MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF PRODUCT AND USES

PRODUCT NAME: Air Duster

APPLICATION: CLEANING PRODUCT / DUST REMOVAL

PRODUCT TYPE: Aerosol

MANUFACTURER'S NAME: Shenzhen Gembird Electronic Ltd.

ADDRESS: 5/F, BuildingD, Anfeng Industrypark, DalangSt. Longhua, Shenzhen, China

DATE PRINTED: 23/04/2015

NOTE: The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. The information provided herein is guidance for providing personal protection to your employees. The user has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. The user must meet all applicable safety and health standards.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with harmless additions

INGREDIENTS	CAS RN	EC-No.	CLASSIFICATION	RANGE
BUTANE	106-97-8	203-448-7	F+ R12	70%
PROPANE	74-98-6	200-827-9	F+ R12	30%

Additional information For the wording of the listed risk phrases refer to section 16.

3. HAZARD IDENTIFICATION / SAFETY PRECAUTIONS

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

The preparation is classified as extremely flammable: F+, R12.

Intentional misuse of the preparation by concentrating and inhaling the vapors can be harmful or fatal.

Classification system:

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

4. FIRST AID MEASURES

- **4.1.** In case of contact with eyes: In the case of cold burns involving the eye, obtain medical attention without delay.
- **4.2.** In case of skin contact: In the event of cold burns obtain medical advice. Cover the wounds with sterile dressings only. Do not apply ointments or powders.
- **4.3.** In case of inhalation: Remove the victim to fresh air. Seek medical advice if the victim is not feeling well. If breathing has stopped, begin artificial respiration immediately. Obtain medical attention without delay.
- **4.4.** In case of ingestion: Not applicable.

5. FIRE FIGHTING MEASURES

- **5.1.** Suitable extinguishing media: CO2, powder, spray.
- **5.2.** Extinguishing media which must not be used for safety reasons: Full jet of water.
- **5.3.** Special exposure hazards: Heating will cause pressure rise with risk of bursting. Bursting aerosols can be forcibly projected from a fire. Keep containers cool by spraying with water if exposed to fire. Keep public away from danger area. If possible, remove to a safe, ventilated place. Can be ignited by flame or sparks under all normal atmospheric conditions. Vapours may form explosive mixtures with air. Avoid electrostatic build-up.
- **5.4.** Special protective equipment for fire-fighters: Wear suitable protective clothing. Wear suitable gloves and suitable respiratory equipment. Wear eye/face protection. Use self-contained

breathing equipment when fighting fire in confined spaces.

5.5. Specific methods: Spray from a protected position till the containers are cool. If possible, take the aerosols outside. Keep public on a distance.

6. ACCIDENTAL RELEASE MEASURES

- **6.1.** Personal precautions: Avoid contact with skin and eyes. Eliminate sources of ignition. Take care of a good ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.
- **6.2.** Environmental precautions: Evacuate area. Stop flow. Eliminate all sources of ignition.
- **6.3.** Methods for cleaning up : Not applicable.

7. HANKLING AND STORAGE

- **7.1.** Handling: Pressurized container. Do not spray on a naked flame or any incandescent material. Do not pierce or burn, even after use. When using do not eat, drink or smoke. Do not inhale the spray particles. Avoid contact with eyes. Use only in well ventilated areas.
- **7.2.** Storage: Keep out of the reach of children. Protect from sunlight and do not expose to temperatures exceeding 50°C. Storage in a dry, ventilated place free from frost. Keep away from food, drink and animal feeding stuffs. Keep away from heat and sources of ignition.
- **7.3.** Specific uses : Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure limit values:

Name Component Limit Value Short Time Value Additional classification

Butane 800 ppm / 1928 mg/m³ -
Propane - A

- 8.2.1. Occupational exposure limits:
- **8.2.1.1.** Respiratory protection: Do not inhale the spray particles. Use in a well ventilated place.
- **8.2.1.2** Hand protection: Not necessary at efficient use.
- 8.2.1.3. Eye protection: Avoid contact with the eyes. Do not spray in the direction of the eyes.
- **8.2.1.4.** Skin protection: Not necessary at efficient use.
- **8.2.2.** Environmental exposure controls: The preparation is following the European directives not classified as dangerous for environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information:

- Appearance : pressurized container
- Colour : colourlessOdour : specific

9.2. Important health, safety and environmental information:

- pH : not applicable
- Boiling point : not applicable
- Flash point : < 0°C
- Flammability: extremely flammable
- Density : ± 0.545 g/ml
- Solubility: in organic solvents

9.3. Other information:

- Melting point : not applicable
- Pressure at 20°C: ± 5 bar

10. STABILITY AND REACTIVITY

- **10.1.** Conditions to avoid: Protect from sunlight and do not expose to temperatures exceeding
- 50°C. Keep away from heat and sources of ignition. Storage in a dry well ventilated place.
- **10.2.** Materials to avoid: May react with strong oxidizing agents.
- **10.3.** Hazardous decomposition products : Stable, no dangerous reactions at efficient use.

11. TOXICOLOGICAL INFORMATION

Inhalation: The vapours can be absorbed into the body through inhalation and at high concentrations

may cause dizziness, drowsiness and headache. Contact with skin: Unlikely to cause skin irritation. Contact with eyes: Unlikely to cause eye irritation.

Ingestion: Not applicable.

Other: Information published in the literature shows a very low order of toxicity. Exposures to very

high concentrations have an anaesthetic effect.

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity:

Butane/Propane : Low acute toxicity for mammals. Slightly toxic, CL50/CE50 > 10-100 mg/l to aquatic organisms estimated.

12.2. Mobility:

 $\label{prop:prop:prop:sol} \textbf{Butane/Propane}: \textbf{Evaporates extremely rapidly from water or soil surface}. \ \textbf{Disperse rapidly in}$

air.

12.3. Persistence en degradability:

Butane/Propane: Oxidises quickly by photochemical reactions in air.

12.4. Bioaccumulatice potential:

Butane/Propane: Does not bioaccumulate.

12.5. Other adverse effects: No.

13. DISPOSAL CONSIDERATIONS

13.1 Handling of waste, Directive 75/442/EEC~91/156/EC:

Take all necessary measures to prevent the production of waste whenever possible. Analyse possible methods for revaluation or recycling. Do not discharge into drains or the environment, dispose of at an authorised waste collection point. Waste should be handled and disposed of in accordance with current local and national regulations. For exposure controls and personal protection measures, see section 8.

13.2 Disposal of empty containers, Directive 94/62/EC:

Emptied containers and packaging should be disposed of in accordance with currently local and national regulations. Ensure the container is completely empty before throwing it away.

13.3 Procedures for neutralising or destroying the product:

In accordance with local regulations. Do not incinerarate closed containers.

14. TRANSPORT INFORMATION

14.1. UN number

UN No. Road 1950 UN No. Sea 1950 UN No., Air 1950

14.2. UN proper shipping name

Proper Shipping Name AEROSOLS

14.3. Transport hazard class(es)

ADR Class No. 2.1

ADR Class Division 2.1: Flammable gases.

ADR Label No. 2.1
IMDG Class 2.1
ICAO Class 2.1

Transport Labels



14.4. Packing group

ADR Pack Group Not Applicable

IMDG Pack Gr. Not Applicable

Air Pack Gr. Not Applicable

15. REGULATORY INFORMATION

Label according to the Directives relating to the classification, packaging and labeling of dangerous substances and preparations:



Risk phrases:

12 Extremely flammable.

Safety phrases:

- Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.
- S 2: Keep out of the reach of children.
- S 16: Keep away from sources of ignition. No smoking.
- S 23: Do not breathe spray.
- \$ 46: If swallowed, seek medical advice immediately and show this container or label.
- S 51: Use only in well-ventilated areas.

16. OTHER INFORMATION

Abbreviations and acronyms:

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

ALWAYS OBSERVE ALL CONTAINER AND DATA SHEET WARNINGS.

ALWAYS READ THE LABEL BEFORE USE.