

 <b>synerzine</b> <sup>TM</sup>	<b>Title:</b>	N309 Product Specification		
	<b>Document #:</b>	02-1006	<b>Rev #:</b>	005
	<b>Status:</b>	ACTIVE	<b>Date Issued:</b>	06/01/2023

### Product Identifiers

Product Name:	2-ETHYL-3,(5 or 6)-DIMETHYLPYRAZINE MIXTURE, NATURAL
---------------	--

Synerzine Item #	<b>N309</b>	CAS #	55031-15-7	FEMA #	3149
------------------	-------------	-------	------------	--------	------

### Material Properties

Molecular Formula	C16H24N4	Flash Point (°F, CC)	156.2
Molecular Weight	136.19	Boiling Point	180-182°C @760mmHg
Shelf Life (days)	730	Physical State	Liquid

Solubility	Soluble in most organic solvents and water
Storage and Stability	Store in fully closed container in cool (~20°C) dry place, away from direct heat and sunlight. Slight development of discoloration may occur.
Handling Precautions	Avoid contact of eyes and skin. In case of contact, flush copiously with water. Keep away from heat and flame.

### Specified Critical Limits

Critical Property	Test Method	UOM	Lower Limit	Upper Limit
Color	Visual Analysis	None	Colorless	Pale yellow
Odor	Organoleptic Analysis	None	Nutty, chocolate, coffee	
Chemical Purity	Gas Chromatography	% Isomeric Sum	98.0%	100.0%
Density	Density Analysis	g/cm <sup>3</sup> @ 20°C	0.957	0.967
Refractive Index	Refractometric Analysis	nD20	1.495	1.505

### Notes

Sum of alkyl pyrazines - Main components (1) 2-ethyl-3,6-dimethylpyrazine, natural (CAS 13360-65-1; FEMA 3149)(50-75%); 2) 2-ethyl-3,5-dimethylpyrazine (CAS 13925-07-0; FEMA 3150)(25-50%); Secondary components (Natural 2,3,5-trimethylpyrazine (CAS 14667-55-1; FEMA 3244)(0-5%), Natural 2,6-diethylpyrazine (CAS# 13067-27-1, no FEMA)(0-2.5%), Natural 2,3-diethylpyrazine (CAS# 15707-24-1, FEMA 3136)(0-0.3%), natural 2,5-diethylpyrazine (CAS# 13238-84-1, no FEMA)(0-3%), natural 2-methyl-6-propylpyrazine (CAS# 29444-46-0, no FEMA)(0-0.5%), natural 2,3,5,6-tetramethylpyrazine (CAS 1124-11-4; FEMA 3287)(0-5%), natural 2,3-diethyl-5-methylpyrazine (CAS# 18138-04-0, FEMA 3336)(0.1-1%))

*This specification was generated electronically, and is therefore unsigned.*

**Synerzine**

Quality Control Dept.

Date Printed: 6/1/2023