



# SAFETY DATA SHEET

## INTERNATIONAL FLAVORS & FRAGRANCES

Product ISO E SUPER

Print Date 09/15/2017

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### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ISO E SUPER  
IFF Code : 00098663  
Cust. Material : 00098663  
SDS Number : R00000225033  
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, Category 1  
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.

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Precautionary statements : P280: Wear protective gloves.  
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

### 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 identified as a carcinogen or potential carcinogen by OSHA.  
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
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	128-37-0

### SECTION 4. FIRST AID MEASURES

#### First aid procedures

Inhalation : Remove from exposure site to fresh air and keep at rest. If victim is unconscious, remove foreign bodies from the mouth. If victim has stopped breathing, give artificial respiration. Obtain medical advice.

Skin contact : Remove contaminated clothes. Wash thoroughly with water (and soap). Contact physician if symptoms persist.

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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.

### **SECTION 5. FIREFIGHTING MEASURES**

#### **Flammable properties**

Flash point : 273 °F (134 °C)

#### **Fire fighting**

Suitable extinguishing media : Use water spray, dry chemical, carbon dioxide or appropriate foam.

#### **Protective equipment and precautions for firefighters**

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 spillages should be contained by use of sand or inert powder and

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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

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negative air pressure relative to the rest of the plant.  
Where feasible, use closed systems to transfer and process this material

### 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.
- 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

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regularly scheduled ascertainment of symptoms and spirometry testing of lung function for workers who are regularly exposed to this material.

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

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Odour : conforms to standard

### Safety data

Flash point : 273 °F (134 °C)

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 : .00 hPa (0.00233 hPa)  
at 73 °F (23 °C)  
Method: Purge & Trap

Relative density (20 °C) : 0.9611 - 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

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

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Conditions to avoid : Remarks: Direct sources of heat.

Chemical stability : Remarks: Presents no significant reactivity hazard, by itself or in contact with water. Avoid contact with strong acids, alkali or oxidizing agents.

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

### 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: IFF

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

Skin irritation (Component) : Component: 68155-66-8  
human  
Result: Skin irritation  
Method: OECD 439

Eye irritation(Component) : Component: 68155-66-8  
Result: No eye irritation  
Method: QSAR

Sensitisation (Component) : Component: 68155-66-8  
LLNA Mouse  
Result: Causes sensitisation.  
Method: OECD 429

Repeated dose toxicity(Component) : Component: 68155-66-8  
OralRat  
Number of exposures: 1x /day  
NOEL: 150 mg/kg  
Method: OECD Test Guideline 407

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Remarks: Repeated dose (28 days) toxicity (oral)

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  
Method: OECD Test Guideline 203

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  
Method: OECD Test Guideline 202  
IFF

Toxicity to algae:  
static test EC50  
Species: Desmodesmus subspicatus (green algae)  
Dose: 2.6 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Toxicity to bacteria:  
static test NOEC  
Species:

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Dose: > 100 mg/l  
Exposure time: 42 h  
Method: OECD 301 F

<03EHS L TEXT(CED-N12.00224460)>

<03EHS L TEXT(CED-H11.00000120)>:

semi-static test NOEC

Species: Danio rerio (zebra fish)

Concentration: .16 mg/l

Exposure time: 30 d

Method: OECD 210

<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

Method: OECD 211

### SECTION 13. DISPOSAL CONSIDERATIONS

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

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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 : Acute Health Hazard

Reportable Quantity :

HMIS Classification : Health hazard: 2  
Flammability: 1  
Physical and chemical hazards: 0

### SECTION 16. OTHER INFORMATION

#### Further information

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