

ASA CHEMICAL PINAR CO. (ASA CHEM) WATER TREATMENT CHEMICALS

① Open cooling system /ASA-C

No	Product Code	Type & Function	Chemical Base	Drum Weight
1	ASA-C 100	Corrosion& Scale Inhibitor	Zinc-Phosphate/Phosphonate	250 kg
2	ASA-C 110	Corrosion& Scale Inhibitor	Zinc-Phosphate/Phosphonate/Dispersant	250 kg
3	ASA-C 130	Corrosion& Scale Inhibitor	All Organic	250 kg
4	ASA-C 140	Corrosion Inhibitor (Copper)	Azole	240 kg
5	ASA-C 150	Corrosion & Scale Inhibitor for Semi-Closed System	High pH Phosphonates/Azole	250 kg
6	ASA-C 300	Non-Oxidizing Biocide	Isothiazoline	210 kg
7	ASA-C 310	Non-Oxidizing Biocide	Glutaraldehyde	210 kg
8	ASA-C 320	Biodispersant	Quaternary Ammonium & Surfactant	210 kg
9	ASA-C 400	Scale Inhibitor or Dispersant	Organic Phosphorous & polymers	220 kg
10	ASA-C 420	Scale Inhibitor or Dispersant	Organic Phosphorous & polymers	220 kg
11	ASA-C 430	Scale Inhibitor or Dispersant phosphate free	Acrylic & maleic-acid based polymers	220 kg
12	ASA-C 410	Oil Dispersant	Surfactants & Alcoholic Compounds	200 kg

② Close cooling system /ASA-S

No	Product Code	Type & Function	Chemical Base	Drum Weight
1	ASA-S 100	Corrosion & Scale Inhibitor for Closed Loop	Sodium Nitrite & Azole	250 kg
2	ASA-S 110	Corrosion & Scale Inhibitor for Closed Loop	Sodium Molybdate & Azole	230 kg
3	ASA-S 120	Corrosion & Scale Inhibitor for Closed Loop	Silicate	220 kg
4	ASA-S 130	Corrosion & Scale Inhibitor for Closed Loop	Organic Chemicals & Azole	230 kg
5	ASA-S 300	Corrosion & Scale Inhibitor for Closed Loop	Isothiazoline	210 kg
6	ASA-S 150	Corrosion & Scale Inhibitor for Closed Loop	Sodium Nitrite & Sodium Molybdate	250 kg
7	ASA-S 160	Corrosion & Scale Inhibitor for Closed Loop	Sodium Nitrite & phosphonate	250 kg

③ Steam system & Steam Boiler /ASA-B

No	Product Code	Type & Function	Chemical Base	Drum Weight
1	ASA-B 450	Scale Inhibitor for Boilers	Polymer/Phosphonates	230 kg
2	ASA-B 460	Scale Inhibitor for Low and medium Pressure Boilers	Inorganic Phosphate (TSP)	220 kg

3	ASA-B 470	Scale Inhibitor for High Pressure Boilers	Inorganic Phosphate (TSP/DSP)	220 kg
4	ASA-B 480	Scale Inhibitor for Boilers	Inorganic Phosphate & Polymers	220 kg
5	ASA-B 490	Scale Inhibitor for Boilers (Free Phosphate)	Organic Polymers	220 kg
6	ASA-B 800	Oxygen Scavenger	DEHA & Hydroquinone	185 kg
7	ASA-B 810	Oxygen Scavenger	Hydrazine	200 kg
8	ASA-B 900	Oxygen Scavenger	Catalyzed Sodium Sulfit	200 kg
9	ASA-B 910	Oxygen Scavenger	Carbohydrazide	230 kg
10	ASA-B 600	Neutralizing for Short Condensate Line	Morpholine/MEA	200 kg
11	ASA-B 610	Neutralizing for Medium Condensate Line	Morpholine/MEA/Cyclohexylamine	200 kg
12	ASA-B 620	Neutralizing for Long Condensate Line	Morpholine/Cyclohexylamine	200 kg
13	ASA-B 640	Multi-functional (Oxygen Scavenger & Neutralizing)	Neutralizing & DEHA	200 kg
14	ASA-B 650	Multi-functional (Oxygen Scavenger & Neutralizing)	Neutralizing & Carbohydrazide	200 kg
15	ASA-B 660	All-in-One (Scale Inh. & Oxygen Sc. & Neutralizing)	Neutralizing & DEHA & Phosphonate	220 kg
16	ASA-B 670	All-in-One (Scale Inh. & Oxygen Sc. & Neutralizing)	Neutralizing & Carbohydrazide & Phosphonate	200 kg
17	ASA-B 680	All-in-One (Scale Inh. & Oxygen Sc. & Neutralizing)	Neutralizing & DEHA & Polyamine	200 kg
18	ASA-B 690	Neutralizing for High Pressure Boiler	Mopa/Morpholine/Cyclo.	175 kg

4 Reverse osmosis system-RO /ASA-R

No	Product Code	Type & Function	Chemical Base	Drum Weight
1	ASA-R 200	Anti Scalant-Brackish water(BW)	Phosphonate/Polymer	220 kg
2	ASA-R 210	Anti Scalant-Brackish water(BW)-High pH	Phosphonate/Polymer	220 kg
3	ASA-R 220	Anti Scalant-Sea water(SW)	Phosphonate/Polymer	220 kg
4	ASA-R 230	Anti Scalant-Sea water(SW)-High pH	Phosphonate/Polymer	220 kg
5	ASA-R 240	Anti Scalant-silica		220 kg
6	ASA-R 300	Non-oxidant Biocide	Isothiazoline	210 kg
7	ASA-R 350	Non-oxidant Biocide	DBNPA	210 kg
8	ASA-R 500	Acidic Cleaner (CIP)		200 kg
9	ASA-R 510	Alkaline Cleaner (CIP)		200 kg
10	ASA-R 520	Biological Cleaner (CIP)		200 kg
11	ASA-R 530	Surfactant Cleaner (CIP)		200 kg
12	ASA-R 540	Detergent Cleaner (CIP)		200 kg
13	ASA-R 550	Biocide & Free.Cl Remover	SMBS	200 kg

5 Coagulant & Flocculant /ASA-P

No	Product Code	Type & Function	Chemical Base	PE Bags Weight
1	ASA-P 700	Coagulant-PAC(L) 18%	Al2O3 18%-Poly Aluminum Chloride	25 kg

2	ASA-P 701	Coagulant-PAC(L) 13%	Al ₂ O ₃ 13%-Poly Aluminum Chloride	25 kg
3	ASA-P 702	Coagulant-PAC(L) 10%	Al ₂ O ₃ 10%-Poly Aluminum Chloride	25 kg
4	ASA-P 710	Coagulant-PAC(S) 30%	Poly Aluminum Chloride-Drinkable water	25 kg
5	ASA-P 715	Coagulant-PAC(S) 30%	Poly Aluminum Chloride-Industrial water	25 kg
6	ASA-P 750	Anionic Flocculant-PAM	Poly acryl amide	25 kg
7	ASA-P 751	Anionic Flocculant-PAM	Poly acryl amide	25 kg
8	ASA-P 752	Anionic Flocculant-PAM	Poly acryl amide	25 kg
9	ASA-P 760	Cationic Flocculant-PAM	Poly acryl amide	25 kg
10	ASA-P 761	Cationic Flocculant-PAM	Poly acryl amide	25 kg
11	ASA-P 762	Cationic Flocculant-PAM	Poly acryl amide	25 kg
12	ASA-P 770	Non ionic Flocculant-PAM	Poly acryl amide	25 kg

6 Basic Chemicals

No	Product Name	Formula	Activity	Weight
1	Sodium Sulfide Flake	Na ₂ S	60%	25 kgs PE Bags
2	Caustic Soda Flake	NaOH	98-99%	25 kgs PE Bags
3	Caustic Soda Liquid	NaOH	50%	IBC Tank
4	Sodium Metabisulfite	Na ₂ S ₂ O ₅	97%	25 kgs PE Bags
5	Calcium Hypochlorite	Ca(ClO) ₂	65 – 70%	25 kg containers
6	Sodium Hypochlorite	NaClO	15-16%	220 lit drums
7	Hydrochloric acid	HCl	31-33%	220 lit drums