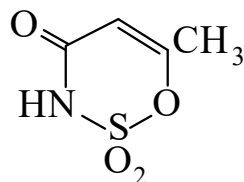




>>Entry Name: Acesulfame, BAN, INN

ENTRY UNDER REVIEW

Synonym(s): 6-Methyl-1,2,3-oxathiazin-4(3H)-one 2,2-dioxide, 9CI. 3,4-Dihydro-6-methyl-1,2,3-oxathiazin-4-one 2,2-dioxide



CAS Registry Number: 33665-90-6

Molecular Formula: C<sub>4</sub>H<sub>5</sub>NO<sub>4</sub>S

Molecular Weight: 163.154

Accurate Mass: 162.993929

Percentage Composition: C 29.45%; H 3.09%; N 8.58%; O 39.23%; S 19.65%

Use/Importance: Non-nutritive sweetener. Pharmaceutical excipient

Physical Description: Needles (CHCl<sub>3</sub> or C<sub>6</sub>H<sub>6</sub>)

Melting Point: Mp 123-123.5°

Supelco: 4-7134

>>Derivative: K salt

Synonym(s): E951. Acesulfame K. Hoe 095K. H 733293

CAS Registry Number: 55589-62-3

Use/Importance: ADI 15 mg/kg (1991). Intense-type sweetener permitted at 300-5500 ppm in foods. Sweetness approx. 200 x sucrose

Physical Description: Cryst.

Melting Point: Mp 225 dec.° (on slow heating)

Supelco: R47-4770

#### References:

- Ger. Pat., 1971, 2 001 017-1193; *CA*, **75**, 129843e, (*synth, ir*)  
Paulus, E.F., *Acta Cryst. B*, 1975, **31**, 1191-1993, (*cryst struct*)  
Clauss, K. *et al.*, *Z. Lebensm.-Unters. -Forsch.*, 1976, **162**, 37-40, (*synth, use*)  
Von Rymon Lipinski, G.-W. *et al.*, *Chem. Ind. (London)*, 1983, 427-432, (*rev*)  
Lewis, R.J., *Food Additives Handbook*, Van Nostrand Reinhold International, New York, 1989, AAF900  
Mayer, D.G. *et al.*, *Acesulfame-K*, M. Dekker, New York, 1991, (*book*)  
Von Rymon Lipinski, G.-W., *Food Sci. Technol.*, 1991, **48**, 11-28, (*rev*)  
*Handbook of Pharmaceutical Excipients*, 2nd edn., (eds. Wade, A. *et al*), American Pharmaceutical Association/Pharmaceutical Press, 1994, 3-4  
*Martindale, The Extra Pharmacopoeia*, 31st edn., *Pharmaceutical Press*, 1996, 1353  
Ager, D.J. *et al.*, *Angew. Chem., Int. Ed.*, 1998, **37**, 1803-1817, (*rev, synth*)  
Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., *Van Nostrand Reinhold*, 1992, AAF900