



# SAFETY DATA SHEET

## INTERNATIONAL FLAVORS & FRAGRANCES

Product ISO E SUPER TOCO

Print Date 01/08/2025

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### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ISO E SUPER TOCO  
Sales Number : 00091841  
SDS Number : R00000224373  
Product Use Description : Fragrance Ingredient

Company : IFF Inc.  
600 Highway 36  
Hazlet NJ 07730

Telephone : (732) 264-4500  
Telefax : (732) 335-2551  
Emergency telephone number : +1 800 424 9300

### SECTION 2 HAZARDS IDENTIFICATION

#### GHS-Classification

Skin irritation, Category 2  
Skin sensitisation, Sub-category 1B

#### GHS-Labeling

Symbol(s) :



Signal word : Warning

Hazard statements : H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.

Precautionary statements : P261: Avoid breathing mist or vapours.  
P280: Wear protective gloves.  
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.  
P333 + P313: If skin irritation or rash occurs: Get medical advice/  
attention.  
  
P501: Dispose of contents/ container to an approved waste disposal  
plant.

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### Carcinogenicity:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous components

Component	CAS-No.
Ethanone, 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)-	68155-66-8, 54464-57-2, 68155-67-9
2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-	10191-41-0

### SECTION 4. FIRST AID MEASURES

#### First aid procedures

- Inhalation : Remove from exposure site to fresh air and keep at rest. Obtain medical advice.
- Skin contact : Remove contaminated clothes. Wash thoroughly with water (and soap). Contact physician if symptoms persist.
- Eye contact : Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.
- Ingestion : Rinse mouth with water and obtain medical advice.

#### Notes to physician

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Risks : Causes skin irritation.  
May cause an allergic skin reaction.

### SECTION 5. FIREFIGHTING MEASURES

#### Flammable properties

Flash point : 273 °F (134 °C)

#### Fire fighting

Suitable extinguishing media : Carbondioxide, dry chemical, foam.

Unsuitable extinguishing media : Do not use a direct waterjet on burning material.

Further information : Standard procedure for chemical fires.

#### Protective equipment and precautions for firefighters

Specific hazards during firefighting : Water may be ineffective.

Special protective equipment for firefighters : Wear NIOSH approved self-contained breathing apparatus and full protective clothing when fighting fires involving chemicals. Use water spray to cool containers exposed to fire.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Avoid inhalation and contact with skin and eyes. A self-contained breathing apparatus is recommended in case of a major spill.

Environmental precautions : Keep away from drains, surface- and groundwater and soil.

Methods for containment / Methods for cleaning up : Clean up spillage promptly. Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Gross

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spillages should be contained by use of sand or inert powder and disposed of according to the local regulations.

### **SECTION 7. HANDLING AND STORAGE**

- Handling : Avoid excessive inhalation of concentrated vapors. Follow good manufacturing practices for housekeeping and personal hygiene. Wash any exposed skin immediately after any chemical contact, before breaks and meals, and at the end of each work period. Contaminated clothing and shoes should be thoroughly cleaned before re-use.
- If appropriate, procedures used during the handling of this material should also be used when cleaning equipment or removing residual chemicals from tanks or other containers, especially when steam or hot water is used, as this may increase vapor concentrations in the workplace air. Where chemicals are openly handled, access should be restricted to properly trained employees. Keep all heated processes at the lowest necessary temperature in order to minimize emissions of volatile chemicals into the air.
- Advice on protection against fire and explosion : Keep away from ignition sources and naked flame.
- Requirements for storage areas and containers : Store in a cool, dry, ventilated area away from heat sources. Keep containers upright and tightly closed when not in use.

### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Components with workplace control parameters**

#### **Engineering measures**

- Engineering measures : Where feasible, isolate mixing rooms and other areas where this material is used or openly handled. Maintain these areas under negative air pressure relative to the rest of the plant. Where feasible, use closed systems to transfer and process this material

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### Personal protective equipment

- Eye protection : Use tight-fitting goggles, face shield or safety glasses with side shields if eye contact might occur.
- Hand protection : Avoid skin contact. Use chemically resistant gloves.
- Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
- Respiratory protection : Use local exhaust ventilation around open tanks and other open sources of potential exposures in order to avoid excessive inhalation, including places where this material is openly weighed or measured. In addition, use general dilution ventilation of the work area to eliminate or reduce possible worker exposures. No respiratory protection is required during normal operations in a workplace where engineering controls such as adequate ventilation, etc. are sufficient.
- If engineering controls and safe work practices are not sufficient, an approved, properly fitted respirator with organic vapor cartridges or canisters and particulate filters should be used:
- a) while engineering controls and appropriate safe work practices and/or procedures are being implemented; or
  - b) during short term maintenance procedures when engineering controls are not in normal operation or are not sufficient; or
  - c) if normal operational workplace vapor concentration in the air is increased due to heat ;
  - d) during emergencies; or
  - e) if engineering controls and operational practices are not sufficient to reduce airborne concentrations below an established occupational exposure limit.
- Hygiene measures : To the extent deemed appropriate, implement pre-placement and regularly scheduled ascertainment of symptoms and spirometry testing of lung function for workers who are regularly exposed to this material.

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To the extent deemed appropriate, use an experienced air sampling expert to identify and measure volatile chemicals that could be present in the workplace air to determine potential exposures and to ensure the continuing effectiveness of engineering controls and operational practices to minimize exposure.

### Protective measures

: In December 2003, the National Institute for Occupational Safety and Health ("NIOSH") published an Alert on preventing lung disease in workers who use or make flavorings [NIOSH Publication Number 2004-110].  
In August 2004, the United States Flavor and Extract Manufacturers Association (FEMA) issued a report entitled "Respiratory Safety in the Flavor Manufacturing Workplace".  
Both of these reports provide recommendations for reducing employee exposure and for medical surveillance in the workplace. The recommendations in these reports are generally applicable to the use of any chemical in the workplace and you are strongly urged to review both of these reports.  
The report published by FEMA also contains a list of "high priority" chemicals. If any of these chemicals are present in this product at a concentration  $\geq 1.0\%$  due to an intentional addition by IFF, the chemical(s) will be identified in this safety data sheet.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Physical state : liquid at 68 °F (20 °C) (1,013.00 hPa (1,013 hPa))  
Appearance : CLEAR LIQUID  
Colour : pale yellow  
Odour : conforms to standard

### Safety data

Flash point : 273 °F (134 °C)

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Auto-ignition temperature : 500 °F (260 °C)  
at 1,013.00 hPa (1,013 hPa)  
Method: Tested according to Annex V of Directive 67/548/EEC.

Boiling point : 554.72 °F (290.40 °C)  
at 1,013.00 hPa (1,013 hPa)  
Note: Calculated

Vapour pressure : < .01 hPa (< 0.01 hPa)  
Note: Calculated

Relative density (20 °C) : 0.9610 - 0.9670  
Method: ISO 279

Water solubility : 0.00268 g/l  
at 68 °F (20 °C)  
Method: OECD Test Guideline 105

Partition coefficient: n-octanol/water : log Pow: 5.650

Viscosity, dynamic : 32.61 mPa.s  
at 68 °F (20 °C)  
Method: OECD 114

### ***SECTION 10. STABILITY AND REACTIVITY***

Conditions to avoid : Remarks: Direct sources of heat.

Materials to avoid : Remarks: Avoid contact with strong acids, alkali or oxidizing agents.

Chemical stability : Remarks: Presents no significant reactivity hazard, by itself or in contact with water.

Hazardous decomposition products : Note: Carbon monoxide and unidentified organic compounds may be formed during combustion.

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### SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (Component) : Component: 68155-66-8  
LD50 Rat  
Dose: > 5,000 mg/kg  
Method: OECD Test Guideline 401  
Remarks: REACH data

Acute dermal toxicity (Component) : Component: 68155-66-8  
LD50 Rat  
Dose: > 5,000 mg/kg  
Method: OECD Test Guideline 402  
Remarks: REACH data

Skin irritation (Component) : Component: 68155-66-8  
reconstructed human epidermis (RhE)  
Classification: Causes skin irritation.  
Result: irritating  
Method: OECD Test Guideline 439  
Test substance:(undiluted)  
Remarks: REACH data

Eye irritation(Component) : Component: 68155-66-8  
Classification: No eye irritation  
Result: No eye irritation  
Method: QSAR  
Remarks: REACH data

Sensitisation : Classification: The product is a skin sensitiser, sub-category 1B.  
Result: The product is a skin sensitiser, sub-category 1B.  
Remarks: REACH data

Sensitisation (Component) : Component: 68155-66-8  
Local lymph node assay (LLNA) Mouse  
Classification: The product is a skin sensitiser, sub-category 1B.  
Result: Causes sensitisation.  
Method: OECD Test Guideline 429  
Remarks: REACH data

Repeated dose : Component: 68155-66-8

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toxicity(Component) OralRat  
Number of exposures: 1x /day  
NOEL: 150 mg/kg  
Method: OECD Test Guideline 407  
Remarks: REACH data  
OralRat  
Number of exposures: 1x /day  
NOEL: 120 mg/kg  
Method: OECD Test Guideline 408  
Remarks: REACH data  
DermalRat  
NOEL: 250 mg/kg  
Method: OECD Test Guideline 411  
Remarks: REACH data  
DermalMouse  
NOEL: 500 mg/kg  
Method: OECD Test Guideline 411  
Remarks: REACH data

Teratogenicity (Component) : Component: 68155-66-8  
Application Route: Oral  
Rat  
Number of exposures: 1x /day

### SECTION 12. ECOLOGICAL INFORMATION

**Component:**  
68155-66-8

Tetramethyl  
Acetyloctahydro  
naphthalenes

Toxicity to fish:  
semi-static test LC50  
Species: Lepomis macrochirus (Bluegill sunfish)  
Dose: 1.3 mg/l  
Exposure time: 96 h  
Analytical monitoring: yes  
Method: OECD Test Guideline 203  
REACH data  
Toxicity to fish:  
semi-static test LC50  
Species: Lepomis macrochirus (Bluegill sunfish)

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Dose: 1.8 mg/l  
Exposure time: 48 h  
Analytical monitoring: yes  
Method: OECD Test Guideline 203  
REACH data  
Toxicity to daphnia and other aquatic invertebrates:  
semi-static test EC50  
Species: Daphnia magna (Water flea)  
Dose: 1.38 mg/l  
Exposure time: 48 h  
Analytical monitoring: yes  
Method: OECD Test Guideline 202  
REACH data  
Toxicity to algae:  
static testErC50  
Species: Desmodesmus subspicatus (green algae)  
Dose: > 2.6 mg/l  
Exposure time: 72 h  
Analytical monitoring: yes  
Method: OECD Test Guideline 201  
REACH data  
Toxicity to algae:  
NOEC  
Species: Desmodesmus subspicatus (green algae)  
Dose: >= 2.6 mg/l  
Exposure time: 72 h  
Analytical monitoring: yes  
REACH data  
Toxicity to bacteria:  
static test NOEC  
Species: activated sludge  
Dose: > 100 mg/l  
Exposure time: 42 d  
Method: OECD 301 F  
REACH data  
<03EHS L TEXT(CED-N12.00224460)>  
<03EHS L TEXT(CED-H11.00000120)>;  
NOEC  
Species: Danio rerio (zebra fish)  
Concentration: .16 mg/l

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Exposure time: 30 d  
Analytical monitoring: yes  
Method: OECD Test Guideline 210  
Remarks:  
REACH data  
<03EHS L TEXT(CED-H12.00200010)>  
<03EHS L TEXT(CED-H11.00000120)>:  
NOEC  
Species: Daphnia magna (Water flea)  
Concentration: .02 mg/l  
Exposure time: 21 d  
Analytical monitoring: yes  
Method: OECD Test Guideline 211  
Remarks:  
REACH data  
<03EHS L TEXT(CED-H12.00200010)>  
<03EHS L TEXT(CED-H11.00000120)>:  
NOEC  
Species: Daphnia magna (Water flea)  
Concentration: .44 mg/l  
Exposure time: 21 d  
Analytical monitoring: yes  
Method: OECD Test Guideline 211  
Remarks:  
REACH data  
<03EHS L TEXT(CED-H12.00200010)>  
<03EHS L TEXT(CED-H11.00000120)>:  
EC10  
Species: Daphnia magna (Water flea)  
Concentration: .04 mg/l  
Exposure time: 21 d  
Analytical monitoring: yes  
Method: OECD Test Guideline 211  
Remarks:  
REACH data

### SECTION 13. DISPOSAL CONSIDERATIONS

Contaminated packaging : Place material into sealed containers and dispose of in accordance

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with local, state and federal regulations.

### SECTION 14. TRANSPORT INFORMATION

**DOT** Not dangerous goods

**IATA** UN number : 3082  
Description of the goods : ENVIRONMENTALLY HAZARDOUS  
SUBSTANCE, LIQUID, N.O.S.  
(Octahydro Tetramethyl Naphthalenyl Ethanone)  
Class : 9  
Packing group : III  
ICAO-Labels : 9

**IMDG** UN number : 3082  
Description of the goods : ENVIRONMENTALLY HAZARDOUS  
SUBSTANCE, LIQUID, N.O.S.  
(Octahydro Tetramethyl Naphthalenyl Ethanone)  
Class : 9  
Packing group : III  
IMDG-Labels : 9  
EmSNumber 1 : F-A  
EmSNumber 2 : S-F  
Marine pollutant : yes  
(Octahydro Tetramethyl Naphthalenyl Ethanone)

### SECTION 15. REGULATORY INFORMATION

**SARA 311/312 Hazards** : Skin corrosion or irritation  
Respiratory or skin sensitisation

**Reportable Quantity** :

**HMIS Classification** : Health hazard: 2  
Chronic Health Hazard: /  
Flammability: 1  
Physical and chemical hazards: 0

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### ***SECTION 16. OTHER INFORMATION***

#### **Further information**

The information in this MSDS was obtained from current and reliable sources. However the data is provided without any warrant, expressed or implied, regarding its correctness or accuracy. Since the use, handling, storage and disposal of this product are beyond IFF control, it is the responsibility of the user both to determine safe conditions for the use of this product and to assume liability of loss, damage, or expense arising out of the product's improper use. No warranty expressed or implied regarding the product described herein shall be created by or inferred from any statement or omission in this MSDS. Various Federal, State or Provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in this MSDS. The user should review these regulations to ensure full compliance.

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