HIGH PURITY CHLORINE

MSSA (Métaux Spéciaux) produces technical grade Chlorine from its electrolysis process of salt. After collection and liquefaction of the Chlorine, MSSA uses a brand new purification unit to produce High Purity chlorine.

QUALITY

- In early 2012, MSSA implemented a new High Purity Chlorine Production Center capable of producing up to 1,000 tons/year, with a quality of 99.9999%
- Highly stable composition
- Packaging control upon receipt and dedicated filling station
- Distillation process removes gas impurities and particules

Main applications

- SEMICONDUCTOR
- TFT
- RESEARCH INDUSTRIES
- OPTIC FIBER

Contact
High purity Chlorine
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Fax: +33 (0) 4 79 24 70 90
sales@metauxspeciaux.fr

www.metauxspeciaux.fr
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Typical technical quality : 5.0 and 5.5

<table>
<thead>
<tr>
<th>ELEMENTS</th>
<th>N55 SPECIFICATIONS</th>
<th>N50 SPECIFICATIONS</th>
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<tbody>
<tr>
<td>Cl₂</td>
<td>&gt;99.9995 %</td>
<td>-</td>
</tr>
<tr>
<td>O₂ + Ar</td>
<td>&lt;0.5 ppmv</td>
<td>&lt;1 ppmv</td>
</tr>
<tr>
<td>CO₂</td>
<td>&lt;1 ppmv</td>
<td>&lt;4 ppmv</td>
</tr>
<tr>
<td>CO</td>
<td>&lt;0.5 ppmv</td>
<td>&lt;1 ppmv</td>
</tr>
<tr>
<td>H₂</td>
<td>&lt;0.1 ppmv</td>
<td>&lt;0.5 ppmv</td>
</tr>
<tr>
<td>H₂O</td>
<td>&lt;1 ppmv</td>
<td>&lt;1 ppmv</td>
</tr>
<tr>
<td>N₂</td>
<td>&lt;1 ppmv</td>
<td>&lt;2 ppmv</td>
</tr>
<tr>
<td>CH₄</td>
<td>&lt;0.1 ppmv</td>
<td>&lt;0.5 ppmv</td>
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<thead>
<tr>
<th>ELEMENTS</th>
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<tbody>
<tr>
<td>Cd</td>
<td>&lt;2 ppbw</td>
<td>&lt;2 ppbw</td>
</tr>
<tr>
<td>Cr</td>
<td>&lt;5 ppbw</td>
<td>&lt;5 ppbw</td>
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<tr>
<td>Cu</td>
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<td>&lt;10 ppbw</td>
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<tr>
<td>Fe</td>
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<td>Ni</td>
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<td>Zn</td>
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<td>&lt;10 ppbw</td>
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<tr>
<td>P</td>
<td>20 ppbw</td>
<td>20 ppbw</td>
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</tbody>
</table>

Packaging and deliveries

**CYLINDERS AND DRUMS**
5kg to 1000 kg net

**SPECIAL PACKAGING**
Upon request

**APPROVED FOR**
Road, Rail and Maritime transport

ISO 14001
Environnement
ISO 50001
Énergie

CAS
7782-50-5

UN
1017

Purity
from 99.998 to 99.9999%

Class
2

**the Formula for Success**