

# 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



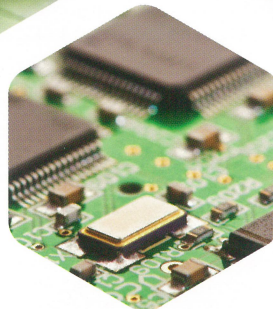
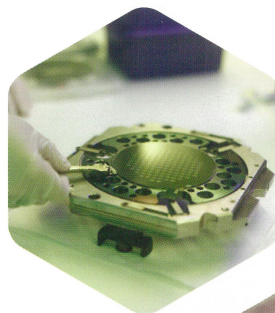
**Worldwide**  
DELIVERIES



**1,000 t**  
PRODUCTION/YEAR

## Main applications

- SEMICONDUCTOR
- RESEARCH INDUSTRIES
- TFT
- OPTIC FIBER



Contact  
High purity Chlorine

MSSA S.A.S.  
111 rue de la Volta  
Pomblière, St Marcel  
France

Tel. +33 (0) 4 79 24 70 70  
Fax : +33 (0) 4 79 24 70 90

sales@metauxspeciaux.fr



**Cl<sub>2</sub>**  
**CAS**  
7782-50-5

**UN**  
1017

**Purity**  
from 99.998  
to 99.9999%

**Class**  
2

## Typical technical quality : 5.0 and 5.5

ELEMENTS	N55 SPECIFICATIONS	N50 SPECIFICATIONS
<b>Cl<sub>2</sub></b>	>99.9995 %	-
<b>O<sub>2</sub> + Ar</b>	<0.5 ppmv	<1 ppmv
<b>CO<sub>2</sub></b>	<1 ppmv	<4 ppmv
<b>CO</b>	<0.5 ppmv	<1 ppmv
<b>H<sub>2</sub></b>	<0.1 ppmv	<0.5 ppmv
<b>H<sub>2</sub>O</b>	<1 ppmv	<1 ppmv
<b>N<sub>2</sub></b>	<1 ppmv	<2 ppmv
<b>CH<sub>4</sub></b>	<0.1 ppmv	<0,5 ppmv

ELEMENTS	N55 SPECIFICATIONS	N50 SPECIFICATIONS
<b>Cd</b>	<2 ppbw	<2 ppbw
<b>Cr</b>	<5 ppbw	<5 ppbw
<b>Cu</b>	<10 ppbw	<10 ppbw
<b>Fe</b>	<100 ppbw	<100 ppbw
<b>Na</b>	<100 ppbw	<100 ppbw
<b>Ni</b>	<10 ppbw	<10 ppbw
<b>Zn</b>	<10 ppbw	<10 ppbw
<b>P</b>	20 ppbw	20 ppbw

## Packaging and deliveries

### CYLINDERS AND DRUMS

5kg to 1000 kg net

### SPECIAL PACKAGING

Upon request

### APPROVED FOR

Road, Rail and Maritime transport



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