Are you seeing the whole picture?
The whole picture on osmolality

Lowest osmolality of all monomers

- Low osmolality improves patient comfort and minimizes patient movement
- In a randomized, parallel, double-blind, controlled study of 112 patients, OXILAN® was well tolerated on patient measures of pain and warmth.

The threshold of vascular pain was determined to be approximately 700 to 750 mOsm*s.

*The clinical significance of this data is not known.

Compare the osmolality of OXILAN® 300

Compare the osmolality of OXILAN® 350

OXILAN® gives you both patient comfort and
Lowest viscosity of all the monomers at 350-370 concentration

- Low viscosity allows for easy injection through small diameter catheters
- Low viscosity allows for high-speed injection
- Low viscosity provides better flow through small blood vessels and capillaries

Compare the viscosity of OXILAN® 300

<table>
<thead>
<tr>
<th>Monomers</th>
<th>Dimers</th>
</tr>
</thead>
<tbody>
<tr>
<td>OXILAN® 300</td>
<td>20° C</td>
</tr>
<tr>
<td>Omnipaque™ 300</td>
<td></td>
</tr>
<tr>
<td>Isovue® 300</td>
<td></td>
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<tr>
<td>Ultravist® 300</td>
<td></td>
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<tr>
<td>Visipaque™ 320</td>
<td></td>
</tr>
<tr>
<td>OXILAN® 300</td>
<td>5.1</td>
</tr>
<tr>
<td>Omnipaque™ 300</td>
<td>4.7</td>
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<tr>
<td>Isovue® 300</td>
<td>5.5</td>
</tr>
<tr>
<td>Ultravist® 300</td>
<td></td>
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<tr>
<td>Visipaque™ 320</td>
<td></td>
</tr>
</tbody>
</table>

Compare the viscosity of OXILAN® 350

<table>
<thead>
<tr>
<th>Monomers</th>
<th>Dimers</th>
</tr>
</thead>
<tbody>
<tr>
<td>OXILAN® 350</td>
<td>20° C</td>
</tr>
<tr>
<td>Omnipaque™ 350</td>
<td></td>
</tr>
<tr>
<td>Isovue® 370</td>
<td></td>
</tr>
<tr>
<td>Ultravist® 370</td>
<td></td>
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<tr>
<td>Hexabrix® 320</td>
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</tr>
<tr>
<td>Visipaque™ 320</td>
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<td>OXILAN® 350</td>
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<td>Isovue® 370</td>
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<td>Ultravist® 370</td>
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<tr>
<td>Hexabrix® 320</td>
<td></td>
</tr>
<tr>
<td>Visipaque™ 320</td>
<td></td>
</tr>
</tbody>
</table>

* 39% less viscosity than Visipaque and 20% less viscosity than Omnipaque at 20°C

The whole picture on viscosity

the visibility you need
The whole picture on safety

Renal Safety

The OXILAN® balance of low viscosity and low osmolality may help reduce the risk of renal complications*:
- Low osmolar contrast media (CM) are as safe as iso-osmolar for contrast-induced nephropathy (CIN), as ICON and CARE studies have shown7.
- Hydration plays a major role in at least limiting the incidence of CIN8.
- Osmolality is not a factor in decreasing renal blood flow or glomerular filtration9*.
- High viscosity CM can be responsible for hypoperfusion of the inner medulla and cortex in animal studies10*.
- High viscosity can significantly reduce renal blood flow from baseline10*.
- Low osmolar dimeric CM may have a greater potential for cytotoxic effects on proximal renal tubular cells than monomeric CM11* (in vitro study).

OXILAN® contains sodium (9 mmol/L Na) with a citrate buffer:
- The addition of sodium to CM solutions has been shown to reduce the risk of ventricular fibrillation (VF) in animal studies12*.
  - OXILAN® produced a much lower incidence of VF compared to other nonionic monomers studied (ioversol12, iomeprol12, iopromide12, iohexol13).

Arrhythmia

In these studies vs iohexol, OXILAN®:
- Significantly decreased platelet aggregation and activation14 (clinical study, N=37).
- Had less effect on the endothelium15* (animal study, electron micrograph of aortic rings).
- Had minimal effect on mean blood pressure and heart rate16* (animal study).
- Had no negative inotropic effect16* (animal study).

Hemodynamics

*The clinical significance of this data is not known.
Please see full Prescribing Information for complete disclosure of safety risks and warnings.
The whole picture
on the unique molecular structure

The molecular structure of OXILAN® provides
both patient comfort and the visibility you need

Hydrophilic Group
• Increases solubility which can contribute to rapid renal clearance
• Reduces binding with other molecular structures, which may promote endothelial tolerance

Hydrophobic Region
• Promotes “transient molecular aggregation” of the molecules, reducing osmolality
• Achieves lower osmolality at diagnostically useful concentrations
The whole picture
on the OXILAN® balance

Viscosity is determined by the size of the molecules in solution

Osmolality is determined by the number of particles in solution

The low viscosity characteristic of a monomer balanced with the low osmolality provided by the hydrophobic region of the molecule

OXILAN® has been used in more than 4 million patients since 1996

Indications
OXILAN® is available in 2 concentrations for the following indications:

**Intra-arterial**
- OXILAN® (ioxilan) Injection (300 mgI/mL) is indicated for cerebral arteriography
- OXILAN® (ioxilan) Injection (350 mgI/mL) is indicated for coronary arteriography and left ventriculography, visceral angiography, aortography and peripheral arteriography

**Intravenous**
- OXILAN® (ioxilan) Injection (300 mgI/mL) and OXILAN® (ioxilan) Injection (350 mgI/mL) are indicated for excretory urography and contrast enhanced computed tomographic (CECT) imaging of the head and body
References:

1. Data on file. Guerbet LLC.


When you see the whole picture, OXILAN® looks like the right choice

- Low viscosity for easy administration
- Lowest osmolality of all monomers contributes to patient comfort
- Unique molecular structure contributes to patient comfort and rapid renal clearance
- Contains sodium citrate to reduce the risk of ventricular fibrillation
- Excellent hemodynamic profile

Available in single dose 300 and 350 mgI/mL, 50 mL, 100 mL, 150 mL and 200 mL latex-free vials

Product Information

OXILAN® (ioxilan) Injection Nonionic Contrast Agent is a water-soluble, triiodinated contrast medium administered by intravascular injection to enhance radiographic visualization and diagnosis.

All OXILAN® vials are manufactured latex-free.¹

NOT FOR INTRATHecal USE

Serious adverse reactions have been reported due to the inadvertent intrathecal administration of ionic contrast media that are not indicated for intrathecal use. These serious adverse reactions include: death, convulsions, cerebral hemorrhage, coma, paralyisis, arachnoiditis, acute renal failure, cardiac arrest, seizures, rhabdomyolysis, hyperthermia, and brain edema. Special attention must be given to ensure that this drug product is not administered intrathecally.

Nonionic iodinated contrast media inhibit blood coagulation, in vitro, less than ionic contrast media. The use of plastic syringes in place of glass syringes has been reported to decrease but not eliminate the likelihood of in vitro clotting.

Serious, rarely fatal, thromboembolic events causing myocardial infarction and stroke have been reported during angiographic procedures with both ionic and nonionic contrast media. Therefore, meticulous intravascular administration technique is necessary, particularly during angiographic procedures, to minimize thromboembolic events.

Please see accompanying full Prescribing Information