

Analyzers 3.1.6 and OLI Engine/ESP 8.2.6 What is new?

October 11, 2010

Mixed-solvent electrolyte databank

Inorganic systems

CaCl₂ – CO₂ – H₂O

MgCl₂ – CO₂ – H₂O

NaCl – CO₂ – H₂O

KCl – CO₂ – H₂O

LiCl – CO₂ – H₂O

CaCO₃ – CO₂ – H₂O (revision)

MgCO₃ – CO₂ – H₂O (revision)

K₂CO₃ – CO₂ – H₂O (revision)

NaNO₂ - Na₃PO₄ – H₂O

Sodium silicate

Na₂SiO₃, Na₃HSiO₄

Cancrinite chemistry

cancrinite (Na₈Al₆Si₆O₂₄CO₃)

hydrated cancrinite (Na₈Al₆Si₆O₂₄CO₃•2H₂O)

Hydrosodalite chemistry

hydroxysodalite (Na₈Al₆Si₆O₂₄(OH)₂)

hydroxysodalite dihydrate (Na₈Al₆Si₆O₂₄(OH)₂•2H₂O)

Zeolite A chemistry

anhydrous zeolite A (Na₆Al₆Si₆O₂₄)

hydrated zeolite A (Na₆Al₆Si₆O₂₄•12H₂O)

Sodium aluminosilicate gel chemistry

Na₅Al₆Si₇O_{25.5}•15½H₂O

LiF – H₂O

Li₂CO₃ – H₂O

PF₅ – H₂O

ZrMo₂O₇(OH)₂

Zr(IV) – H₂O₂ complexes

Mo(VI) – H₂O₂ complexes

Organic systems

Monoethanolamine (MEA) – H₂O – CO₂ – H₂S

Diethanolamine (DEA) – H₂O – CO₂ – H₂S

Diglycolamine (DEA) – H₂O – CO₂ – H₂S

Morpholine – H₂O – CO₂

Methanol – oxygen – H₂O

Surface tension and thermal conductivity of pseudocomponents

Aqueous databank

Inorganic systems

BaSO₄ – H₂O (revision)
BaSO₄ - NaCl - H₂O
BaSO₄ - KCl - H₂O
BaSO₄ – MgCl₂ - H₂O
BaSO₄ – Na₂SO₄ - H₂O
BaSO₄ – Na₄B₄O₇ - H₂O
Eliminated: Na₄Si₂O₄ from Geochem

Organic systems

Surface tension and thermal conductivity of pseudocomponents

Corrosion kinetics

Copper electrochemistry in the presence of the following environments (both aerated and deaerated):

H₂SO₄ – H₂O
H₂SO₄ – Na₂SO₄ – H₂O
H₂SO₄ – CuSO₄ – H₂O
H₂SO₄ – Fe₂(SO₄)₃ – H₂O
HNO₃ – H₂O
HNO₃ – NaNO₃ – H₂O
HNO₃ – Cu(NO₃)₂ – H₂O
H₃PO₄ – H₂O
H₃PO₄ – NaH₂PO₄ – H₂O
H₂CrO₄ – H₂O
HCl – H₂O
HCl – CuCl₂ – H₂O
HCl – FeCl₃ – H₂O
HCl – KCl – H₂O
Formic acid – H₂O
Acetic acid – H₂O
Acetic acid – formic acid – H₂O
Propionic acid – H₂O
Na₂SO₄ – H₂O
NaCl – H₂O
NaCl – HCl – NaOH – H₂O
NaCl – CaCl₂ – Na₂SO₄ – CaCO₃
CaCl₂ – H₂O
FeCl₃ – FeCl₂ – H₂O
CuCl₂ – CuCl – H₂O
LiBr – H₂O

LiBr – Li₂CrO₄ – H₂O

LiBr – Na₂MoO₄ – H₂O

LiBr – Na₂B₄O₇ – H₂O

Na₂S – NaHS – H₂O

NaNO₂ – H₂O

NaH₂PO₄ – H₂O

Na acetate – H₂O

NH₄OH – H₂O

NH₄Cl – H₂O

(NH₄)₂SO₄ – H₂O

(NH₄)₂SiF₆ – H₂O

NaOH – H₂O

Seawater

Seawater + sulfide

Water + minor ionic components