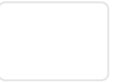


# Ethiodized oil



## IDENTIFICATION

**Name** Ethiodized oil

**Accession Number** DB00965 (APRD00960)

**Type** Small Molecule


**Groups** Approved, Investigational

**Description** Ethiodized oil is used by injection as a radio-opaque contrast agent. It is composed of iodine combined with ethyl esters of fatty acids of poppyseed oil, primarily as ethyl monoiodostearate and ethyl diiodostearate. The precise structure is not known.

**Synonyms** EOE 13

**Prescription Products** Show  entries

NAME	↕	DOSAGE	↕	STRENGTH	↕	ROUTE	↕	LABELLER	↕	MARKETING START	↕	MARKETING END	↕	↕	↕

			Intralymphatic; Intrauterine					
<b>Lipiodol Ultra Fluid</b>	Liquid	380 mg	Intracavitary; Parenteral	Guerbet	1977-12-31	Not applicable		

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**International/Other Brands**

Ethiodol

**Categories**

[Biological Products](#)

[Iodinated Contrast Agents](#)

[Plant Oils](#)

[Complex Mixtures](#)

[Iodized Oil](#)

[Plant Preparations](#)

[Contrast Media](#)

[Lipids](#)

[Roentgenography](#)

[Diagnostic Uses of Chemicals](#)

[Oils](#)

**UNII**

[KZW0R0686Q](#)

**CAS number**

8008-53-5

**Weight**

Not Available

**Chemical Formula**

Not Available

**InChI Key**

Not Available



**IOFAC Name** NOT Available

**SMILES** Not Available

## PHARMACOLOGY

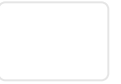
**Indication** For use as a radio-opaque medium for hysterosalpingography and lymphography, and as an antineoplastic agent when part of the iodine is  $^{131}\text{I}$ . It is also used in follow-up imaging for chemoembolization.

**Associated Conditions** [Hepatocellular,Carcinoma](#)

**Pharmacodynamics** There has been little detailed investigation of the metabolic fate of ethiodized oil in either man or animals. However, the fate of ethiodized oil following lymphangiography in dogs has been reported. Koehler *et al.* employed  $^{131}\text{I}$ -tagged ethiodol for lymphangiography in dogs and analyses of individual organs at various time intervals were done. The investigators reported an average of only 25% of the injected medium was retained in the lymphatics at the end of three days. An average of 50% was recovered from the lungs. They found the remainder of injected activity was fairly uniformly distributed throughout the body. Urinary excretion in the form of inorganic iodine was revealed as the chief mode of iodine loss from the system.

**Mechanism of action** Ethiodized oil is selectively retained in tumor vessels for long periods, and is used for imaging organs such as liver, lung, stomach, and thyroid. Labeled with  $^{131}\text{I}$  or other beta emitters ( $^{90}\text{Y}$  or  $^{32}\text{P}$ ), ethiodized oil can deliver a high internal radiation dose to certain tumors with minimal effect on healthy tissues.

**Absorption** Not Available



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**Protein binding**

Not Available

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**Metabolism**

Not Available

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**Route of elimination**

Urinary excretion in the form of inorganic iodine was revealed as the chief mode of iodine loss from the system.

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**Half life**

Not Available

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**Clearance**

Not Available

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**Toxicity**

Intravenous LD50 in dog is 1580mg/kg. Symptoms of overdose include dyspnea and change in clotting factors.

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**Affected organisms**

Humans and other mammals

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**Pathways**

Not Available

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**Pharmacogenomic  
Effects/ADRs** ⓘ

Not Available

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**INTERACTIONS****Drug Interactions** ⓘShow  entries

Acetyldigoxin	Acetyldigoxin may decrease the cardiotoxic activities of Ethiodized oil.	Experimental
<a href="#">Aldesleukin</a>	The risk of a hypersensitivity reaction to Ethiodized oil is increased when it is combined with Aldesleukin.	Approved
<a href="#">Ancestim</a>	The risk or severity of cytotoxicity can be increased when Ancestim is combined with Ethiodized oil.	Approved, Investigational, Withdrawn
<a href="#">Bevacizumab</a>	Bevacizumab may increase the cardiotoxic activities of Ethiodized oil.	Approved, Investigational
<a href="#">Cabazitaxel</a>	The risk or severity of adverse effects can be increased when Cabazitaxel is combined with Ethiodized oil.	Approved
<a href="#">Cyclophosphamide</a>	Cyclophosphamide may increase the cardiotoxic activities of Ethiodized oil.	Approved, Investigational
Cymarin	Cymarin may decrease the cardiotoxic activities of Ethiodized oil.	Experimental
<a href="#">Deslanoside</a>	Deslanoside may decrease the cardiotoxic activities of Ethiodized oil.	Approved
<a href="#">Digitoxin</a>	Digitoxin may decrease the cardiotoxic activities of Ethiodized oil.	Approved, Investigational

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#### Food Interactions

Not Available

#### REFERENCES

##### General References

1. Nelson RC: Techniques for computed tomography of the liver. Radiol Clin North Am. 1991 Nov;29(6):1199-212. [[PubMed:1947041](#)]
2. Hamm B, Wolf KJ: Contrast material for computed tomography and magnetic resonance imaging of the gastrointestinal tract. Curr Opin Radiol. 1991 Jun;3(3):474-82. [[PubMed:1859783](#)]
3. Link [[Link](#)]

#### External Links

KEGG Drug

[D04082](#)

ChEMBL	<a href="#">CHEMBL1201458</a>
PharmGKB	<a href="#">PA164768833</a>
RxList	<a href="#">RxList Drug Page</a>
Wikipedia	<a href="#">Ethiodized_oil</a>

### AHFS Codes

36:68.00 — Roentgenography

### MSDS

[Download](#) (12.2 KB)

## CLINICAL TRIALS

### Clinical Trials ⓘ

Show  entries

PHASE	STATUS	PURPOSE	CONDITIONS	COUNT
1, 2	Recruiting	Treatment	<a href="#">Advanced Hepatocellular Carcinoma / Recurrence Hepatocellular Carcinoma</a>	1
2	Active Not Recruiting	Other	<a href="#">Liver Cancer</a>	1
2	Completed	Prevention	<a href="#">Hepatocellular,Carcinoma</a>	1
2, 3	Not Yet Recruiting	Treatment	<a href="#">Hepatocellular,Carcinoma</a>	1
2, 3	Unknown Status	Treatment	<a href="#">Hepatocellular,Carcinoma</a>	1
3	Completed	Treatment	<a href="#">Liver Cancer</a>	1
3	Recruiting	Diagnostic	<a href="#">Infertility, Female</a>	1
3	Recruiting	Treatment	<a href="#">Child-Pugh Class A / Child-Pugh Class B / Recurrent Hepatocellular Carcinoma</a>	1

3	Recruiting	Treatment	Hepatocellular,Carcinoma / Portal Vein Tumor Thrombus	1
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## PHARMACOECONOMICS

### Manufacturers

Guerbet llc

### Packagers

Not Available

### Dosage forms

Show  entries

FORM	ROUTE	STRENGTH
Injection	Intra-arterial; Intralymphatic; Intrauterine	480 mg/mL
Liquid	Intracavitary; Parenteral	380 mg

Showing 1 to 2 of 2 entries

< 1 >

### Prices

Not Available

### Patents

Not Available

## PROPERTIES

### State

Liquid

water solubility

Insoluble

Not Available

**Predicted Properties**

Not Available

**Predicted ADMET features**

Not Available

SPECTRA

**Mass Spec (NIST)**

Not Available

**Spectra**

Not Available

TAXONOMY

**Classification**

Not classified

Drug created on June 13, 2005 07:24 / Updated on July 13, 2018 01:04

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