

Yuanlian Chemical

Polyaspartic acid sodium salt (PASP Na salt)

PASP, Sodium Salt - SUPPLIED IN LIQUER OR SOLID:

Product Name	PASP 100/40%	PASP solid
Delivery Form	solution	solid
Appearance	orange to brown	orange to brown powder
Odor	very low	odorless
pH-Value 10% solution	9.5 – 10.5	< 10.5
Density at 20°C [g/ml]	< 1.30	---
Bulk Density [kg/Liter]	---	0.55 – 0.90
Viscosity at 20°C [mPa*s]	20 - 60	---
Freezing point [°C]	< -12°C	---
Solubility in Water at 20°C [g/100g H ₂ O]	each ratio	80
COD [mg O ₂ /g]	< 330	< 480

PASP, Sodium Salt - CONSTITUENTS:

Product Name	PASP 100/40%	PASP solid
Polyaspartic Acid, Sodium Salt [% w/w]	> 38.0	> 94
Aspartic Acid, Sodium Salt [% w/w]	< 2.0	< 0.5
Asparagine Sodium Salt [% w/w]	< 0.3	< 0.1
Fumaric Acid, Sodium Salt [% w/w]	< 0.3	< 0.1
Maleic Acid, Sodium Salt [% w/w]	< 0.2	< 0.1
Water [% w/w]	< 60	< 6

Yuanlian Chemical

Tetrasodium Iminodisuccinate (IDS-Na 4)

IDS, Na 4 salt - SUPPLIED IN LIQUOR OR SOLID FORMS:

Product Name	IDS 100/34%	IDS solid
Delivery Form	solution	solid
Appearance	colorless to orange	white powder
Odor	very low	no odor
Color no.[Hazen]	< 300	---
pH value 10% solution	approx. 11.0	approx. 11.0
density at 20°C [g/ ml]	< 1.34	---
Bulk density [kg/Liter]	---	0.5 – 0.7
Viscosity 20°C [mPa*s]	< 50	---
Freezing point [°C]	< 5	---
Solubility in water at 20°C [g/ 100g H ₂ O]	soluble in any ratio	56
Solubility in glycol at 20°C [g/100g glycol]	soluble in any ratio	very low
Ammonia [ppm]	< 70	---
COD (DIN H 41) [mg O ₂ /g]	approx. 225	approx. 480
BoD 7 [mg O ₂ /g]	> 120	> 260

IDS, Na 4 salt - CONSTITUENTS:

Productname	IDS 100/34%	IDS solid
Iminodisuccinic acid, Na ₄ salt [% w/w]	> 33.0	> 77.0
Aspartic acid, Na ₂ salt [% w/w]	< 7.0	< 13.0
Fumaric acid, Na ₂ salt [% w/w]	< 2.5	< 6.0
Hydroxysuccinic acid, Na ₂ salt [% w/w]	< 0.5	< 1.5
Maleic acid, Na ₂ salt [% w/w]	< 0.3	< 1.5
Total sodium salts [% w/w]	> 41.0	> 94.0
Water [% w/w]	< 59.0	< 6.0

Yuanlian Chemical

Polysuccinimide (PSI)

PSI - PRODUCT PROPERTIES:

Product name

Product form

Appearance

Odor

Bulk density [kg/liter]

Solubility in water at 20 °C [g/100 g H₂O]

Solubility in triethylene glycol at 20 °C [g/100 g glycol]

PSI

solid

orange-beige powder

odorless

> 0.5

insoluble

30 - 35

PSI - COMPONENTS:

Product name

Polysuccinimide [% by wt]

Aspartic acid Na₂ salt [% by wt]

Fumaric acid Na₂ salt [% by wt]

Maleic acid Na₂ salt [% by wt]

PSI

> 95%

< 0.5%

< 0.1%

< 0.1%