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Material Safety Data Sheet

Date of Revise: 2015.05.20

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: PUFF DINO BLACKING SPRAY 420ml

Item Code: BLS40

Supplier: PUFFDINO TRADE CO., LTD.

25, 23 Road, Industrial Park, Taichung City 40850, Taiwan

TEL: +886-4-23503555 FAX: +886-4-23501867

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SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	<u>PERCENTAGE</u>
Graphite Powder	7782-42-5	≦8%
Acrylic Resin	9063-87-0	≦20%
Solvent		≦22%
Dimethyl Ether	115-10-6	≦50%

SECTION 3 – HAZARDS IDENTIFICATION

Adverse Health Effects:

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Inhalation	In high concentrations, vapor and spray mist are narcotic and may cause headache, fatigue,
	dizziness and nausea. Vapor / aerosol spray may irritate the respiratory system.
Skin contact	Prolonged and repeated contact may cause irritation.
Eye contact	Irritating to eyes.
Ingestion	May cause irritation or pain to the gastrointestinal system. Chronic ingestion of dispersions
	may cause kidney or CNS damage.

SECTION 4 - FIRST AID MEASURES

The First-aid Measures For Different Exposure Routes:

Inhalation	For severe inhalation move the patient to fresh air, rest the patient and keep warm.
Skin contact	Wash contaminated skin with soap and water.
Eye contact	Flush with water for 15 minutes. If symptoms persist seek medical attention.
Ingestion	Product is not intended to be ingested or eaten. If this product is ingested, induce vomiting
	with finger. DO NOT do it to whom loss of consciousness.

SECTION 5 – FIRE FIGHTING MEASURES

Fire extinguishing media: Foam, CO2, Dry chemical, Water fog.

Specific hazards may be encountered during fire-fighting: Aerosol containers can explode when heated, due to excessive pressure build-up. Vapor may be ignited by a spark, a hot surface or an ember. Vapor are heavier than air and may travel along the floor and in the bottom of containers. Vapor may be ignited by a spark, a hot surface or an ember.

Special fire-fighting procedures: In case the materials is released or spilled, rinse affected area thoroughly

with water for clean-up. These procedures will help to minimize potential exposures.

Specific equipment for the protection of fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Remove the contaminated clothes, wearing after wash or scrape up. DO NOT smoke in working area. Wash hands thoroughly after handling. Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental precautions: Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

Methods for cleaning up: Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Spills should be covered with sand, dirt, gravel or calcium chloride. Wash thoroughly after dealing with a spillage.

SECTION 7 – HANDLING AND STORAGE

Handling: Keep away from all ignition sources. Use only with adequate ventilation. Do not cut, puncture, or weld on or near this container. Do not breathe vapors.

Storage: Store in a cool, dry place. Store in a well- ventilated area. Do not store in areas containing flammable or combustible products. Store below 45 °C. Store away from heat ignition sources, and open flame in accordance with applicable regulations.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Control:

COMPONENT	TWA - 8 Hrs	STEL	CEILING
Butyl Acetate	200 ppm	N/A	N/A
Ethyl Acetate	400 ppm	N/A	N/A
Dimethyl Ethe	1000 ppm	N/A	N/A

Personal Protective Equipment:

Respiratory protection	Provide adequate ventilation. Observe workplace exposure limits and minimize
	the risk of inhalation of vapors. At work in confined or poorly ventilated spaces,
	respiratory protection with air supply must be used.
Hand protection	None required under normal use. For prolonged or repeated hand exposure,
	gloves are recommended.
Eye protection	Wear splash-proof eye goggles to prevent any possibility of eye contact.
Skin & body protection	Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene Measures: DO NOT smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet.

Other precautions:

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Black
Odor	Organic solvent smell
PH Value	N/A
Boiling Point	-0.5℃
Decomposition Temperature	N/A
Flash Point	-21.7°C (Without propellant) / Test method: closed cup
Auto-ignition Temperature	N/A

Vapor Pressure	N/A
Vapor Density	2.11
Explosion Limits	1.8%~8.4%
Density	0.790
Solubility	Miscible in most of aliphatic, aromatic, hydrocarbon organic solvent,
	insoluble in water.

SECTION 10 – STABILITY AND REACTIVITY

Stability: This product is stable at normal temperatures and pressure.

Possible hazardous reactions occurring under specific conditions: Strong oxidants (such as nitrate, perchlorate will increase the risk of fire or explosion.

Conditions to avoid: Avoid heat, flames, sparks and other sources of ignition. Minimize contact with material. Containers may rupture or explode if exposed to heat.

Materials to avoid: Keep away from strong acids and strong oxidizers.

Hazardous decomposition products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation	In high concentrations, vapors are narcotic and may cause headache, fatigue, dizziness
	and nausea.
Skin Contact	Prolonged contact may cause dryness of the skin. Prolonged or repeated exposure may
	cause severe irritation.
Eye Contact	Irritation of eyes and mucous membranes.
Ingestion	Swallowing concentrated chemical may cause severe internal injury. May cause nausea,
	headache, dizziness, intoxication and diarrhoea.

Chronic Toxicity:

Testing not conducted. See other toxicity data.

SECTION 12 - ECOLOGICAL INFORMATION

Possible environmental effects: No data is currently available.

Environmental mobility: Highly volatile and will rapidly evaporate to the air.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste disposal: Dispose of in accordance with Federal, State/Provincial, and Local regulations regarding pollution. The container for this product can present explosion or fire hazards, even when emptied! To avoid risk of injury, do not cut, puncture or weld on or near this container. Since the emptied containers retain product residue, follow product insert warnings even after container is emptied.

SECTION 14 – TRANSPORT INFORMATION

Proper Shipping Name (PSN)	Aerosols, flammable, (each not exceeding 1 L capacity)
IMDG / IATA Class	2.1
UN Number	UN1950
Label	FLAMMABLE GAS 2
Marine Pollutant	No

SECTION 15 – REGULATORY INFORMATION

This product, as supplied, is regulated as a hazardous waste by the Taiwan Environmental Protection Agency (EPA) under environmental protection related regulations. Comply with state and local regulations for disposal. If you are unsure of the regulations, contact your local Public Health Department, or the local office of the EPA.

Taiwan related regulations listed as below:

- 1. Regulations Governing Road Traffic Safety
- 2. Enforcement Rules of the Labor Safety and Health Act
- 3. Regulations for High Pressure Gas Labor Safety

SECTION 16 – OTHER INFORMATION

PRECAUTION: READ THIS MSDS BEFORE USE

As of the date of preparation of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state law(s). However, no warranty or representation with respect to such information is intended or given.