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Safety Data Sheet

FDI-13C

Orange / Citrus Fragrance

SECTION 1: IDENTIFICATION

1.1 Product identifier

Product name	Orange / Citrus Fragrance
Product code	FDI-13C, FDI-13C-10
Product type	Fragranced plastic freshener

1.2 Recommended use and restrictions on use

Recommended use	Air freshener — professional/institutional use
Uses advised against	Any use other than specified above

1.3 Supplier information

Company	Ekcos Innovations
Address	12000 US Hwy 281 N, Round Mountain, TX 78663, USA
Telephone	(925) 371-1277
Email	info@ekcos.com

1.4 Emergency telephone number

Emergency contact (24/7)	(510) 908-3114
Business hours	(925) 371-1277 Option 2 (M–F 8:00–16:00 PST)

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the chemical

In accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200

Hazard Class	Category	H-Statement
Skin Sensitization	Category 1	H317 — May cause an allergic skin reaction.

2.2 Label elements

Hazard pictogram	 Exclamation mark (GHS07)
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Signal word	Warning
Hazard statement	H317 — May cause an allergic skin reaction.

Precautionary statements:

Code	Statement
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves.
P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents/container in accordance with applicable Federal, State and local laws and regulations.

2.3 Hazards not otherwise classified (HNOC)

This product is a solid article. Under normal conditions of use, the following hazards do not apply: flammability, acute oral toxicity, acute inhalation toxicity. No additional hazards have been identified.

2.4 Unknown acute toxicity

Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

Component	CAS No.	Concentration
Ethylenevinylacetate copolymer (EVA)	24937-78-8	95–99% (w/w)
Fragrance (Orange / Citrus)	Mixture	1–5% (w/w)
↳ d-Limonene	5989-27-5	2.0–<2.55% (w/w)
↳ Citral	5392-40-5	0.125–<0.25% (w/w)
↳ Hexyl cinnamic aldehyde (HCA)	101-86-0	0.125–<0.25% (w/w)
↳ Linalool	78-70-6	0.125–<0.25% (w/w)
↳ Citronellol	106-22-9	0.125–<0.25% (w/w)
↳ Alpha-Ionone	127-41-3	0.050–<0.125% (w/w)
↳ 2-t-Butylcyclohexyl acetate	88-41-5	0.050–<0.125% (w/w)
Eco-One EG35 (biobased additive)	Polyolefin mixture	<1% (w/w)

Additional fragrance components are present at concentrations below the 1% disclosure threshold under OSHA HazCom 2012 (29 CFR 1910.1200). The skin sensitization classification (H317) is attributable to d-Limonene, Citral, Hexyl cinnamic aldehyde (HCA), Linalool, Citronellol, Alpha-Ionone, 2-t-Butylcyclohexyl acetate, present above the 0.1% GHS classification threshold for skin sensitizers. Fragrance components are used exclusively for olfactory purposes.

SECTION 4: FIRST-AID MEASURES

4.1 Description of first-aid measures

Inhalation	Not an expected route of exposure under normal conditions of use. If discomfort occurs, move person to fresh air. If symptoms persist, seek medical attention.
Skin contact	This product may cause an allergic skin reaction in sensitized individuals. Remove contaminated clothing. Wash affected area thoroughly with soap and water for at least 15 minutes. If skin irritation or rash develops, seek medical attention and bring this SDS.
Eye contact	Not an expected route of exposure under normal conditions of use. If contact occurs, flush eyes with clean water for at least 15 minutes. Remove contact lenses after first 1–2 minutes if present and easy to do. If irritation persists, seek medical attention.
Ingestion	Not an expected route of exposure under normal conditions of use. This product is a solid article and is not intended for ingestion. If swallowed, do not induce vomiting. Seek medical attention immediately and bring this SDS.

4.2 Most important symptoms and effects, both acute and delayed

Route	Symptoms
Skin contact	Allergic skin reaction, redness, rash or itching in sensitized individuals
Eye contact	Possible mechanical irritation
Inhalation	No significant effects expected under normal conditions of use
Ingestion	No significant effects expected under normal conditions of use

4.3 Indication of any immediate medical attention and special treatment needed

No specific antidote. Treat symptomatically. If skin sensitization reaction occurs, consult a physician. Bring this SDS to any medical consultation.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

Water fog or fine spray, dry chemical, carbon dioxide (CO₂), foam.

Unsuitable extinguishing media: Do not use direct water stream — may spread burning material.

5.2 Special hazards arising from the chemical

This product is a solid plastic article and is not classified as flammable under OSHA HazCom 2012. Under fire conditions, thermal decomposition may generate hazardous combustion products including carbon monoxide (CO), carbon dioxide (CO₂), and other organic compounds.

5.3 Special protective equipment and precautions for fire-fighters

Firefighters should wear full protective clothing and NIOSH-approved self-contained breathing apparatus (SCBA) operated in positive pressure mode. Cool surrounding containers and structures with water to prevent fire spread.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

This product is a solid article. In the event of accidental release (e.g., spilled units), no special emergency procedures are required. Pick up units manually. Wear protective gloves as indicated in Section 8.

6.2 Environmental precautions

This product is not classified as environmentally hazardous. Prevent loose units from entering drains, sewers or waterways.

6.3 Methods and materials for containment and cleaning up

Collect spilled product units manually and place in a suitable container for disposal in accordance with Section 13. No special cleanup materials required.

6.4 Reference to other sections

See Section 8 for personal protective equipment. See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Aspect	Guidance
General handling	Handle with care. Wash hands thoroughly after handling. Avoid prolonged or repeated skin contact.
Sensitized individuals	Persons with known skin sensitization to fragrance components should avoid direct and prolonged skin contact.
Hygiene measures	Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Parameter	Requirement
Temperature	Store between 5°C and 35°C (41°F – 95°F)
Conditions	Store in a cool, dry, well-ventilated area away from direct sunlight and heat sources
Incompatibilities	Keep away from strong acids, strong bases, and strong oxidizing agents
Container	Keep in original sealed packaging until use

7.3 Specific end use(s)

This product is designed for single use as a air freshener in professional/institutional restroom facilities. No other end uses are recommended.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

No specific OSHA Permissible Exposure Limit (PEL) or ACGIH Threshold Limit Value (TLV) has been established for the fragrance components at the concentrations present in this finished solid product. Exposure is not expected under normal handling conditions.

Component	CAS No.	OSHA PEL	ACGIH TLV
d-Limonene	5989-27-5	None established	None established
Citral	5392-40-5	None established	None established
Hexyl cinnamic aldehyde (HCA)	101-86-0	None established	None established
Linalool	78-70-6	None established	None established
Citronellol	106-22-9	None established	None established
Alpha-Ionone	127-41-3	None established	None established
2-t-Butylcyclohexyl acetate	88-41-5	None established	None established

8.2 Appropriate engineering controls

No special ventilation or engineering controls are required under normal conditions of use. General room ventilation is considered adequate.

8.3 Individual protection measures

PPE Type	Requirement
Skin protection	Protective gloves recommended when handling multiple units or for individuals with known skin sensitivity to fragrance. Nitrile or latex gloves are suitable.
Eye/face protection	Not required under normal conditions of use.
Respiratory protection	Not required under normal conditions of use. General ventilation is adequate.
Body protection	Standard work clothing. Wash hands after handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Value/Description
9.1 Appearance	Solid plastic clip. Color: Orange.
9.2 Odor	Orange / Citrus fragrance
9.3 Odor threshold	Not determined
9.4 pH	Not applicable (solid article)
9.5 Melting point/range	Approx. 70°C (158°F) — softening point of EVA matrix
9.6 Boiling point	Not applicable (solid article)
9.7 Flash point	Not applicable (solid article — not classified as flammable)
9.8 Evaporation rate	Not applicable (solid article)
9.9 Flammability	Not classified as flammable solid under OSHA HazCom 2012

9.10 Upper/lower flammability limits	Not applicable
9.11 Vapor pressure	Not applicable (solid article)
9.12 Vapor density	Not applicable
9.13 Relative density	Approx. 0.94 g/cm ³ (EVA matrix)
9.14 Solubility	Insoluble in water
9.15 Partition coefficient (n-octanol/water)	Not applicable (mixture/solid article)
9.16 Auto-ignition temperature	Not determined
9.17 Decomposition temperature	Approx. >200°C (>392°F)
9.18 Viscosity	Not applicable (solid article)

SECTION 10: STABILITY AND REACTIVITY

Parameter	Assessment
10.1 Reactivity	No specific reactivity hazard under normal conditions of use or storage.
10.2 Chemical stability	Stable under recommended storage conditions. See Section 7.
10.3 Possibility of hazardous reactions	Hazardous polymerization will not occur. No hazardous reactions expected under normal conditions.
10.4 Conditions to avoid	Excessive heat (above 35°C for prolonged periods), direct sunlight, strong oxidizing agents.
10.5 Incompatible materials	Strong acids, strong bases, strong oxidizing agents.
10.6 Hazardous decomposition products	Under normal conditions of use, no hazardous decomposition products are expected. Under fire conditions: carbon monoxide (CO), carbon dioxide (CO ₂) and other organic compounds. See Section 5.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Hazard Category	Assessment
Acute toxicity — oral	Not classified. Product is a solid article not intended for ingestion.
Acute toxicity — dermal	Not classified.
Acute toxicity — inhalation	Not classified. Product is a solid article — airborne exposure not expected under normal conditions of use.
Skin corrosion/irritation	Not classified. No components present at or above classification thresholds.
Serious eye damage/irritation	Not classified. No components present at or above classification thresholds.
Respiratory sensitization	Not classified.
Skin sensitization	CATEGORY 1 — H317. May cause an allergic skin reaction. Attributable to d-Limonene, Citral, Hexyl cinnamic aldehyde (HCA), Linalool, Citronellol, Alpha-Ionone, 2-t-Butylcyclohexyl acetate, present above the 0.1% GHS classification threshold for skin sensitizers.
Germ cell mutagenicity	Not classified. No components present at or above classification thresholds.

Carcinogenicity	Not classified. No components present at or above classification thresholds under OSHA, NTP or IARC classifications.
Reproductive toxicity	Not classified. No components present at or above classification thresholds.
STOT — single exposure	Not classified.
STOT — repeated exposure	Not classified.
Aspiration hazard	Not applicable. Product is a solid article.

11.2 Toxicological data for declared components

Component	CAS No.	LD50 oral	LD50 dermal	LC50 inhalation
d-Limonene	5989-27-5	4,400 mg/kg (rat)	>5,000 mg/kg	Not determined
Citral	5392-40-5	4,960 mg/kg (rat)	>5,000 mg/kg	Not determined
Hexyl cinnamic aldehyde (HCA)	101-86-0	3,100 mg/kg (rat)	>5,000 mg/kg	Not determined
Linalool	78-70-6	2,790 mg/kg (rat)	>5,000 mg/kg	Not determined
Citronellol	106-22-9	3,450 mg/kg (rat)	>5,000 mg/kg	Not determined
Alpha-Ionone	127-41-3	Not determined	Not determined	Not determined
2-t-Butylcyclohexyl acetate	88-41-5	2,750 mg/kg (rat)	>2,000 mg/kg	Not determined

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

This product is a finished solid article. Under normal conditions of use, it is not expected to present ecological hazards. No components are present at concentrations that would classify this product as environmentally hazardous under OSHA HazCom 2012.

Component	CAS No.	Aquatic toxicity data
d-Limonene	5989-27-5	LC50 (fish, 96h): 0.62 mg/L — not present at ecotoxicologically relevant concentrations in finished product.
Hexyl cinnamic aldehyde	101-86-0	LC50 (fish, 96h): 0.62 mg/L — not present at ecotoxicologically relevant concentrations in finished product.
All other declared components	Various	Not present at ecotoxicologically relevant concentrations in the finished product.

12.2 Persistence and degradability

Component	Assessment
EVA plastic matrix	Enhanced anaerobic biodegradability in biologically active landfills, facilitated by the Eco-One EG35 biobased additive (<1% w/w). Independent laboratory testing by Instituto Politécnico Nacional (Mexico City, 2017) per ASTM D-5511-02 and ISO-15985:2014 demonstrated 93.31% biodegradation at 1,288 days under anaerobic conditions. Enhanced biodegradation is specific to biologically active landfills — not expected under standard storage or use conditions.
Fragrance components	Readily biodegradable based on available data for declared components.

12.3 Bioaccumulation potential

Fragrance components present in this product have low bioaccumulation potential based on available data for declared components.

12.4 Mobility in soil

This product is a solid article. Under normal conditions of use, mobility in soil is not expected. Prevent product from entering waterways or soil.

12.5 Other adverse effects

No other adverse ecological effects are known or expected under normal conditions of use.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product disposal:

This product is a finished solid plastic article. It is not classified as hazardous waste under the Resource Conservation and Recovery Act (RCRA) or applicable Federal, State, or local regulations.

This product contains Eco-One EG35 biobased additive, which has been independently validated to enhance anaerobic biodegradation in biologically active landfills per ASTM D-5511-02 and ISO-15985:2014. Disposal in municipal solid waste (landfill) is the recommended end-of-life option for this product.

Disposal must comply with applicable Federal, State, and local regulations. Regulations may vary by location — it is the responsibility of the waste generator to verify local requirements.

Packaging disposal:

Dispose of packaging materials in accordance with applicable Federal, State, and local regulations.

13.2 Additional considerations

Do not dispose of product in drains, sewers, or waterways. Do not incinerate unless in compliance with applicable regulations.

For Canada: Disposal must comply with applicable Federal and Provincial regulations under the Canadian Environmental Protection Act (CEPA) and applicable Provincial legislation.

SECTION 14: TRANSPORT INFORMATION

Parameter	Assessment
14.1 UN Number	Not regulated — not applicable.
14.2 UN Proper Shipping Name	Not regulated — not applicable.
14.3 Transport hazard class(es)	Not regulated — not applicable.
14.4 Packing group	Not regulated — not applicable.
14.5 Environmental hazards	Not classified as environmentally hazardous for transport purposes.
14.6 Special precautions	No special transport precautions required.

14.7 Transport in bulk	Not applicable — product is not transported in bulk.
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Applicable transport regulations:

Regulation	Status
USA — DOT 49 CFR (Hazardous Materials Regulations)	Not regulated
Canada — TDG (Transportation of Dangerous Goods)	Not regulated
International maritime — IMDG	Not regulated
International air — IATA/ICAO	Not regulated

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific to the product

UNITED STATES

Regulation	Status
OSHA Hazard Communication Standard	This Safety Data Sheet has been prepared in compliance with OSHA Hazard Communication Standard 29 CFR 1910.1200 and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Revision 3.
Toxic Substances Control Act (TSCA)	All components of this product are listed on the TSCA Chemical Substance Inventory or are exempt from listing requirements.
SARA Title III — Sections 311/312	Skin Sensitizer — Yes. All other hazard categories — No.
SARA Title III — Section 313	No components are present at or above reportable thresholds under Section 313.
CERCLA	No components are listed as CERCLA hazardous substances at concentrations that trigger reporting requirements.
California Proposition 65	This product contains no substances known to the State of California to cause cancer, birth defects, or other reproductive harm at levels requiring a warning under Proposition 65.
EPA — RCRA	This product is not classified as hazardous waste under RCRA when disposed of as directed in Section 13.

CANADA — WHMIS 2015

Regulation	Status
WHMIS 2015 Classification	This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) under WHMIS 2015. Skin Sensitization — Category 1 (H317).
Domestic Substances List (DSL)	All components of this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.
Canadian Environmental Protection Act (CEPA)	No components are identified as toxic under Schedule 1 of CEPA at the concentrations present in this product.

15.2 Chemical safety assessment

No chemical safety assessment has been conducted for this product. This is not required under OSHA HazCom 2012 or WHMIS 2015.

SECTION 16: OTHER INFORMATION

16.1 Issue date and revision history

Field	Information
Issue date	April 2025
Version	3
Revision	1
Replaces	Version 2, Revision 3 — March 2024 (FDI-13C-202403)
Prepared by	Ekcoss Innovations

16.2 Full text of hazard statements

Code	Full text
H317	May cause an allergic skin reaction.

16.3 Full text of precautionary statements

Code	Full text
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves.
P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents/container in accordance with applicable Federal, State and local laws and regulations.

16.4 Abbreviations and acronyms

Abbreviation	Definition
ACGIH	American Conference of Governmental Industrial Hygienists
ASTM	American Society for Testing and Materials
CASRN	Chemical Abstracts Service Registry Number
CEPA	Canadian Environmental Protection Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations

DOT	U.S. Department of Transportation
DSL	Domestic Substances List (Canada)
EPA	U.S. Environmental Protection Agency
EVA	Ethylenevinylacetate copolymer
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
HazCom	Hazard Communication Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheet
TDG	Transportation of Dangerous Goods (Canada)
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
WHMIS	Workplace Hazardous Materials Information System (Canada)

16.5 Disclaimer

The information contained in this Safety Data Sheet is based on data considered accurate as of the issue date. It is provided in good faith and is believed to be correct. However, no warranty, express or implied, is given as to its accuracy or completeness. This SDS is intended only as a guide for safe handling, use, storage, and disposal of the product. Ekcos Innovations shall not be liable for any damages resulting from the use of or reliance upon this information. Users are responsible for determining the suitability of this information for their specific applications and for complying with all applicable laws and regulations.