







CLEANING CHEMICALS HYLINE



GLASSES



PLATES/CUPS



CUTLERY



BLACK DISHES



PLASTIC CONTAINERS



ALUMINIUM TRAYS





HOBART

HYLINE CLEANING CHEMICALS

With decades of experience and scores of satisfied customers across the globe, HOBART has proved itself as a warewashing brand that stands for innovation, value for money and quality.

One of the most important elements for achieving perfect rinse results is the efficiency of the dishwasher. However, the quality of the chemicals and water used in the process is just as important. Reliable rinse results and customer satisfaction can only be guaranteed if all three of these sources of influence are factored in and perfectly harmonised.

With its range of HYLINE cleaning chemicals, HOBART meets the demands of its customers to produce a "one-stop shop" solution. HYLINE products are suitable for all types of machines, from compact glasswashers through to utensil washers. Depending on the water hardness and type of soil deposits, HOBART can offer the perfect product from its HYLINE range. These are guaranteed to impress thanks to their impeccable rinsing and drying results, no matter the type of wash ware – whether porcelain, glass, cutlery, plastic or aluminium.

High-quality washing chemicals combined with high-quality dishwashers are guaranteed to deliver the perfect results – just the way you want them.

Your HOBART Team

YOUR ONE-STOP SHOP

BRILLIANT SOLUTIONS FOR ALL YOUR REQUIREMENTS

HOBART is the world's market leader in the commercial warewashing industry and offers its customers end-to-end solutions under one roof: warewashing, cooking, food preparation, water treatment and cleaning chemicals. The products are known for their top-rate quality and reliability and are created in collaboration with you - our customers.

Clean, sparkling dishes are the "business card" of your establishment and one of the first impressions that a guest will receive.

THE PRODUCT RANGE

In addition to the detergents and rinse aids that can be used for rinsing tasks in commercial dishwashers, our product range also includes detergents for combi steamers, as well as supplementary products, such as basic cleaning detergents or machine detergents.

WHY HYLINE?

- Your one-stop shop: HOBART can offer you
 a perfectly harmonised range of products. As
 well as dishwashers, we also offer the matching
 chemical and water treatment products. Whatever
 your needs may be, HYLINE is your go-to brand.
- All of the products are labelled with clear and easy-to-understand pictograms, which ensure that they are easy and safe to handle.
- We match the most suitable cleaning chemicals to each individual HOBART product.
- HOBART dishwashers are pre-set in the factory to accept HOBART HYLINE products. This means you don't waste valuable time trying to work out the correct dosage.







WHAT THEY DO AND HOW THEY WORK

HYLINE **DETERGENTS**

- Emulsification: binding and removal of fat
- **Dispersion:** removal of solid and insoluble wash ware residue
- **Protection of wash ware:** products contain substances especially designed for wash ware
- **Binding of water hardness:** prevention of deposits on wash ware or parts of the machine
- Wetting of wash ware: improved water distribution
- Capillarity: reduction of surface tension, allowing the water to access cavities

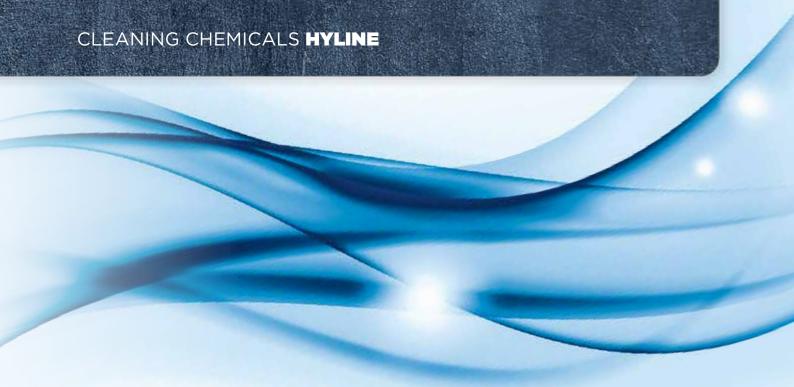
HYLINE RINSE AIDS

- · Improved drying of wash ware
- Removal of residual alkalinity from wash ware
- Streak-free and sparkling dishes









PRODUCT OVERVIEW







HLG-1000

Glass rinse aid

Liquid rinse aid developed especially for glasses, gentle on patterns, fast and spotless drying, brilliant shine, slight acidity

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HLB-20

Universal detergent

All-purpose liquid detergent, outstanding cleaning performance, excellent starch and grease dissolving capacity, odour-neutral

12 kg / 24 kg



PRODUCT OVERVIEW









HLU-31

Universal detergent

All-purpose liquid detergent, contains active chlorine, outstanding cleaning performance, especially suitable for hard water areas

12 kg









HLU-32

Universal detergent

All-purpose liquid detergent, excellent starch and grease dissolving capacity, developed especially for soft water areas

12 kg









HLD-5000

Special rinse aid

Liquid rinse aid developed especially for demineralised water, glassware corrosion protection, gentle on patterns, excellent draining function, below 100 microsiemens

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CLEANING CHEMICALS HYLINE

SUPPLEMENTARY PRODUCTS





CHEMICAL TABLETS INTENSIVE

Machine detergent

Tablet for cleaning interior of machine in combination with the hygiene programme of your HOBART dishwasher

15 tablets, each 50 g

INTERESTED IN FINDING OUT MORE ABOUT OUR HYLINE PRODUCTS?

Please get in touch.

We are more than happy to help!

HOBART Australia & New Zealand
Phone: 1800 462 278 (AU) | 0800 462 278 (NZ)
sales@hobartfood.com.au | www.hobartfood.com.au | www.hobartnz.co.nz





HLC-70

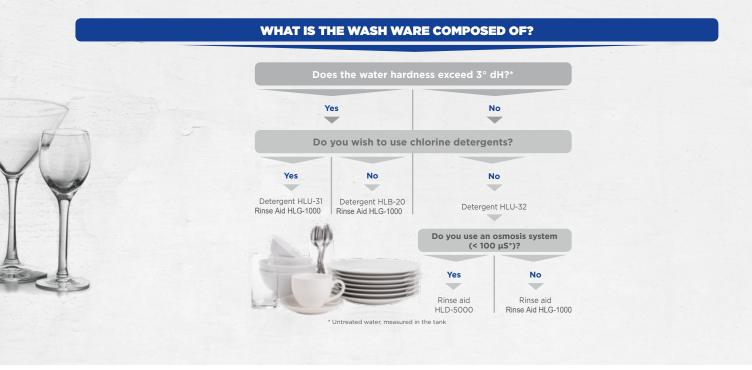
Hygiene detergent COMBI

For the automatic cleaning programme of combi steamers, excellent cleaning performance and grease dissolving capacity

12 kg



SELECT THE PERFECT CHEMICALS



ALWAYS THE RIGHT DECISION

JUST A FEW STEPS AWAY

from finding the perfect chemicals

The following factors are crucial when deciding which chemicals to choose:

- 1. The type of wash ware you want to clean (glasses, plates, cutlery, pots and pans, etc.)
- 2. What is the quality of your water?
- 3. Do you use an osmosis system?

GOOD TO KNOW

You can use the **water hardness** to gauge the quantity of minerals in the water, especially calcium and magnesium. The unit of measurement of the **water hardness in Germany** is the "**deutsche** Härtegrad" (German degree of hardness).

Hard water quickly leads to calcification and increases the consumption of the detergent and rinse aid. Water is classified as hard once it reaches 14°dH.

Soft water is more gentle on the material and has advantages when used in applications that heat up water, e.g. in warewashing. Water with a hardness degree of up to 8.4°dH is classified as soft.



SYMBOLS AND COLOURS

COLOURS	AREA OF APPLICATION	SYMBOLS	ADVANTAGES
BLUE	Glass		Spotless shine
GREEN	Universal		Hygienically clean
YELLOW	Warewashing supplementary products		Enhances cleaning effects
RED	Combi steamer		Quick and simple



YOUR BENEFITS

BEST WASH RESULTS

Thanks to their high-quality contents, the HOBART HYLINE cleaning chemicals are guaranteed to make your wash ware gleam to perfection with uncompromised hygiene.

HIGH-QUALITY PRODUCT FORMULATIONS

Formulations are specifically tailored to HOBART dishwashers. This creates a particularly ecological and efficient harmonisation between the dishwasher and the washing chemicals.

OUTSTANDING PRODUCTIVITY

HOBART detergents and rinse aids are especially effective and, as a result, go a long way. This is more environmentally friendly and reduces operating costs.

VERY EASY TO USE

As standard, our specialist range of HOBART dishwashers are fitted with integrated dosage technology for liquid products. This makes it very easy to handle the products and to select the right dosage.

OPTIMUM PRODUCT OFFERING

HYLINE cleaning chemicals have been formulated to meet the demands of customers from the gastronomy industry and from small-scale foodservice businesses, butcheries and bakeries. Our compact product offering makes it much easier to make a decision.

UNAMBIGUOUS COLOUR-CODED CONTAINERS

The risk of mixing up the detergent canisters with the rinse aid containers is practically eliminated, thanks to their unmistakable difference in colourcoding. Never lose any time by selecting the wrong product!



THE DISHWASHING FACTORS

DISHWASHING EXPLAINED WITH A CIRCLE

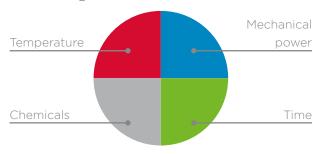
The most important factors in dishwashing

According to the chemist Dr Herbert Sinner, there are four principle factors that ensure dishes are cleaned hygienically: temperature, time, chemicals and mechanical power. He also represented how these factors function in the shape of a circle, which is named after him: the Sinner Circle. Finally, water quality is also crucial when cleaning glasses.

The factors are depicted in a circle to illustrate that one factor can be partly compensated by another. For example, it would be possible to reduce the amount of chemicals if the temperature were to be increased. This, of course, has its limits, as increasing the temperature too much would crack the glasses. HOBART glasswashers have been designed so that the individual principles from the Sinner Circle are perfectly harmonised, thus producing perfect rinse results with uncompromised hygiene every time.

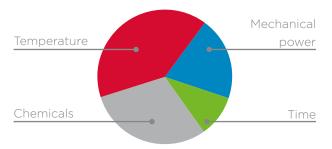
DISHWASHING FACTORS

according to Dr Herbert Sinner



DISHWASHING FACTORS

of HOBART dishwashers



THE PERFECT CHEMICALS

Achieving gleaming, hygienically clean wash ware relies on using the right detergent and rinse aid, as well as the correct dosage.

THE RIGHT TEMPERATURE

Washing glasses:

The washing temperature should be approx. $55 \,^{\circ}\text{C}$, the rinse temperature should be approx. $60 - 70 \,^{\circ}\text{C}$.

Washing dishes:

The washing temperature should be approx. 60 - 65 °C, the rinse temperature should be approx. 80 - 85 °C.

Washing utensils:

The washing temperature should be approx. 60 - 65 °C, the rinse temperature should be approx. 80 - 85 °C.

ADEQUATE WASHING TIME

In catering establishments, time is a valuable commodity where every minute counts – especially during busy periods. When all of the dishwashing factors are perfectly harmonised, the HOBART PREMAX AUP hood-type dishwasher can clean a full load in just 52 seconds. HOBART dishwashers coordinate the temperature, chemicals and mechanical power in such an optimal way, that the time factor can be reduced to a minimum.

THE RIGHT MECHANICAL POWER

In addition to the factors of temperature, chemicals and time, mechanical power or wash pressure is also of vital importance to the cleaning result. The correct wash pressure ensures that any soil deposits detach from the wash ware and can be washed away. Any food or milk froth residues that have become hard simply dissolve and rinse off.

Another important factor is the water quality, to which you'll find more information on page 19.



PRACTICAL TIPS

OUR RECOMMENDATIONS TO YOU

- Make sure you select a matching HYLINE detergent and rinse aid.
- Observe the dosage instructions. If the rinse aid dosage is too low, drops get left behind and have a negative effect on the rinse result of the dishes. If the rinse aid dosage is too high, streaks show up on the wash ware - which is also bad for the environment and uneconomical.
- If using an osmosis or full demineralisation system, use the HYLINE rinse aid specifically designed for demineralised water.
- The correct dosage should be measured out by a specialist when the machine is being set up and installed.
- Use HYLINE detergents and rinse aids for commercial dishwashers. These have been developed specifically for HOBART dishwashers and tailored to their designs.
- Chlorinated detergents can lead to opacity and damage patterns.
- To protect the dosage technology, please observe the instructions in the user manual when changing or refilling the HYLINE detergent or rinse aid.
- Your HOBART contact will be able to provide you with the correct dosage instructions.

AVOID USING ADDITIONAL CHEMICALS

A significant part of the overall rinse result is also influenced by factors external to the machine. Adverse conditions could lead to increased detergent and rinse aid consumption. Such adverse conditions might include:

- · Insufficient preliminary cleaning
- Lengthy surface drying time
- Short contact time when soil deposits are high
- Excessively high or low dosage of chemicals
- High degree of water hardness in the dishwasher



HOW TO USE CHEMICALS SAFELY AND CAREFULLY

- Always wear protective glasses and gloves
- If the alkaline or acid product splashes onto your skin, immediately rinse with plenty of water
- Immediately remove any contaminated clothing, so as to prevent the risk of chemical burns on your skin
- Always consult a doctor if your skin or eyes come into contact with any of the alkaline or acid substances
- Safety data sheets and operating instructions can be found at www.hobart-export.com

Storing the products correctly

- · Keep upright with the lid tightly shut
- Only store in the original container
- · Keep in a cool and dry place
- Protect against direct sunlight, heat and frost
- Note on storage: never store together with incompatible substances, or with food and drink





WATER QUALITY

The quality of the water used for rinsing has a significant influence on the rinse result. Consider, for a moment, a tiny drop of water. This actually consists of many different substances, such as minerals and salts. During the drying stage, these minerals get left behind on the wash ware and leave unattractive stains on the glasses, plates and cutlery. To achieve a spotless rinse result, the water must be free of minerals and salts.

To filter these out of the water, HOBART offers two technologies: the reverse osmosis system and the full or partial demineralisation system.

Regardless of the quality of the untreated water, both the reverse osmosis and the full demineralisation systems extract all of the minerals and salts found in the water. This makes these types of water treatments ideal for rinsing glasses and cutlery. The reverse osmosis system also requires the least amount of labour input of all the systems.

The partial demineralisation process extracts the portion of minerals that is responsible for the carbonate hardness from the untreated water. As a result, it is a suitable system to use for rinsing glasses when the carbonate hardness of the untreated water makes up a very high proportion of the total hardness. It is suitable for any type of dishwashing - without restrictions.



demineralisation HYDROLINE PURITY 1200

Full demineralisation HYDROLINE PURITY 1200 EXTRA



Reverse osmosis HYDROLINE PURE RO-C



Water softener HYDROLINE PROTECT SD-H

HORART) ATT PRE



- High chemical consumption
- · Calcified machine and heating rods
- · Limescale marks and streaks



- Low detergent consumption
- Protects against calcification in the machine



- WATER
- Spotless rinse results with high carbonate hardness without need for repolishing
- Lower detergent consumption
- Protects against calcification in the machine



FULLY DEMINERALISED WATER/ **OSMOSIS WATER**

- Spotless rinse results regardless of untreated water, without need for repolishing
- Lower detergent consumption
- · Protects against calcification in the machine



TROUBLESHOOTING

TYPE OF PROBLEM	POSSIBLE CAUSE	REMEDY
	Level of soil carried into the machine too high	Improve preliminary cleaning, clean sieves
	Rinse aid arm/wash arm won't turn, spray nozzles blocked	Remove and clean wash arms and rinse aid arms
	Chemicals dosage too low	Increase dosage/ dosage time
Wash ware not clean	Dosage too low, no detergent/ rinse aid dosage	Canisters are empty, attach new canister
	Shelf life exceeded	Change product
	Build-up of starch, discolouration	Incorrect chemicals selected for soil deposits concerned, change product or carry out basic cleaning of wash ware with basic cleaning detergent HP-100
Wash ware has smears and smells of detergent, poor cleaning performance, alkaline solution not neutralised	Canisters mixed up, detergent poured into boiler and rinse aid added to wash tank	Check dosing hoses, rinse boiler and dosing hoses with water
Chlorine smell	Chlorinated detergent used instead of chlorine-free detergent, detergent dosage too high	Adjust dosage
Water droplets and water streaks, dishes won't dry, no shine	Rinse aid dosage setting too low, rinse aid canister empty	Adjust dosage, dosage too low





TYPE OF PROBLEM	POSSIBLE CAUSE	REMEDY
Plastic parts won't dry	Concentration of rinse aid too low	Adjust dosage
Streaks, rainbow colours, cloud-like and blister-like traces	Dosage too high, concentration of rinse aid too high	Adjust dosage
Crystals in dosing hose, no dosage of detergent / rinse aid	Hoses not rinsed with water after changing product	Rinse dosing hoses thoroughly with water
Calcification	Water used in the machine was too hard	Check water softening, refill with salt if necessary
Chamical consumntion to a high	Dosage too high	Adjust dosage according to manufacturer's specifications
Chemical consumption too high	Water hardness not aligned to chemicals	Change product
Discolouration of aluminium parts	Aluminium detergent used as immersion bath detergent	Only use aluminium detergent in the machine and not as an immersion bath cleaner
	Dosage too high, incorrect detergent	Reduce dosage time, use suitable detergent
Salt or limescale stains on glasses and cutlery	Water quality not adequate for wash ware	Use osmosis or demineralisation



OUR VISION

Wash without water

Intensive market research has shown that our customers expect warewashing technology that combines efficiency with optimal performance. We are focused on meeting these demands, and they form the foundation for our vision to "wash without water". This vision is our continuous incentive to break new ground in order to constantly reduce the consumption of water, energy and chemicals. We continue pursuing this goal methodically and with the most innovative engineering. Indeed, we already know that:

>>> When the first machine is finally capable of washing without water, it will be a HOBART.

THE COMPANY

We are HOBART

HOBART is the world market leader for commercial warewashing technology and wellknown manufacturer of cooking, food preparation, and environmental technology. Established in 1897 in Troy, Ohio, today HOBART employs more than 6,900 employees around the world. At our manufacturing plant in Offenburg, Germany, HOBART develops, produces, and distributes warewashing technology worldwide. The hotel and catering trade, cafeterias, bakeries and butcher shops, supermarkets, airlines, cruise ships, automotive suppliers, research centres and pharmaceutical companies all over the world swear by our innovative products, which are considered to be economical and ecological market leaders.





MADE IN GERMANY

We provide this promise of quality to our customers, and it represents our personal standard upheld by all our staff at HOBART.

made in germany

OUR FOCUS

Innovative - economical - ecological

This is our philosophy. To us, innovation means continuously setting new standards in technology, combined with real added value for the customer. Our group's Technological Centre, and our own Innovation Centre for Warewashing Technology at our headquarters in Germany, make this possible. Here, our innovative powers are combined to create highly efficient products which continuously confirm our status as technological leader. To be economical means to set standards in terms of the lowest operating costs and minimal use of resources. and to revolutionise the market continuously. To be ecological means responsible handling of resources and a sustainable energy policy. This applies not only to the product in use, but in general to all areas of the organisation, such as purchasing or manufacturing.

HOBART SERVICE

Competent - fast - reliable

HOBART service technicians and HOBART service partners are the "real" experts. Thanks to intensive training and many years of experience, they have a unique and profound knowledge of the products. This means that maintenance and repair work is always carried out professionally, fast and reliably.



DEUTSCHLAND/ÖSTERREICH HOBART GMBH

Robert-Bosch-Straße 17 | 77656 Offenburg Tel.: +49 781 600-0 | Fax: +49 781 600-2319 info@hobart.de | www.hobart.de

SERVICE

Werkskundendienst +49 180 345 6258

für Österreich +43 820 240 599

Zentraler Verkauf +49 180 300 0068

NEDEDI AND

HOBART NEDERLAND B.V.

Pompmolenlaan 12 | 3447GK Woerden

Tel.: +31 348 46 26 26 Fax: +31 348 43 01 17

info@hobart.nl www.hobart.nl

KOREA

HOBART KOREA LLC

7th Floor | Woonsan Bldg | 108 | Bangi-dong

Songpa-gu | Seoul 138-050 Phone: +82 2 34 43 69 01

Fax: +82 2 34 43 69 05 contact@hobart.co.kr

www.hobart.co.kr

SCHWEIZ

GEHRIG GROUP AG

Bäulerwisenstrasse 1 | 8152 Glattbrugg

Tel.: +41 43 211 56-56 Fax: +41 43 211 56-99 info@gehriggroup.ch www.gehriggroup.ch

NORGE

HOBART NORGE

Gamle Drammensvei 120 A I 1363 HØVIK

Tel.: +47 67 10 98 00 Fax: +47 67 10 98 01 post@hobart.no www.hobart.no

JAPAN

HOBART (JAPAN) K.K.

Suzunaka Building Omori 6-16-16 Minami-Oi | Shinagawa-ku | Tokyo 140-0013

Phone: +81 3 5767 8670 Fax: +81 3 5767 8675 info@hobart.co.jp www.hobart.co.jp

FRANCE

COMPAGNIE HOBART

ZI PARIS EST - Allée du 1er Mai - B.P. 68 77312 MARNE LA VALLEE Cedex 2 Téléphone: +33 1 64 11 60 00 Fax: +33 1 64 11 60 01 contact@hobart.fr

SVERIGE

HOBART SCANDINAVIA APS

Varuvägen 9 1 125 30 Älvsjö Tel.: +46 8 584 50 920 info@hobart.se www.hobart.se

SINGAPORE

HOBART INTERNATIONAL (S) PTE LTD

158 I Kallang Way I #06-03/05 Singapore 349245 Phone: +65 6846 7117 Fax: +65 6846 0991

enquiry@hobart.com.sg www.hobart.com.sg

UNITED KINGDOM

HOBART UK

www.hobart.fr

Southgate Way I Orton Southgate Peterborough I PE2 6GN Phone: +44 844 888 7777 customer.support@hobartuk.com www.hobartuk.com

DANMARK

HOBART SCANDINAVIA APS

Håndværkerbyen 27 I 2670 Greve Tel.: +45 43 90 50 12 Fax: +45 43 90 50 02 post@hobart.dk www.hobart.dk

THAILAND

HOBART (THAILAND)

43 Thai CC Tower Building I 31st FL
Room No. 310-311 I South Sathorn Rd.
Yannawa I Sathorn I Bangkok I 10120
Phone: +66 2 675 6279 81 I Fax: +66 2 675 6282
enquiry@hobartthailand.com I www.hobartthailand.com

BELGIUM

HOBART FOSTER BELGIUM

Industriestraat 6 | 1910 Kampenhout

Phone: +32 16 60 60 40 Fax: +32 16 60 59 88 sales@hobart.be www.hobart.be

AUSTRALIA

HOBART FOOD EQUIPMENT

Unit 1 / 2 Picken Street $\,$ I $\,$ Silverwater NSW $\,$ I $\,$ 2128

Tel.: +61 2 9714 0200 Fax: +61 2 9714 0242 www.hobartfood.com.au

OTHER COUNTRIES

HOBART GMBH

Robert-Bosch-Straße 17 | 77656 Offenburg | Germany

Phone: +49 781 600-2820 Fax: +49 781 600-2819 info-export@hobart.de www.hobart-export.com

Die Angaben in diesem Prospekt beruhen auf dem Stand 05/2019. Technische Änderungen oder Änderungen der Ausführung bleiben vorbehalten.

The details given in this brochure are correct as of 05/2019. We reserve the right to technical or design modifications.

