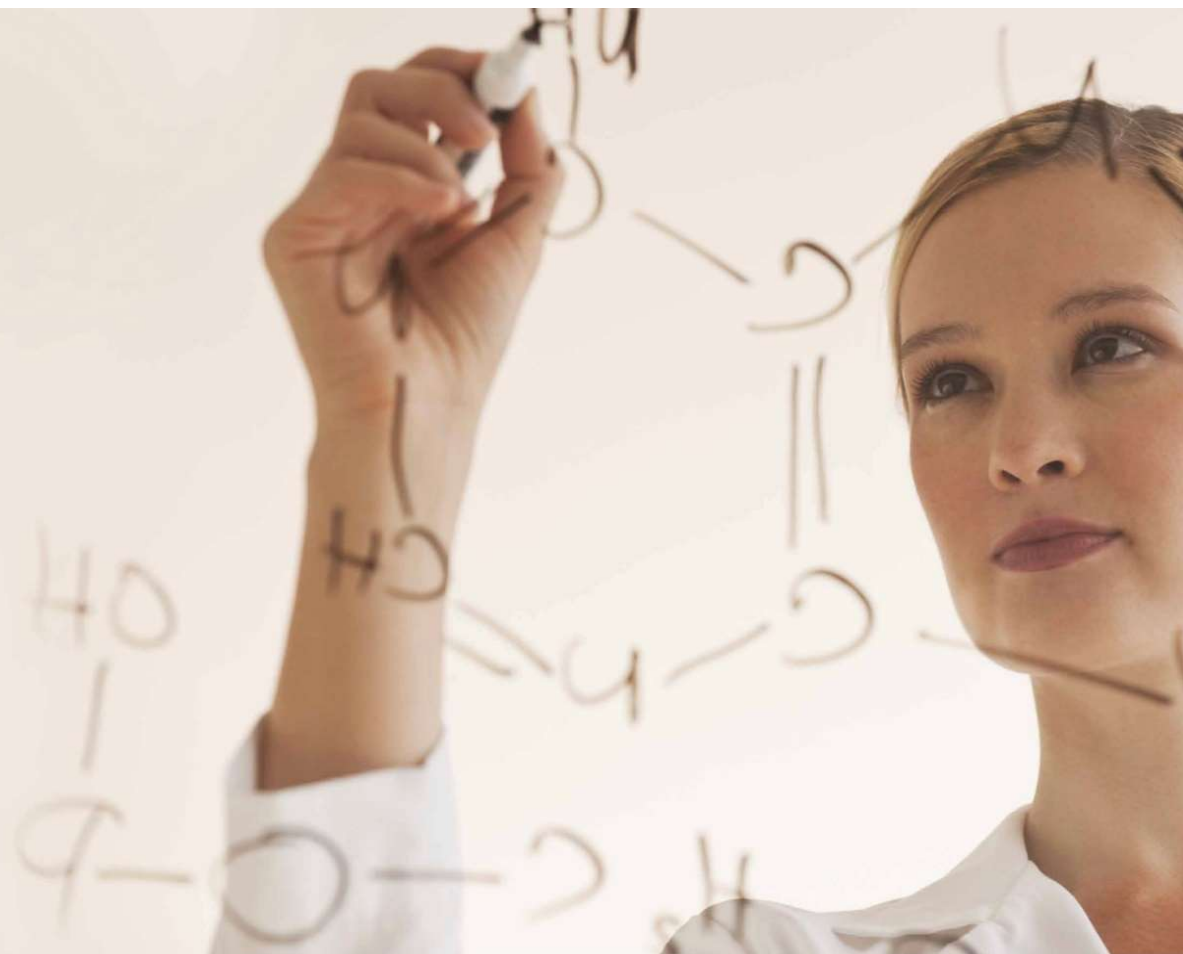


# VINYL

CHEMISTRY WITH INNOVATION  
AND COMPETENCE SINCE 1876.

INNOVÁCIÓ ÉS HOZZÁÉRTÉS  
A VEGYIPAR TERÜLETÉN 1876 ÓTA.

[www.vinyl.hu](http://www.vinyl.hu)



# History of the Budapest site

- **Foundation:** 1876- the first chemical plant in Hungary
- **Electrolyses plant:** 1937 – 1996. Solvay technology
- **Chlorine filling:** 1937- still in operation
- **Sulphuric acid plant:** 1937- 1984
- **Fine chemicals:** 1937- 2000
- **Chlorine business sold to Vinyl:** 2004



# Our Divisions:

## **1. Production and distribution of water treatment chemicals and swimming pool chemicals**

Biocide registered sodium-hypochlorite production, the only liquid chlorine filling station in Hungary. Market leader in this field.

## **2. Whole Sales of chemicals**

Based on the special knowledge of the company and long term cooperations and partnerships. Supported by our warehouse and storage facilities in Budapest.

## **3. Iodine chemicals**

We are the only Methyl-iodine producer in Europe and the only Periodic acid and Sodium-metaperiodate producer in the European Union.

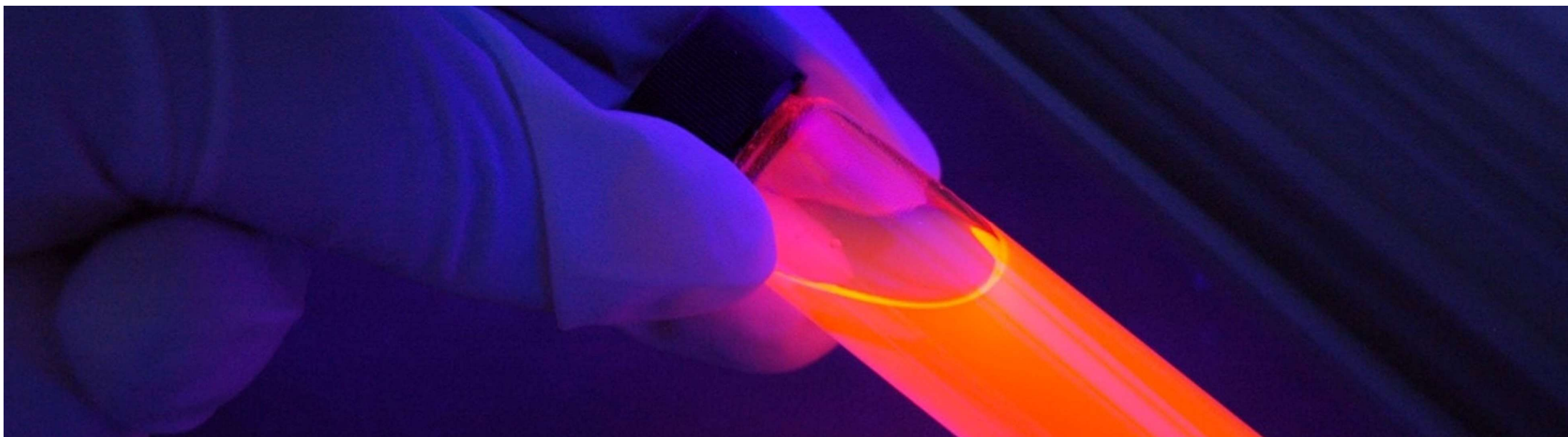


# Well equipped laboratory



- ❖ Gas Chromatographe
- ❖ Atomabsorpic Spectrophotometer
- ❖ Ion Chromatographe
- ❖ UV VIS Spectrophotometer
- ❖ Automatic titrators

# IODINE COMPOUNDS







# Methyl Iodide & Ethyl Iodide

# Methyl Iodide (Iodomethane, Mel – CAS number: 74-88-4)

It is available as non-stabilized and stabilized (with Ag net or Cu wire) in 100 kg/KEG and 2,5 kg/bottle packing, too.

We supply the Methyl Iodide at DAP delivery terms and collect back the empty (contaminated) KEG packing material. This service is included in price in Eu.

Special requests for packing unit or quality requirement are negotiable. It means: batch size packing, for example only 78 kg/KEG only, special grade.

The transport of Mel by air is strictly prohibited, only by surface transport possible.

REACH registered

## Application:

- Catalyst in Acetic Acid production (Monsanto process).
- It's used as an intermediate in the manufacture of some pharmaceuticals and pesticides.
- It is also used in methylation processes and in the field of microscopy.
- Methyl iodide is an excellent substrate for SN2 substitution reactions. It is sterically open for attack by nucleophiles, and iodide is a good leaving group.
- It is used for alkylating carbon, oxygen, sulphur, nitrogen, and phosphorus nucleophiles, Grignard reagent, methylmagnesium iodide, dimethylmercury.

# Ethyl Iodide (Iodoethane, CAS number: 75-03-6)

It is available as non-stabilized and stabilized (Cu wire) in 75 kg/KEG and 2,5 kg/bottle packing, too.

We supply the Ethyl Iodide at DAP delivery terms and collect back the empty (contaminated) KEG packing material. This service is included in price in Eu.

Special requests for packing unit or quality requirement are negotiable. It means: batch size packing, for example only 50 kg/KEG only, special grade.

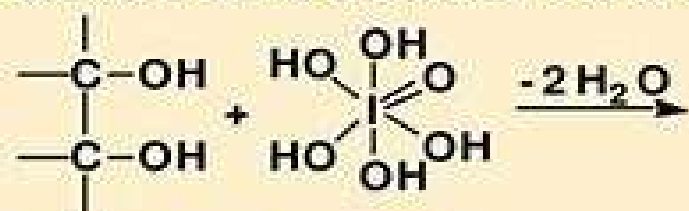
REACH registered

It is special alkylation agents, typical specialty, limited application.



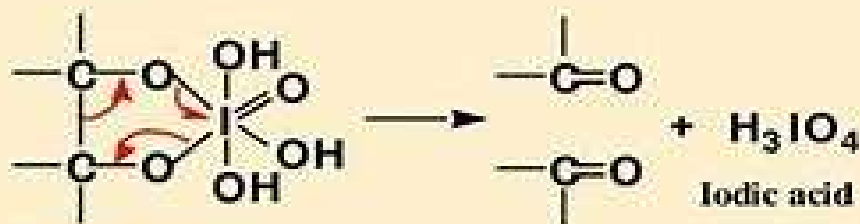
## Oxidation by periodic acid, $\text{HIO}_4$ or $\text{H}_5\text{IO}_6$

- ◆ Periodic acid cleaves the C-C bond of a glycol.



A 1,2-diol

Periodic acid



A cyclic periodic ester

Iodic acid

25-40

# Periodic Acid

# Periodic acid (CAS number: 10450-60-9)

It is available as solid technical, puriss, ACS grade and in liquid form 50 % solution.

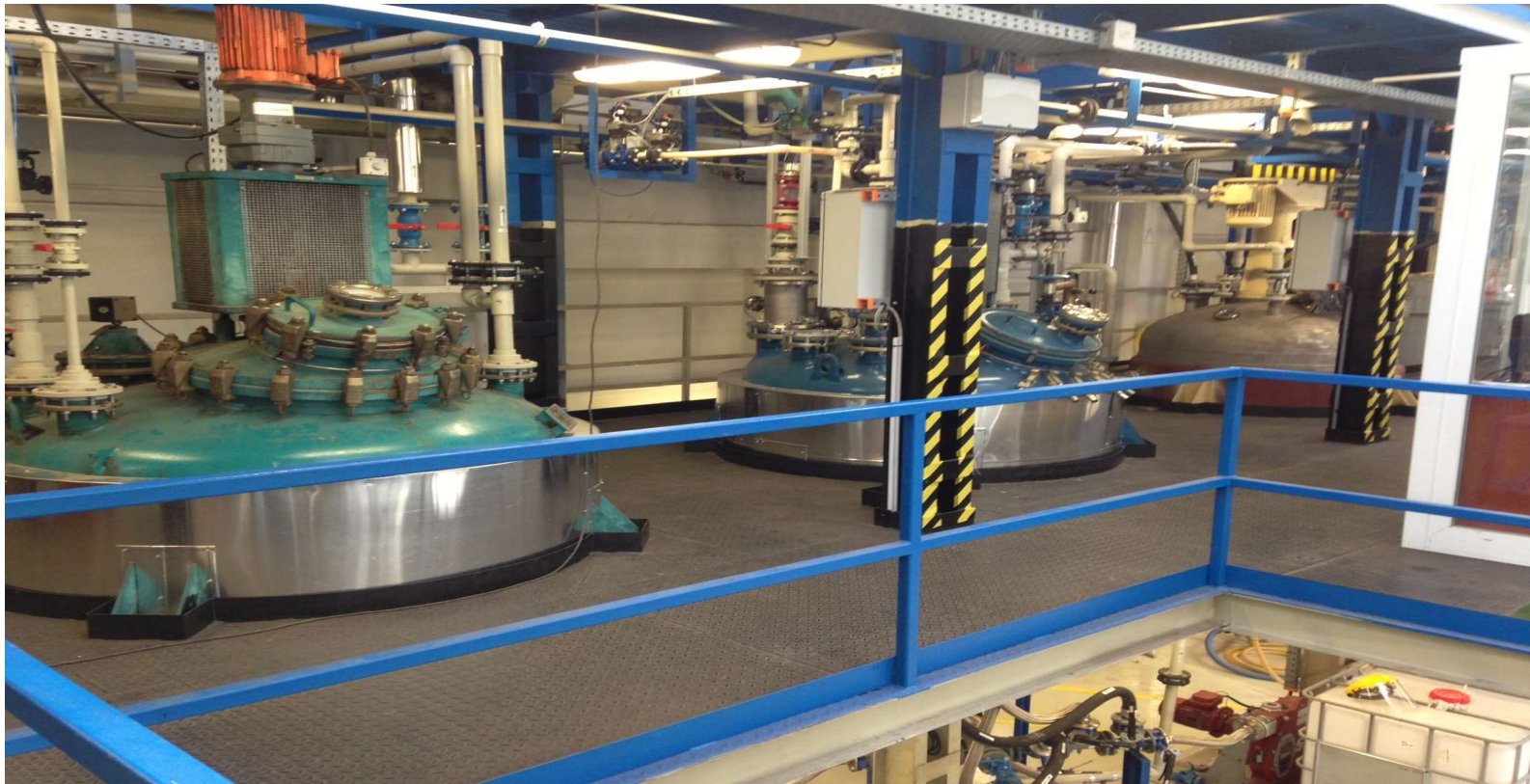
The solid form packaged in 20 kg / plastic pail. The liquid form is packaged in drum, filled from 180 kg to 250 kg.

REACH registered.

## Application:

- It's used as component of environmental friend print screen cleaner and emulsion remover in printing industry, additive of pigments removal solution from printing rolls. Chlorine-free scouring and washing powder, Chemical Mechanical Planarization in microelectronic. (CMP slurry).
- In organic chemistry: determining the structure of carbohydrates (cleave vicinal diols into two aldehyde or ketone fragments). It's an interesting point the Schiff (PAS) stain kit (in vitro diagnostic) application. Oxidation agent of moderate strength. Further applications are fine and laboratory chemical, analytical reagent.

# Sodium-metaperiodate



# **SMP** (Sodium Meta Periodate, CAS number: 7790-28-5)

It is available in technical grade and ACS grade.

The solid form packaged in 20 kg / plastic pail.

REACH registered.

## Application:

- It is widely used oxidation agent used mainly in acidic medium and printing industry as environmental friend print screen cleaner.
- It is used in organic chemistry, API synthesis as moderate strength and selective oxidant, mainly in acidic medium.



# Iodine Monochloride

## **Iodine Monochloride (CAS number: 7790-99-0) and Wijs solution:**

It is highly polar and behaves as a source of  $I^+$ . It is a useful reagent in organic synthesis. It is used as a source of electrophilic iodine in the synthesis of certain aromatic iodides. It also cleaves C-Si bonds. We can offer you 50% iodine monochloride solution in methylene chloride, too.

Wijs solution, which is iodine monochloride dissolved in acetic acid, is used to determine the iodine value of a substance. It can also be used to make pure iodates, by reacting with a chlorate and releasing chlorine gas as by product.

Quantity bellow REACH limit.



# IODINE RECYCLING



**We have a special service. It is Iodine recycling:** We have licence to take over waste with some EWC\* codes and regularly purchase waste with Iodine content for recycling and utilization in production.

# WATER TREATMENT CHEMICALS



**vinyl**



# CHLORINE IN DRUMS AND CYLINDERS



# SODIUM HYPOCHLORITE



# **SODIUM HYPOCHLORITE (CAS number: 7681-52-9)**

Sodium hypochlorite ( $\text{NaClO}$ ) is an inorganic compound.

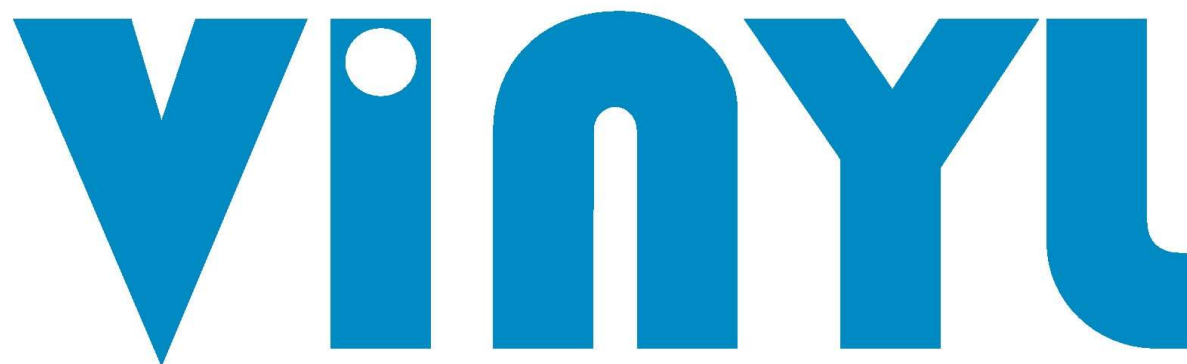
An aqueous solution of the hypo is used for disinfection, bleaching, deodorization.

Due to our own production in Budapest, we always offer fresh, guaranteed active chlorine content to our customers with short delivery times.

We always offer high quality products even with special grades (low chlorate content) or with active ingredient content up to 180 g / l.

Our product complies with current legal requirements and are licensed by BIOCID, REACH ÁNTSZ.

Safety Information: Sodium hypochlorite is a regulated product of ADR / RID. UN number: 1791



H-3524 Miskolc Adler Károly utca 19. Hungary

Production site: 1097 Budapest Illatos út 19-23. Hungary

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[www.vinyl.hu](http://www.vinyl.hu)