

# MATERIAL SAFETY DATA SHEET

## CALC - OUT

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### 1 - IDENTIFICATION OF THE SUBSTANCE :

CHEMICAL NAME : Disodic salt of ethanedioic acid  
FORMULA :  $\text{Na}_2\text{C}_2\text{O}_4$ .  
TRADE NAME : **CALC-OUT**  
USE : Product for decarbonation (decrease of total alkalinity) of swimming pool waters.  
DESCRIPTION: Wet white solid, with blocks.  
CAS NO. : 62 - 76 - 0

### 2 - PHYSICAL DATA :

pH (1% in water) : 8.25 (at 68F / 20°C)  
FUSION POINT: 482- 500F / 250-260 °C (decomposition of product into water and CO2).  
FLASH POINT : not applicable  
FLAMMABILITY : not applicable  
EXPLOSIVITY : not applicable  
VOLUMIC MASS : 2340 kg/m<sup>3</sup> (density of pure product).  
APPARENT DENSITY: 0.8 to 0.95  
SOLUBILITY IN WATER ca. 2.7 g / 100 ml at 32F / 0 °C  
ca. 3.7 g / 100 ml at 68F / 20 °C  
ca. 6.4 g / 100 ml at 212F / 100 °C  
OTHERS : insoluble in ether, ethanol,...

### 3 – HAZARDOUS INGREDIENTS

MATERIAL	CAS N°	BY WEIGHT	HAZARD DATA
Disodic salt of ethanedioic acid	62 - 76 – 0	80%	Harmful in contact with skin and if swallowed

### 4 - FIRE AND EXPLOSION HAZARD DATA

GENERAL CONSIDERATION The product is not combustible

SPECIFIC DANGERS Production of CO<sub>2</sub> at temperatures over 260°C.

EXTINCTION MEANS All fire fighting means are authorized.

## 5 - HEALTH HAZARD DATA

CALC OUT is nocive by skin contact, and if swallowed.

Irritates skin, eyes and respiratory system.

If swallowed : irritation of mouth and digestive system and may cause serious lesion of kidneys.

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## 6 - EMERGENCY AND FIRST AID PROCEDURE

EYE CONTACT	Rinse immediately with plenty of water. Seek medical advice if irritation persists or develops.
SKIN CONTACT	Rinse immediately with plenty of water the contaminated zones.
INGESTION	Rinse mouth and give very quickly 2 to 3 glasses of water. Seek medical advice.
INHALATION	Bring the victim to a well ventilated place. If you feel unwell or sick, seek medical advice.

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## 7 - TOXICOLOGICAL INFORMATION

Product classified as toxical for its acute lethal effects.

LD 50 (mouse, by intravenous way) = 155 mg/kg

LD 50 (on man, by intravenous way) = 17 mg/kg

CARCINOGENIC      No carcerigenous effects.

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## 8 - REACTIVITY DATA

STABILITY            Emanation of CO<sub>2</sub> at temperatures over 482- 500F / 250-260°C.

REACTIVITY        The product is very eager for calcium (ionic reaction without any risk, with formation of calcium oxalat)  
Reacts with oxydizer producing CO<sub>2</sub>.

INCOMPATIBLE MATERIALS : -

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## 9 - SPILL, LEAKAGE & DISPOSAL PROCEDURES

### CLEAN UP PROCEDURE

Pick up mechanically (and recuperate in dry and suitably labelled containers).  
Rinse the surface with water.

PRECAUTIONS      Avoid release of the product in "rain water" networks, in sewerage systems or in rivers.

### DISPOSAL CONSIDERATIONS :

Eliminate the product in respect of regulations (disposal authorized in rubbish dumps under certain conditions).

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**10 - SPECIAL PROTECTION DATA**

OCCASIONAL HANDLING OF THE PRODUCT : gloves and goggles recommended.

REPEATED OR CONTINUOUS HANDLING OF THE PRODUCT: labour clothing covering body and members, and wear suitable gloves and goggles.

Use a respiratory protection apparatus if handling of the product generates dust.

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**11- SPECIAL PRECAUTIONS DATA**

HANDLING For handling of large quantities of product , wear labour clothing, gloves and goggles.

STORAGE In original, well closed packaging. Avoid contact with iron or aluminium.

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**12- TRANSPORTATION INFORMATION**

This material is not a hazardous material and is not regulated by the D.O.T.

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The above information is based on the present state of our knowledge of the product at the time of the up-dating. It is given in good faith, no warranty is implied with respect to the quality or the specification of the product. The user must satisfy himself that the product is entirely suitable for his purpose.

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