



Character of Calcium Hypochlorite (NICLON)

1. Name

- (1) Chemical name : Calcium Hypochlorite
- (2) Usual name : Calcium Hypochlorite (High Test Hypochlorite)
- (3) Chemical formula : $\text{Ca}(\text{ClO})_2$ (Molecular Weight 142.99)
- (4) Calcium Hypochlorite Compounds

Name	Molecular formula	Crystal form	Com.
Calcium hypochlorite dehydrate	$\text{Ca}(\text{ClO})_2 \cdot 2\text{H}_2\text{O}$	tetragonal plate or double pyramidal shape	70%

2. Grades

- 70G : Granules
- 7000 : Pallets (Particle size aligned)
- 70T : 20g Tablets (30mm ϕ \times 16.4mm)
- 70B : 200g Tablets (70mm ϕ \times 33.0mm)



**3. Quality (Typical Analysis)**

Contents		70G	7000	70T/70B
Available Chlorine	(%)	77.6	77.6	76.0
Ca(ClO) ₂	(%)	78.2	78.2	76.0
Ca(OH) ₂	(%)	1.6	1.5	1.5
CaCO ₃	(%)	1.3	1.0	1.5
CaCl ₂	(%)	0.8	0.8	1.0
NaCl	(%)	7.8	7.7	4.9
Ca(ClO ₃) ₂	(%)	0.3	0.3	0.5
H ₂ O	(%)	10.0	10.5	14.0
(Total)	(%)	(100.0)	(100.0)	(100.0)
Insoluble matter in water	(%)	1.6	1.2	N/A

*These data are the typical analysis results and not our specification of NICLON products.

4. Application

bactericide, disinfectant and bleaching agent

Typical Disinfectant Application of NICLON

Application	Available Chlorine Level (mg/L)	Description
Drinking Water	0.1-0.2	Keep minimum 0.1mg/L.
Pool Water	0.4-1.0	0.4-1.0mg/L is desirable.
Vegetables & Fruits	50-100	Prepare dilution water. Soak for 5-10 minutes and wash with fresh water.
Tableware	100	Prepare dilution water. Soak for 2-5 minutes and wash with fresh water.
Finger	100	Prepare dilution water. Soak for a few seconds and wash with fresh water.

*These data are based on standards for use of NICLON in Japan and may not necessarily apply to use of this product in elsewhere.



Standard Usage of Granules for Pool

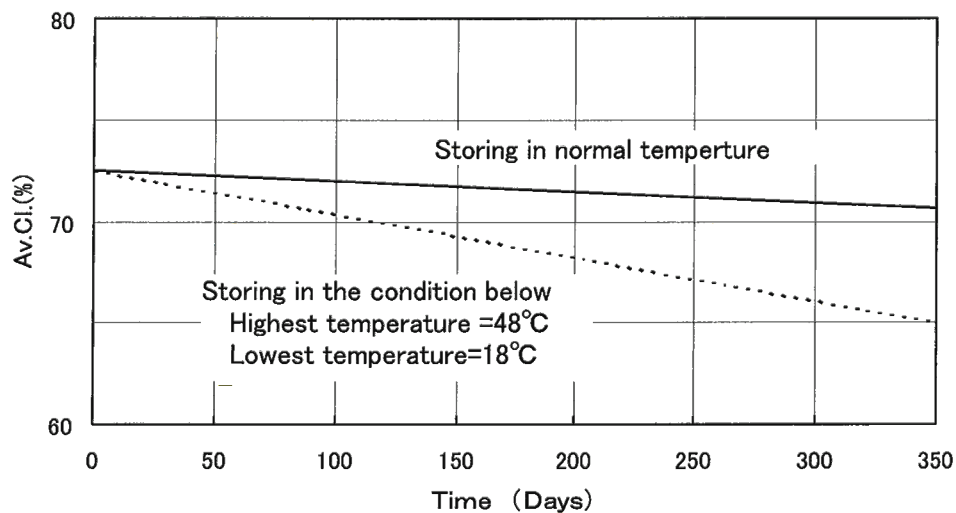
Pool Water Capacity	Concentration of Residual Chlorine				
	0.1mg/L	0.2mg/L	0.4mg/L	0.7mg/L	1.0mg/L
100 m ³	14g	29g	57g	100g	143g
200 m ³	29g	57g	114g	200g	286g
250 m ³	36g	71g	143g	250g	357g
300 m ³	43g	86g	171g	300g	429g
350 m ³	50g	100g	200g	350g	500g
400 m ³	57g	114g	229g	400g	571g
500 m ³	71g	143g	286g	500g	714g

*Actual usage volume is depending on the conditions such as number of swimmers, weather and so on.

5. Decomposition

(1) Usual decomposition

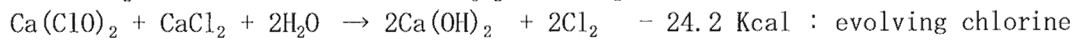
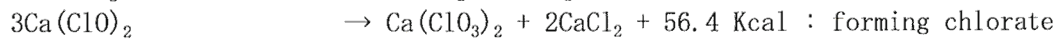
Even under normal conditions when storing, calcium hypochlorite decomposes by itself. Generally the available chlorine decreases by almost 3% per year.





(2) Decomposition by heat

by rising temperature



(3) Decomposition by acid



(4) Decomposition by reducing matter

Organic compounds (Chlorinated Isocyanuric Acid, Amines)

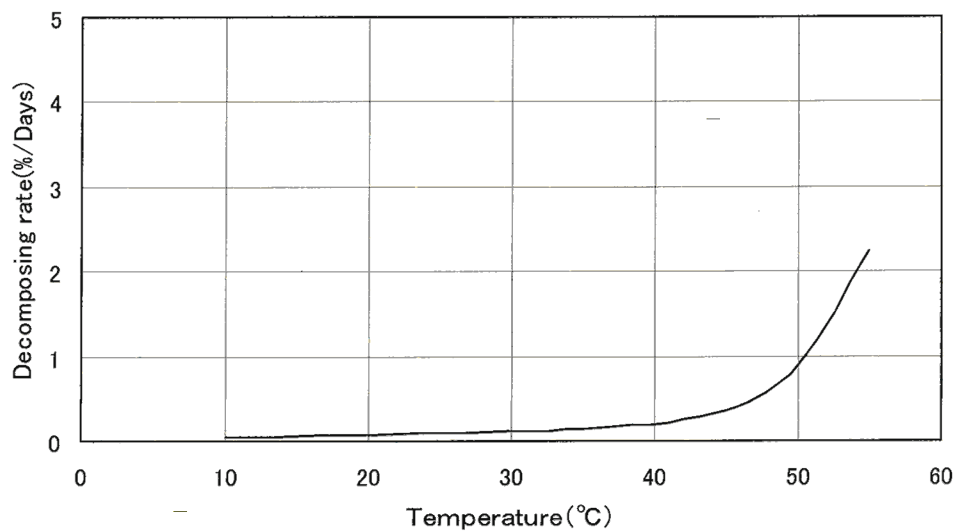
Oils

Grease

Sulfur

Dust

Decomposing rate of Calcium Hypochlorite depending on temperature (H₂O Of Calcium Hypochlorite:4.2~16.6%)





ADVICES FOR TROUBLE-FREE USE OF NICLON

1. Avoid its contact with skin or clothes. Wash it off immediately in water, when in contact.
2. Take the utmost care in order not to swallow or put it into your eye.
In case you swallowed, Then see a doctor right away.
In case, it got into your eye, wash it out in water immediately, and see a doctor.
3. Since NICLON makes metals rust, store it in a glass, plastic or enameled container, or a polyethylene bag.
4. Store it in a completely closed container at a darkened place under lower temperature.
5. Keep it away from children.
6. Since NICLON is a strong oxidizer, never bring it into contact with oils and fats, acids and inflammables. Oily fabrics like a cleaning cloth, in particular, often catch fire in contact with NICLON.
7. It is dangerous to expose it to direct sun light, fire or a high temperature and humidity.

Ask our sales department directly or through our distributors whatever questions you may have, and our experienced engineers will give you the most appropriate advices.