxicological effects

Acute toxicity - oral

Notes (oral LD<sub>50</sub>) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC50) Based on available data the classification criteria are not met.

Skin corrosion/irritation

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

Serious eye damage/irritation

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

## Flammable Air Duster 400ml

Respiratory sensitization

**Respiratory sensitization** Based on available data the classification criteria are not met.

Skin sensitization

**Skin sensitization** Based on available data the classification criteria are not met.

Germ cell mutagenicity

**Genotoxicity - in vitro**Based on available data the classification criteria are not met.

Carcinogenicity

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

**IARC carcinogenicity**None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity -

Based on available data the classification criteria are not met.

development

Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

**Aspiration hazard** Based on available data the classification criteria are not met.

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

**Inhalation** Spray/mists may cause respiratory tract irritation.

**Ingestion** Due to the physical nature of this product, it is unlikely that ingestion will occur.

**Skin Contact** Repeated exposure may cause skin dryness or cracking.

**Eye contact** May be slightly irritating to eyes. May cause discomfort.

Route of entry Ingestion Inhalation Skin and/or eye contact

**Target Organs** No specific target organs known.

Toxicological information on ingredients.

Petroleum gases, liquefied

**Toxicological effects** Not regarded as a health hazard under current legislation.

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative. REACH dossier information. Based on available

data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available

data the classification criteria are not met.

Carcinogenicity

Carcinogenicity NOAEL 10000 ppm, Inhalation, Mouse REACH dossier information. Based on

available data the classification criteria are not met.

## Flammable Air Duster 400ml

Reproductive toxicity

Reproductive toxicity -

fertility

Fertility - NOAEC 9000 ppm, Inhalation, Rat F1 REACH dossier information. Based

on available data the classification criteria are not met.

Reproductive toxicity - development

Developmental toxicity: - NOAEC: 10426 ppm, Inhalation, Rat REACH dossier

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

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEC 10000 ppmV/4hr/day, Inhalation, Rat REACH dossier information. Based

on available data the classification criteria are not met.

12. Ecological Information

**Ecotoxicity** Not regarded as dangerous for the environment. However, large or frequent spills may have

hazardous effects on the environment.

**Toxicity** 

**Toxicity** Based on available data the classification criteria are not met.

Ecological information on ingredients.

Petroleum gases, liquefied

**Toxicity** Aquatic toxicity is unlikely to occur. Based on available data the classification

criteria are not met.

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 147.54 mg/l, Freshwater fish

Estimated value.

Acute toxicity - aquatic

EC<sub>50</sub>, 48 hours: 16.33 mg/l, Daphnia magna

invertebrates

Estimated value.

Acute toxicity - aquatic

EC<sub>50</sub>, 96 hours: 11.89 mg/l, Freshwater algae

plants

Estimated value.

Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

Petroleum gases, liquefied

Persistence and

degradability

The substance is readily biodegradable.

Biodegradation

Water - Degradation 100%: 385.5 hours

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient Not available.

Ecological information on ingredients.

Petroleum gases, liquefied

Bio-Accumulative Potential No data available on bioaccumulation.

Mobility in soil

## Flammable Air Duster 400ml

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all

surfaces.

Ecological information on ingredients.

## Petroleum gases, liquefied

Mobility The product contains volatile organic compounds (VOCs) which will evaporate

easily from all surfaces.

Results of PBT and vPvB assessment

Ecological information on ingredients.

## Petroleum gases, liquefied

Results of PBT and vPvB

This substance is not classified as PBT or vPvB according to current EU criteria.

assessment

Other adverse effects

Other adverse effects None known.

## 13. Disposal considerations

#### Waste treatment methods

General information The generation of waste should be minimized or avoided wherever possible. Reuse or recycle

products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners

may retain some product residues and hence be potentially hazardous.

Disposal methods

Dispose of surplus products and those that cannot be recycled via a licensed waste disposal

contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only

be considered when recycling is not feasible.

## 14. Transport information

General For limited quantity packaging/limited load information, consult the relevant modal

documentation using the data shown in this section.

**UN Number** 

**UN No. (TDG)** 1950

**UN No. (IMDG)** 1950

**UN No. (ICAO)** 1950

UN No. (DOT) ID8000

UN proper shipping name

Proper shipping name (TDG) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS

## Flammable Air Duster 400ml

## Proper shipping name (DOT) CONSUMER COMMODITY

## Transport hazard class(es)

**DOT hazard class** 9

**DOT hazard label** 9

TDG class 2.1

TDG label(s) 2.1

IMDG Class 2.1

ICAO class/division 2.1

## Transport labels



## **DOT transport labels**



## Packing group

TDG Packing Group None

IMDG packing group None

ICAO packing group None

## **Environmental hazards**

## **Environmentally Hazardous Substance**

No.

## Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

EmS F-D. S-U

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

## 15. Regulatory information

## International Regulations

#### **US Federal Regulations**

## SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed or exempt.

## CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed or exempt.

## SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed or exempt.

## Flammable Air Duster 400ml

## SARA 313 Emission Reporting

None of the ingredients are listed or exempt.

#### **CAA Accidental Release Prevention**

None of the ingredients are listed or exempt.

#### FDA - Essential Chemical

None of the ingredients are listed or exempt.

#### FDA - Precursor Chemical

None of the ingredients are listed or exempt.

## SARA (311/312) Hazard Categories

None of the ingredients are listed or exempt.

#### **OSHA Highly Hazardous Chemicals**

None of the ingredients are listed or exempt.

#### **US State Regulations**

## California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed or exempt.

## California Air Toxics "Hot Spots" (A-I)

None of the ingredients are listed or exempt.

#### California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed or exempt.

## California Directors List of Hazardous Substances

None of the ingredients are listed or exempt.

## Massachusetts "Right To Know" List

All the ingredients are listed or exempt.

## Rhode Island "Right To Know" List

All the ingredients are listed or exempt.

## Minnesota "Right To Know" List

All the ingredients are listed or exempt.

## New Jersey "Right To Know" List

All the ingredients are listed or exempt.

## Pennsylvania "Right To Know" List

All the ingredients are listed or exempt.

## **Inventories**

## **US-TSCA**

All the ingredients are listed or exempt.

## US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

#### 16. Other information

## Training advice

Read and follow manufacturer's recommendations. Only trained personnel should use this material.

## Flammable Air Duster 400ml

**Issued by** Toni Ashford

Revision date 5/24/2016

Revision 1

**SDS No.** 605

Hazard statements in full H220 Extremely flammable gas.

H222 Extremely flammable aerosol.

H280 Contains gas under pressure; may explode if heated.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.