

# CHEMICALS FOR WATER BOILERS

## Descaling product for chemical washing

### NYTRA LC 1430 Descaling for water boilers

Mixture of organic and inorganic acids, wetting agents, defoamers and special corrosion inhibitors that make it safe to use on most metals and alloys commonly used in the heat exchangers of residential and industrial water boilers (cast iron - steel - copper alloys).  
Particularly suitable for carrying out the removal of inorganic deposits (limestone, carbonates, phosphates, oxides, sulfides) present in the wall-mounted boilers, centralized boilers, heat exchangers, condensers, boilers, cooling systems etc.

#### Chemical-physical properties

Colour	red/orange
Odour	strong
Physical state	liquid
Solubility in water	completely soluble
pH	0,5
Specific weight	1,12 kg/l
Dilution in water	10-30%
Packing	25 kg and 10 kg PE tanks



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Codice	Pack./Kg	Euro/Kg
N1430-25	25	
N1430-10	10	



### NYTRA LC 1420 Super-concentrated descaling for water boilers

Balanced mixture of organic and inorganic acids, wetting and antifoaming agents, additives and special corrosion inhibitors that make it safe to use on most metals and alloys commonly used in the heat exchangers of industrial equipment (cast iron - steel - copper alloys).  
Particularly suitable for carrying out the removal of inorganic deposits (limestone, carbonates, phosphates, oxides, sulfides) present in water boilers, heat exchangers, condensers, boilers, cooling systems etc.

#### Chemical-physical properties

Colour	red/orange
Odour	strong
Physical state	liquid
Solubility in water	completely soluble
pH	0,5
Specific weight	1,18 kg/l
Dilution in water	8-15%
Packing	25 kg and 10 kg PE tanks



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Code	Pack./Kg	Euro/Kg
N1420-25	25	
N1420-10	10	



### NYTRA LC 1410 De-scaler for stainless steel

Mixture of organic and inorganic acids, wetting agents, defoamers and special corrosion inhibitors that make it safe to use on most metals and alloys commonly used in the residential and industrial equipment and in particular with stainless steel heat exchangers. Suitable for carrying out the removal of inorganic deposits (limestone, carbonates, phosphates, oxides, sulfides). Recommended when it's necessary to use a non aggressive product. This product does not need any passivation after cleaning.



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Code	Pack./Kg	Euro/Kg
N1410-12	12	



#### Chemical-physical properties

Colour	straw yellow
Odour	characteristic
Physical state	liquid
Solubility in water	completely soluble
pH	0,5
Specific weight	1,2 kg/l
Dilution in water	15-30%
Packing	25 kg PE tanks

### NYTRA LC 1470 Neutraliser after acid de-scaling

Concentrated neutralizing powder consisting of a balanced formulation of neutralising salts. Used to remove residual acidity after descaling. Recommended to neutralize the heat exchangers and systems in which acid chemical cleaning was carried out.



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Code	Pack./Kg	Euro/Kg
N1470-10	10	



#### Chemical-physical properties

Colour	white
Odour	odourless
Physical state	crystal grains
Solubility in water	soluble
pH	12 (1% water solution at 25°C)
Specific weight	1,0 kg/l
Dilution in water	5%
Packing	5 kg drums

### NYTRA LC 1468 Powder de-scaler for aluminium/light alloys

Acid powder which can be safely used in the cleaning of heating systems, heat exchangers, cooling systems, condensers, boilers and pipes. It removes deposits of calcium, magnesium, and iron oxides. It should be diluted in water at 5 to 10% depending on the degree of fouling of the system. Recommended for systems in aluminium, light alloys and galvanized surfaces.



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Code	Pack./Kg	Euro/Kg
N1468-5	5	



#### Chemical-physical properties

Colour	white
Odour	odourless
Physical state	crystal grains
Solubility in water	soluble
pH	1,2 (1% water solution at 25°C)
Specific weight	1,2 kg/l
Dilution in water	10-15%
Packing	5 kg drums

### Descaling pumps LC series

Vertical axis pump with inverter, flow reverser and tank for chemical additives.



Code	Tank (l)	hxlxw	Max press. (bar)	Max flow rate (l/h)	Hp	Euro
LC 20	17	430x450x300	1	2.600	0,18	
LC 20 T	17	470x450x300	2	5.400	0,45	



## THERMONET

### FLUSHING, DESCALING PRODUCT FOR CLOSED HEATING SYSTEMS

Disperses and removes sludge, iron oxides, limestone and scale deposits in closed circuits of heating and cooling systems, or in closed circuits which have been powered for a long time with water not properly treated, and thus restores optimal working conditions. This can be done directly with system running without interrupting the operation. The deposits of metal oxides are removed and carried in suspension, deposits of limestone and other minerals in the water are gradually dispersed. The system can then be emptied of the sludge from the circuit until it is completely clean or at the periodic draining. The use of THERMONET, to restore the ideal operating conditions, allows significant energy savings due to better performance of the system,

#### Chemical-physical properties

Colour	reddish
Odour	none
Physical state	liquid
Solubility in water	very soluble
pH	1,3
Specific weight	1,0 kg/l
Dilution in water	2-5% of system capacity
Packing	10 kg PE tanks

a more efficient transfer of heat and good fluid circulation. This needs to be added with a dosing pump or in an expansion bath for the existing installations.



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Code	Pack./Kg	Euro/Kg
TMT-10	10	



## NYTRA R 1630

### POLYPHOSPHATE LIQUID

Mixture of polyphosphate salts particularly suitable for the control of scale and corrosion in open sanitary circuits. Prevents the precipitation of calcium and inhibits the corrosion of metal pipes caused by aggressive water. It should be dosed through dosing pump continuously and in proportion to the flow of water to be treated.

#### Chemical-physical properties

Colour	colourless
Odour	odourless
Physical state	liquid
Solubility in water	very soluble
pH	5-6
Specific weight	1,1 kg/l
Dosage	30 ppm
Packing	25 kg PE tanks



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Code	Pack./Kg	Euro/Kg
N1630-25	25	



## THERMOLONG

### ANTI-CORROSIVE, ANTI SCALE, NOISE REDUCER PRODUCT

Concentrated liquid used as an additive in all closed circuits of heating systems to protect them from corrosion and scale thus keeping the initial performance and allowing for significant energy savings due to an optimum and efficient heat exchange. Eliminates the noise from the aluminium radiators. Inhibits corrosion and protects the surfaces of metals, prevents the formation of mineral deposits and prevents the calcium to precipitate in the form of fouling-resistant. It is necessary to add 1-2% of the total capacity of the system with a dosing pump or through the expansion tank.

#### Chemical-physical properties

Colour	yellow
Odour	slight
Physical state	liquid
Solubility in water	very soluble
pH	5,8
Specific weight	1,0 kg/l
Dilution in water	1-2%
Packing	25 kg PE tanks

To ensure the correct dosage check Phosphonates (5-10 ppm) and sulfates (10-20 ppm) in the boiler water using the suitable test kit.



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Code	Pack./Kg	Euro/Kg
TMG-25	25	



## NYTRA 1480 AG-60

### ANTIFREEZE FOR HEATING COOLING SYSTEMS

Anti-freeze liquid product (inhibited ethylene glycol) particularly suitable for heating circuits and chiller systems which are made of copper, steel, cast iron and aluminium. It contains special agents antiscalants able to control the formation of carbonates on the hot spots of the circuits.

The dosage of NYTRA 1480 AG-60 varies depending on the freezing point to be checked (see table).

#### Chemical-physical properties

Colour	colourless
Odour	odourless
Physical state	liquid
Solubility in water	complete
pH	6-7,5
Specific weight	1,1 kg/l
Dilution in water	see table
Packing	25 kg PE tanks



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Protection temperature	Water	NYTRA 1480 AG-60
- 37 °C	50%	50%
- 26 °C	60%	40%
- 20 °C	67%	33%
- 13 °C	75%	25%

Code	Pack./Kg	Euro/Kg
N1480-25	25	



## NYTRA CLEAN 881

Detergent for radiators, finned batteries, filters and fan-coil. Concentrated liquid cleanser formulated using appropriate detergents and corrosion inhibitors, which allow rapid and safe cleaning of organic and inorganic deposits accumulated in heating and air conditioning systems.

### Chemical-physical properties

Colour	straw yellow
Odour	slight
Physical state	liquid
Solubility in water	complete
pH	13
Specific weight	1,0 kg/l
Dilution in water	10 - 50%
Packing	10 kg PE tanks



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Code	Pack./Kg	Euro/Kg
N881-10	10	



## NYTRA C 1920

Scale Inhibitor and Corrosion Inhibitor for steam generators. Combined polyacrylates/polyphosphates/sulphites blend to protect against corrosion and scale in boilers and steam generators powered by water with low/medium alkalinity <50 ppm (usually demineralized). Increases alkalinity, reduces CO2 and dissolves oxygen, protects metals against corrosion while preventing the formation of deposits or sludge. It does not contain volatile substances. It is added by dosing pump on the water feed-in line.

Dose range between 100 and 300 ppm. To be able to check the correct

### Chemical-physical properties

Colour	reddish
Odour	none
Physical state	liquid
Solubility in water	very soluble
pH	13
Specific weight	1,2kg/l
Dilution in water	100-300 ppm
Packing	25 kgs PE tanks

dosage control the Phosphates (10-30 ppm) and sulfates (10-20 ppm) in the boiler water with the suitable test kit.



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Code	Pack./Kg	Euro/Kg
N1920-25	25	



## ANALYSIS KITS



Code	Description	Euro
1015	HARDNESS	
3112-1	HARDNESS TITRANT BOTTLE 250 ml	
1029	HARDNESS PRECIPITATION	
1016	IRON 0,05 - 1,5 ppm	
1039	MANGANESE 0.05 - 1,5 ppm	
1028	NITRATES 10-140 ppm	
1019	NITRITES 0.05 - 1.5 ppm	
1017	PHOSPHATES 1-20 ppm	
1025-1	SOLPHITES 1 - 10 ppm	

Code	Description	Euro
1022	PH 1 - 11	
1024	SILICA 0.25 - 8 ppm	
1012	CLORIDE	
1010	TOTAL CHLORINE 0.1 - 1.5 ppm	
1006	AMMONIA 0.25 - 4 ppm	
1007	CARBON DIOXIDE 0.5 °f	
1003	ALCALINITY FOR BOILERS (P&M)	
6014	OXIGEN 0.2 ppm	
6017	PHOSPHONATES	

## NYTRA C 1927

SCALE INHIBITOR AND CORROSION INHIBITOR FOR STEAM GENERATORS

Combined polyacrylates/polyphosphates/sulphites blend to protect against corrosion and scale in boilers and steam generators fed with water alkalinity >50 ppm (usually softened or untreated). It inhibits the formation of limestone, reduces CO2 and dissolves oxygen, protects metals against corrosion while preventing scale deposits and sludge formation. Excellent dispersant of ferric oxides. It does not contain volatile substances. It is added by dosing pump on the water feed-in line. Dose range between

100 and 300 ppm. To be able to check the correct dosage control the Phosphonates (5-10 ppm) and sulphites (10-20 ppm) in the boiler water with the suitable test kit.

### Chemical-physical properties

Colour	yellowish
Odour	slight
Physical state	liquid
Solubility in water	very soluble
pH	5,5
Specific weight	1,0 kg/l
Dilution in water	100-300 ppm
Packing	25 kg PE tanks



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Code	Pack./Kg	Euro/Kg
N1927-25	25	



## NYTRA C 1980

### OXYGEN SCAVENGER FOR STEAM BOILERS

Liquid product based on sulphites used to protect steam generators against corrosion from dissolved oxygen. Note that the product is not volatile and therefore does not exhibit corrosive action on the circuits and piping of the steam/condensate network but only on the boiler generating steam. The recommended starting dose is 300/500 g of product per m<sup>3</sup> of water to be treated, from 50 to 150 g/m<sup>3</sup> for reinstatement.

#### Chemical-physical properties

Colour	colourless
Odour	acre
Physical state	liquid
Solubility in water	soluble
pH	4,2
Specific weight	1,2 kg/l
Dilution in water	18 g every ppm SO <sub>2</sub> + 4g every ppm of SO <sub>3</sub>
Packing	25 kg PE tanks

To be able to check the correct dosage control the sulphates (10-20 ppm) in the boiler water with the suitable test kit.



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Code	Pack./Kg	Euro/Kg
N1980-25	25	



## NYTRA R 1636

### Scale and corrosion inhibitors for cooling systems.

Multifunctional treatment formulated to protect from corrosion and calcium and mineral scales cooling circuits fed with raw water, or demineralized or softened water.

The product is suitable for cooling circuits open, semi-open and closed. It is also effective with water with a hardness of up to 40°f, with a pH between 6 and 8. The dosage varies depending on the characteristics of the water to be treated. Maintain control of correct dosing checking phosphonates (4-12 ppm).

#### Chemical-physical properties

Colour	straw yellow
Odour	amino
Physical state	liquid
Solubility in water	soluble
pH	2
Specific weight	1,2 kg/l
Dilution in water	70 - 100 ppm
Packing	25 kg PE tanks

For the correct dosage we recommend contacting the Idroservice technical department, and sending the analysis of the water to be treated.



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Code	Pack./Kg	Euro/Kg
N1636-25	25	



## NYTRA V 1813 G

### CORROSION INHIBITORS FOR STEAM AND CONDENSATE PIPELINES

Liquid product based on aliphatic polyamines to protect against corrosion in steam generators and steam/condensate pipelines, fed with softened or demineralised water. Exerts a protective action and reduces condensate drains. It should be added depending on the amount of CO<sub>2</sub> in the steam.

The recommended starting dose is 1,4 ppm/ppm CO<sub>2</sub> (with softened water) and 0,7 ppm/ppm CO<sub>2</sub> (with demineralised water).

#### Chemical-physical properties

Colour	yellowish
Odour	amino
Physical state	liquid
Solubility in water	soluble
pH	>12
Specific weight	1,0 kg/l
Dilution in water	10 - 80 ppm
Packing	25 kg PE tanks

Check the correct dosage controlling the pH>8.5 and the iron<0.1 ppm.



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Code	Pack./Kg	Euro/Kg
N1813G-25	25	



## NYTRA B1541

### BIOCIDE FOR COOLING SYSTEMS

Non-oxidizing broad-spectrum biocide, fast acting, non-oxidant based on a 20% solution of DBNPA (2,2-dibromo-3-nitropropionamide). It does not produce foam, has a low toxicity and degrades quickly. It is very effective in destroying algae, bacteria and fungi from the surfaces of heat exchangers, condensers, cooling towers and cooling systems. Its fast action allows you to eliminate 90% of the micro-organisms within 30 minutes after application and 99.99% within 3 hours. The product is activated in a wide pH range and it is compatible with chlorine.

#### Chemical-physical properties

Colour	yellow straw
Odour	typical
Physical state	liquid
Solubility in water	soluble
pH	2-5
Specific weight	1,2 kg/l
Dilution in water	see table
Packing	25 kg PE tanks



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Recommended dose	Bacteria control	ppm	Fungi and algae control	ppm
Initial dose (3/4 d)		5 - 10		50 - 100
Shock dose (every 4 d)	2,5 - 10	30 - 100		
Daily dose	1 - 5	30 - 100		

Code	Pack./Kg	Euro/Kg
N1541-10	10	



## NYTRA B 1542

### BROAD SPECTRUM BIOCIDES FOR COOLING SYSTEMS

Broad-spectrum antibacterial biocide, polymer-based quaternary ammonium, suitable in preventing the proliferation of algae, fungi and bacteria in heat exchangers, condensers, cooling towers and cooling circuits. It does not form foam. Particularly effective with iron bacteria and sulphate-reducing bacteria. Non-volatile. The dosage depends on the characteristics of the water. As purely indicative see table under the photo.

#### Chemical-physical properties

Colour	red
Odour	slight
Physical state	liquid
Solubility in water	soluble
pH	7
Specific weight	1,0 kg/l
Dilution in water	see table
Packing	PE 25 kg tanks



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Recommended dosage		ppm	
		Open circuits	Cooling towers
Initial dose (for 3/4 days)		100 - 150 ppm (calculated on the flow). Twice a day for 3 hours.	100-125 ppm (calculated on the volume). Twice a day shock treatment.
Daily maintenance dose		100-150 ppm (calculated on the flow). Twice a day for 2 hours.	30-45 ppm (calculated on the volume). Twice a day shock treatment.

Code	Pack./Kg	Euro/Kg
N1542-25	25	



## IPOCLOR

SODIUM IPOCHLORITE 14%

#### Chemical-physical properties

Colour	straw yellow
Odour	typical for chlorine
Physical state	liquid
Solubility in water	soluble
pH	11
Specific weight	1,2 kg/l
Dilution in water	-
Packing	25 kg PE tanks



Download the technical data on-line: [www.idroservice.net/download.aspx](http://www.idroservice.net/download.aspx)

Code	Pack./Kg	Euro/Kg
IPC-25	25	

