>>**Entry Name: Trisodium hydrogen carbonate, dihydrate**
Synonym(s): Sodium sesquicarbonate dihydrate. Carbonic acid, sodium salt (2:3), dihydrate, 8CI

CAS Registry Number: 6106-20-3
$Na_3H(CO_3)_2.2H_2O$

Molecular Formula: $C_2H_5Na_3O_8$
Molecular Weight: 226.026
Accurate Mass: 225.967746
Percentage Composition: C 10.63%; H 2.23%; Na 30.51%; O 56.63%
Source/Synthesis: Manuf. from mineral ores by conventional extraction methods. Synth. by reaction of $NaHCO_3$ and Na_2CO_3 in excess H_2O, slowly cooled from 70°
Use/Importance: Used in SO_2 removal from gas flues. Also used in the manuf. of Na_2CO_3
Physical Description: Colourless monoclinic cryst. Dec. on heating by CO_2 and H_2O loss forming Na_2CO_3
Solubility: V. sol. H_2O (13 g per 100 cm^3 at 0°; 42 g per 100 cm^3 at 100°)
Other Data: ΔH_f° –2682 kJ mol^{-1}; ΔG_f° –2381 kJ mol^{-1}; S° 301 J K^{-1} mol^{-1}

Sigma: S1754

>>**Variant:** Mineral-form
Synonym(s): Trona

CAS Registry Number: 15243-87-5
Molecular Formula: $C_2H_5Na_3O_8$
Molecular Weight: 226.026
Accurate Mass: 225.967746
Percentage Composition: C 10.63%; H 2.23%; Na 30.51%; O 56.63%
Source/Synthesis: Common in western USA; also found in e.g. southern Greenland, Kenya, Tibet, Iran
Physical Description: Colourless or off-white

References:

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