Chemtai®
CHEMICAL PUMP

CATALOG

YEAR 2025

VERTICAL CHEMICAL PUMP

MODEL : QHA SERIES

HIGH EFFICIENCY
MOTOR IE3/IE4
Premium Quality

Certifield ISO9001:2015

A NEW LEVEL OF PUMP PERFORMANCE
Expanded field of application owning
to improved corrosion resistance.

- CHEMICAL INDUSTRY
- POLLUTION PROCESS
- SEMICONDUCTOR
- AUTO-PART INDUSTRY

Expert in dry running chemical vertical pumps

High Cost-effective Long Service Life

Consistent pressure and a minimal failure rate. Applicable to waste gas srubber spraying in the field of environmental protection.

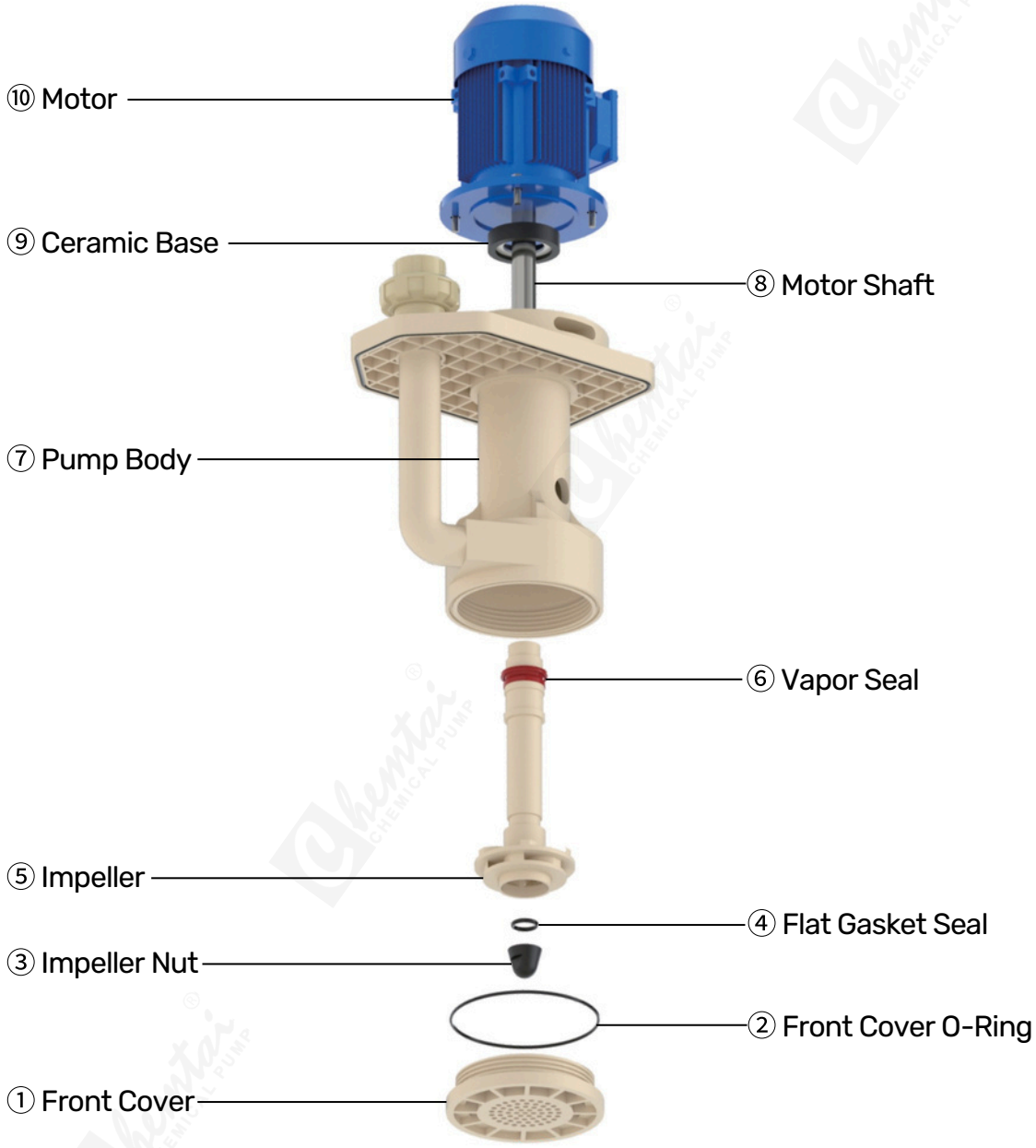
Series Model

50Hz 60Hz

Main Material	Model	Max.Flow (L/min)	Max.Head (m)	Parameters Apply To Specific Gravity Range
		200 400 600 800 1000 1200	5 10 15 20 25 30	
GFRPP	QHA-40SK-1	295 / 267	9 / 8	<1.2
	QHA-40SK-2	358 / 355	13 / 13	
	QHA-40SK-3	425 / 397	17 / 17	
	QHA-40SK-5	527 / 543	22 / 24	
	QHA-50SK-5	655 / 655	20 / 21	
	QHA-50SK-7.5	912 / 845	26 / 24	
	QHA-50SK-10	955 / 958	31 / 30	

- Medium Temperature:Room Temp.0℃~+90℃, Specific Gravity: 1-2, Working Temperature: -5℃~+50℃, Maximum Altitude: 2000m, Maximum Working Pressure: 10Bar.
  Test Basis: The above performance data corresponds to water being transported at normal speed at 25℃. The performance error is ±5%. The performance of the pump varies with the specific gravity and temperature of the conveying fluid medium.

QHA Series Exploded View



I QHA Series 1HP-10HP

Dry Running Semi-submerged Vertical Pump

Product Feature

1. Can do dry running without damage.
2. The sealing of impeller and shaft are a dual convex line structure, which prevents the shaft from corroding.
3. The motor brand offers a wide range of choices, and the voltage and frequency are highly compatible.

Model Description

QHA - 40 - SK - 3 - 5 - E - G - V38 - K - A - B - S
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

① Model No.: QHA
② Outlet caliber: 40-1.5 "; 50-2 "
③ Specific gravity of liquid: SK-1.0-1.2; SB-1.3; SC-1.4; SD-1.5; SE-1.6; SF-1.7; SG-1.8; SH-1.9; SI-2.0
④ Power: 1-1 HP; 2-2HP; 3-3HP; 5-5HP; 7.5-7.5 HP; 10-10HP
⑤ Frequency: 5-50HZ; 6-60HZ
⑥ Sealing material: E-EPDM; V-FKM
⑦ Pump body material: G-GFRPP
⑧ Voltage: V38-3Ø/380V; V41-3Ø/415V; V44-3Ø/440V; V48-3Ø/480v; V66-3Ø/660V; V32-3Ø/220V; V22-1Ø/220v
⑨ Motor brand: A-ABLE; K-Kailida; Q-Other
⑩ Motor Requirements: A-IE3 Normal Motor; B-IE4 Normal Motor; C-IE5 Normal Motor; D-Variable Frequency Motor; E-IE3, BT4 Ex-Proof Motor; F-IE4, BT4 Ex-Proof Motor; G-IE5, BT4 Ex-Proof Motor; H-IE3, CT4 Ex-Proof Motor; I-IE4, CT4 Ex-Proof Motor; J-IE5, CT4 Ex-Proof Motor; K-Permanent magnet variable frequency motor; L-BT4 Ex-Proof Variable Frequency Motor; M-CT4 Ex-Proof Variable Frequency Motor
⑪ Motor protection level: A-IP54; B-IP55; C-IP56; D-IP65
⑫ S-Standard; N-Non-Standard

Product Specification List

Model	Outlet Caliber (mm)	Max. Flow/50Hz		Max. Flow/60Hz		Max. Head(m)		Power		Weight (kg)
		(L/min)	(m^3/h)	(L/min)	(m^3/h)	50Hz	60Hz	HP	KW	
QHA-40SK-1	40	295	17.7	267	16	9	8	1	0.75	20.2
QHA-40SK-2	40	358	21.5	355	21.3	13	13	2	1.5	24.3
QHA-40SK-3	40	425	25.5	397	23.8	17	17	3	2.2	28.9
QHA-40SK-5	40	527	31.6	543	32.6	22	24	5.5	4	41
QHA-50SK-5	50	655	39.3	655	39.3	20	21	5.5	4	41.1
QHA-50SK-7.5	50	912	54.7	845	50.7	26	24	7.5	5.5	57.5
QHA-50SK-10	50	995	59.7	958	57.5	31	30	10	7.5	61

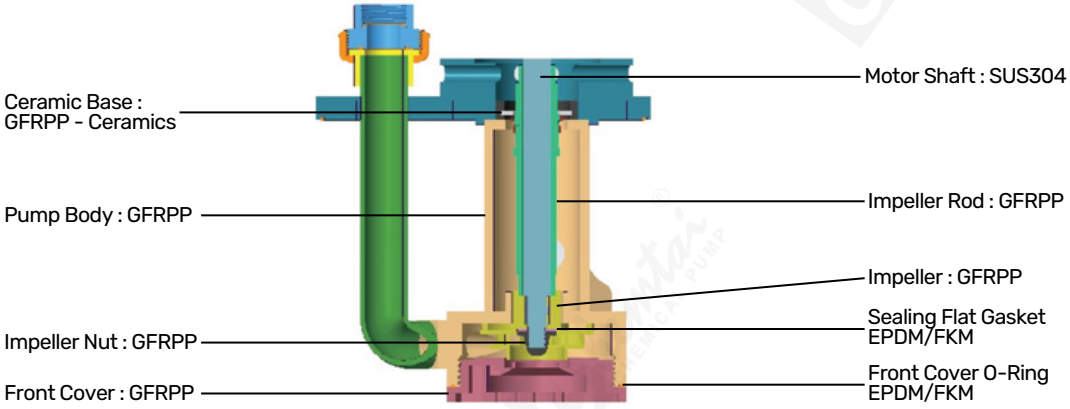
- Medium temperature: 0 ℃~+80 ℃, medium specific gravity: 1-2, working environment temperature: -5 ℃~+50 ℃, maximum usage altitude: 2000m, maximum working pressure: 10Bar.

Test basis: The above performance data corresponds to the normal speed of transportation of clean water at 25 ℃. The performance error is ± 5%. The performance of a pump varies with the specific gravity and temperature of the fluid medium being transported.

QHA - 40SK-1/40SK-2/40SK-3/40SK-5
50SK-50/50SK-7.5/50SK-10

- Max.Flow: 267-995 L/min
- Max.Head: 8-31 m

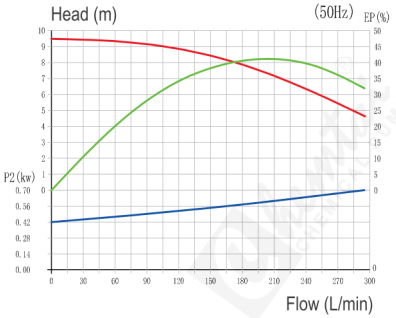
Structure Drawing And Material

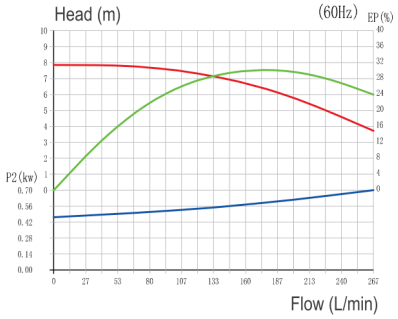


Performance Curve

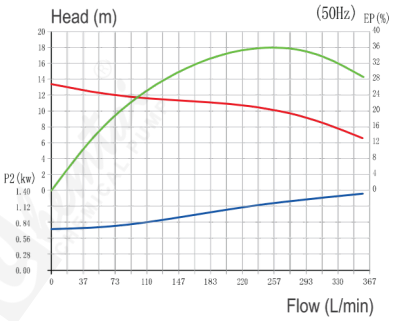
Head&Flow Efficiency Shaft Power

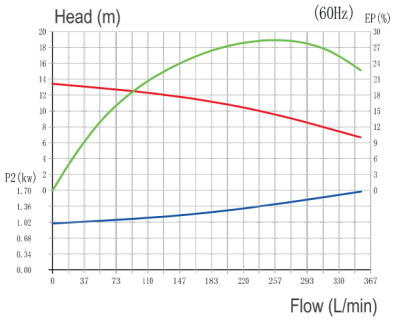
QHA-40SK-1



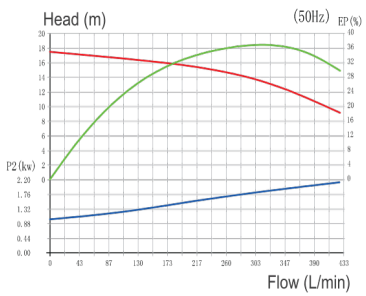


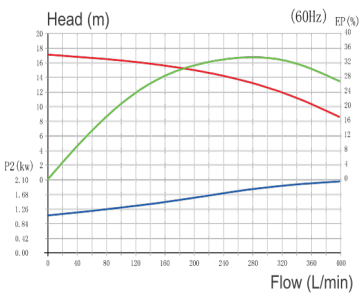
QHA-40SK-2





QHA-40SK-3

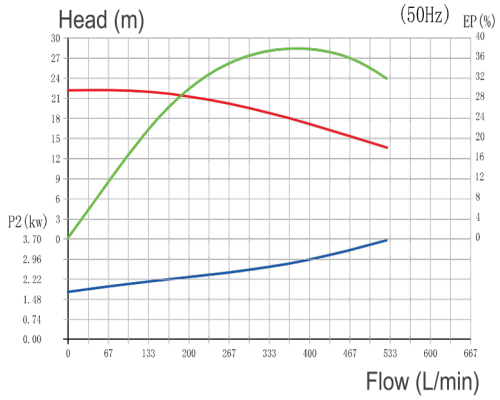


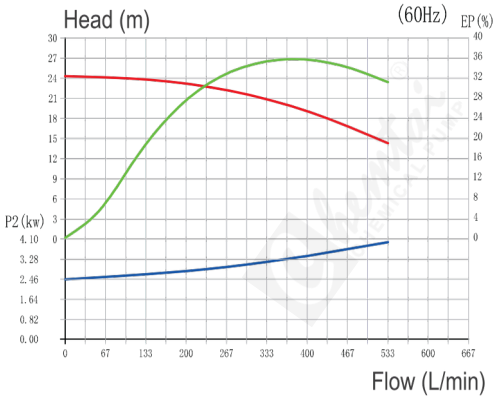


Performance Curve

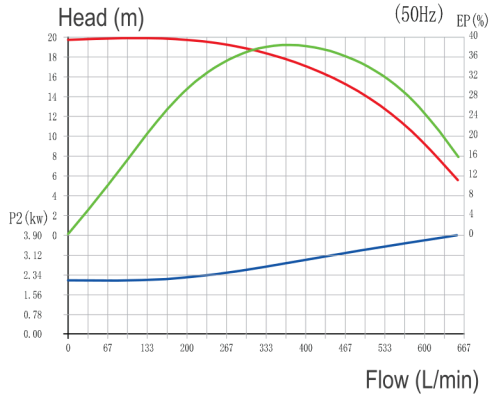
Head&Flow Efficiency Shaft Power

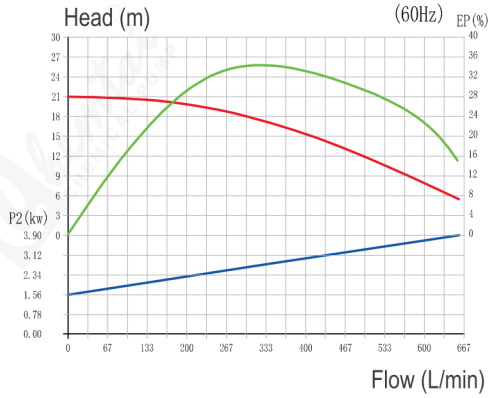
QHA-40SK-5



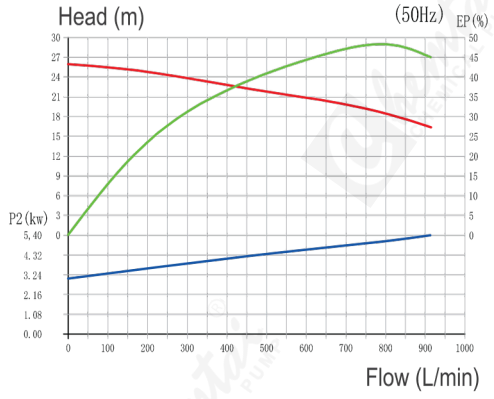


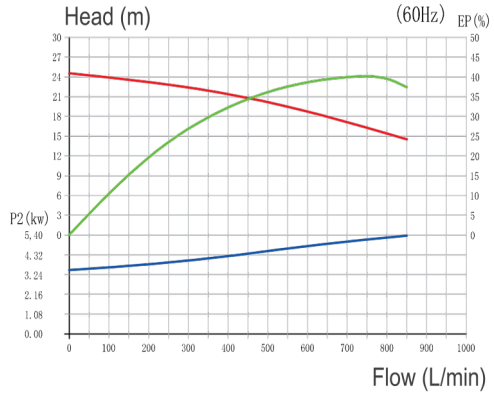
QHA-50SK-5



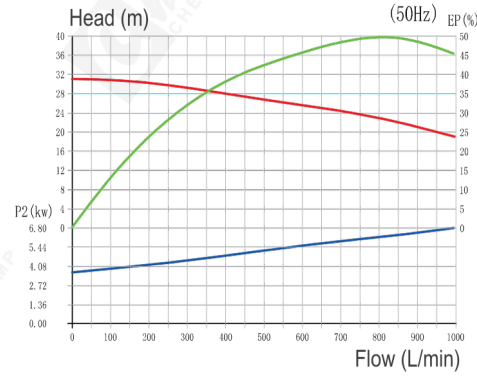


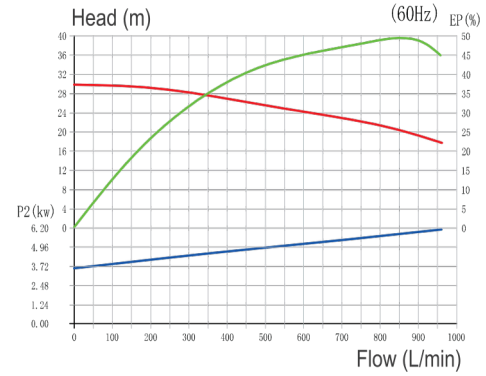
QHA-50SK-7.5





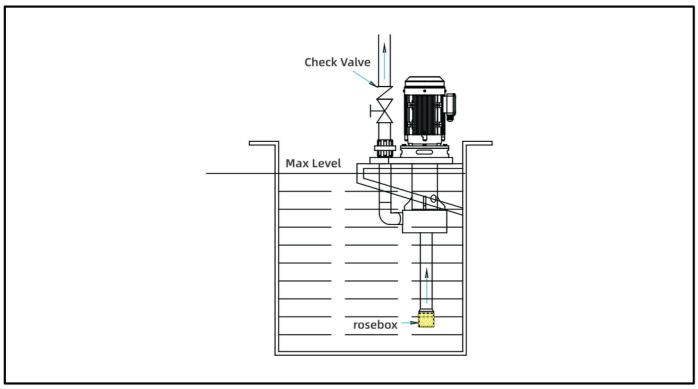
QHA-50SK-10



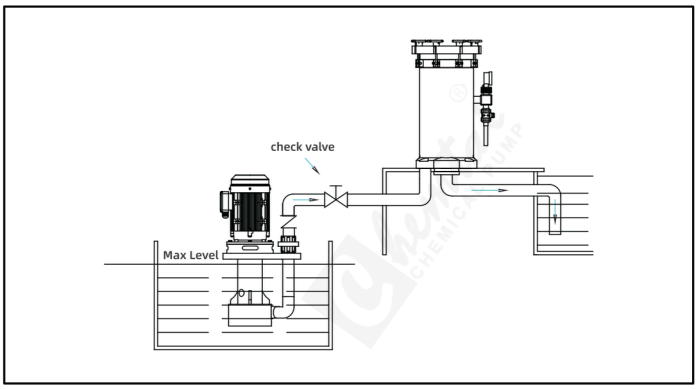


Installation Instruction

Installation instruction



The pump is designed to run inside the tank and use with chemical filter



Precautions For Installation And Operation

1. If the pump is used in chemical plant or environment with volatile gas, it is necessary to select the safe and explosion-proof Eg3 or D2g4 motor.
2. Filter screen shall be installed at the inlet pipe to prevent foreign matters from being inhaled, which may cause damage to the pump.
3. If the outlet pipe is higher than the motor, a check valve shall be installed at the highest point of the liquid level to prevent the motor from being damaged.
4. The mixing of different types of chemical solution may cause chemical reaction, even high heat, which may damage the pump. Therefore, do not use the same pump to transport different chemical solutions.

Chemtai® CHEMICAL PUMP

CORROSION RESISTANCE CHART

Chemical Solution Name	Concen-Tration %	Temperate °C	Body Materail			Seal Materail			Rubber Materail		
			FRPP	CPVC	PVDF / GFR ETFE	Ceramic	Carbon	Sic	NBR	EPDM	VITON
H_2SO_4 Sulfuric acid	30	40	✕	●	●	●	●	●	●	●	●
		60	✕	●	●	●	●	●		●	●
		80	✕	○	●	●	●	●		○	●
		95			●	●	●	●			●
	60	40	✕	●	●	●	●	●		●	●
		60	✕	●	●	●	●	●		●	●
		80	✕	△	●	●	●	●		○	●
		95			●	●	●	●			●
	98	40	✕	○	●	●	●	●			●
		60	✕	△	○	●	●	●			●
HCL Hydrochloric acid	25	40	●	●	●	○	●	●		●	●
		60	○	○	●	●	●	●		●	●
		80			●	●	●	●		○	●
	35	40	●	●	●	●	●	●		○	○
		60	○	○	●	●	●	●			
		80			●	●	●	●			
CrO_3 Chromic acid	20	40	✕	○	●	●	●	●			●
		60		△	●	●	●	●			●
		80			●	●	●	●			○
HNO_3 Nitric acid	30	40	○	○	●	●	○	●			●
		60	✕	△	●	●	○	●			●
		80	✕	✕	●	●	○	●			●
	50	40	△	○	●	●	○	●			●
		60	✕	△	●	●	○	●			●
H_3PO_4 Phosphoric acid	10	40	●	●	●	●	●	●	●	●	●
		60	●	●	●	●	●	●	○	●	●
		80	○	○	●	●	●	●		○	●
	50	40	●	●	●	●	●	●		●	●
		60	●	○	●	●	●	●		○	●
		80	△	△	●	○	●	●		○	●
NaOCl Sodium Hypochlorite	10	40	○	●	●	●	○	●			●
		60	○	○	●	●	△	●			●
		80	△		●	●	✕	●			●
CH_3COOH Acetic acid	20	40	●	●	●	●	●	●			✕
		60	●	○	●	●	●	●			✕
		80	○	△	●	●	●	●			✕
HF Hydrofluoric	30	40	✕	○	●	✕	○	●		●	
		60	✕	△	●	✕	○	●		●	
		80	✕	✕	●	✕	○	●		○	
$HNO_3+{}_3HCl$ Aqua regia	3:1	40	✕	△	●	●	✕	●	✕		○
		60	✕	✕	●	○	✕	●	✕		○
		80	✕	✕	●		✕	●	✕		●
H_2O_2 Hydrogen Peroxide	20	40	●	●	●	●	✕	●	✕		●
		60	●	○	●	●	✕	●	✕		●
		80	○	○	●	●	✕	●	✕		●
NaOH Sodium Hydroxide	45	40	●	○	●	●	✕	●	●	●	○
		60	○	△	○	●	✕	●	●	●	△
		80	○	✕	✕	●	✕	●	○	○	△
$FeCl_3$ Ferric chloride	40	40	●	●	●	●	●	●	●	●	●
		60	●	●	●	●	●	●	○	●	●
		80	●	●	●	●	●	●		●	●
$Cu(CN)_2$ Copper Cyanide		40	●	●	●	△	●	●	●		●
		60	●	●	●	△	●	●	●		●
$ZnCl_2$ Zinc Chloride		40	●	●	●	●	●	●	●		●
		60	●	●	●	●	●	●	●		●
$NiSO_4$ Nickel Sulfate		40	●	●	●	●	●	●	●		●
		60	●	●	●	●	●	●	●		●

● : Excellent ○ : Good △ : Not Good ✕ : Bad

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CHEMICAL PUMP
2025

A new level of pump performance.
Expanded field of application owning
to improved corrosion resistance.

Certifield ISO:9001/2015