

Solubility of B-TRAXIM[®] 2C

B-TRAXIM[®]2C are crystalline forms of glycinate which have the best solubility compared to other sources of organic trace minerals. Because they can be utilised in liquid form for incorporation into drinking water or in soluble feeds (like CMRs), their solubility was measured in various conditions.

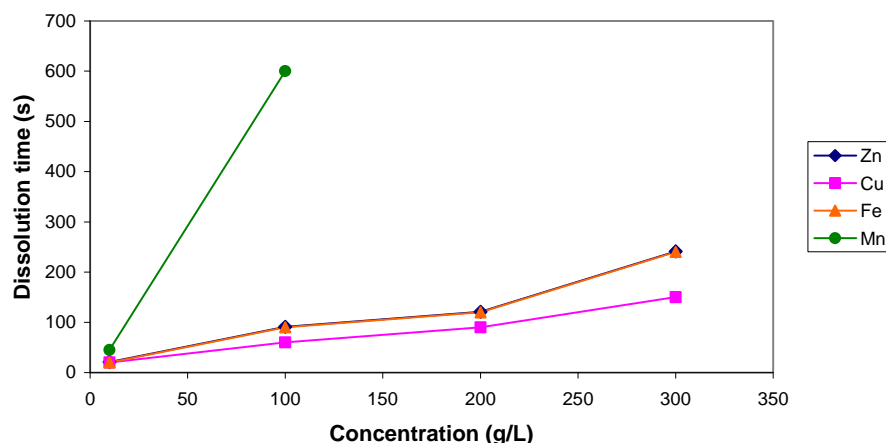
The solubility of B-TRAXIM[®]2C was measured at room temperature (30°C) and at 50 °C. For Cu, Zn and Mn, samples were accurately weighed in a 50 mL glass becher, then 25 mL of deionised water were added under magnetic stirring, and the time of dissolution at 30°C was measured.

For Fe, 200 mg of citric acid were set in a 50 mL glass becher to avoid the oxidation of Fe II in Fe III. The B-TRAXIM sample was then accurately weighed in the becher. Finally 25 mL of deionised water were added under magnetic stirring, and the time of dissolution at 30°C was measured.

Solubility at 30°C and 50°C

Sample	B-TRAXIM [®] 2C Fe	B-TRAXIM [®] 2C Cu	B-TRAXIM [®] 2C Zn	B-TRAXIM [®] 2C Mn
Solubility at 30°C (g/l)	300	300	300	100
Solubility at 50°C (g/l)	~550	~550	~700	100

Dissolution kinetic of B-TRAXIM 2C



Conclusion

The solubility of B-TRAXIM[®]2C almost doubled when temperature was increased from 30°C to 50°C, excepted for manganese which remained constant. The time required to dissolve the products increased with the concentration, specially when reaching the solubility limit which is difficult to determine visually. B-TRAXIM[®]2C are water soluble, with a minimum solubility of 100 g/l for Mn and reaching 700 g/l for Zn at 50°C.