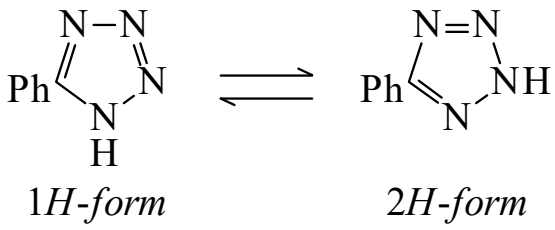
>>**Entry Name: 5-Phenyltetrazole**



1*H-form* 2*H-form*

Molecular Formula: $C_7H_6N_4$
Molecular Weight: 146.151
Accurate Mass: 146.059246
Percentage Composition: C 57.53%; H 4.14%; N 38.33%
Use/Importance: Blowing agent for polymers
Hazard & Toxicity: Synth. may be hazardous, explodes on attempted dist.

>>**Variant:** 1*H*-form

CAS Registry Number: 18039-42-4
Molecular Formula: $C_7H_6N_4$
Molecular Weight: 146.151
Accurate Mass: 146.059246
Percentage Composition: C 57.53%; H 4.14%; N 38.33%
Physical Description: Cryst. (EtOH or dioxan)
Melting Point: Mp 217-218° (212.5-213 dec.)
pKa Value: pK_a 4.54
Other Data: Major tautomer in solvents such as DMSO
Aldrich: 34774-4
Rare Chemicals Library: S57793-6

>>**Derivative:** *N*-Hydroxy

CAS Registry Number: 55513-24-1
Molecular Formula: $C_7H_6N_4O$
Molecular Weight: 162.151
Accurate Mass: 162.054161
Percentage Composition: C 51.85%; H 3.73%; N 34.55%; O 9.87%
Melting Point: Mp 151-152 dec.°

>>**Derivative:** *N*-Me
Synonym(s): 1-Methyl-5-phenyl-1*H*-tetrazole

CAS Registry Number: 20743-50-4
Molecular Formula: $C_8H_8N_4$
Molecular Weight: 160.178
Accurate Mass: 160.074896
Percentage Composition: C 59.99%; H 5.03%; N 34.98%
Physical Description: Needles (petrol/C_6H_6)
Melting Point: Mp 103-104°

>>**Derivative:** *N*-Et
Synonym(s): 1-Ethyl-5-phenyl-1*H*-tetrazole

CAS Registry Number: 24433-71-4
Molecular Formula: $C_9H_{10}N_4$
Molecular Weight: 174.205
Accurate Mass: 174.090546
Percentage Composition: C 62.05%; H 5.79%; N 32.16%
Physical Description: Cryst. (EtOH)
Melting Point: Mp 70-71°