

**International Raw Material Data Sheet**  
**Ethanol 99% denat. (t-Butanol, Bitrex)**

Date: 16.09.2024

Printing date: 16.09.2024

Modification date:

Reason for modification:

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## I. GENERAL DATA

Product name: Ethanol 99% denat. (t-Butanol, Bitrex)  
INCI name: Alcohol denat.  
Purpose of use: Solvent  
Origin: vegetable, synthetic, vegan (fulfills criteria of Vegan Society), petrochemical

## II. COMPOSITION

CAS no.	Chemical substance	Value	Lower	Upper	Exp
64-17-5	Ethanol denatured	99,799			%
75-65-0	t-Butanol	0,100			%
3734-33-6	Denatonium benzoate	0,001			%
7732-18-5	Water	0,1			%

## III. SPECIFIED CHARACTERISTICS

### 1. General characteristics

Delivery form: liquid  
State: clear  
Odour: alcohol-like, characteristic  
Colour: colourless

### 2. Physical-chemical characteristics

No	Parameter	Range of values	Method
1	Content [mass%] <i>Ethanol</i>	99,799 - 100 %	Supplier's method
2	Content [mass%] <i>Water</i>	< 0,1 %	Supplier's method
3	Content [mass%] <i>t-Butanol</i>	0,10 - 0,13 %	Supplier's method
4	Content [mass%] <i>Denatonium benzoate</i>	> 0,001 %	Supplier's method
5	Content [mass%] <i>Methanol</i>	< 0,0035 %	Supplier's method
6	Content [mass%] <i>Acid</i> (calculated as: <i>Acetic acid</i> )	< 0,0010 %	Supplier's method
7	Content [mass%]	< 0,00040 %	Supplier's method

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	<i>Aldehyde</i> (calculated as: <i>Acetaldehyde</i> )		
8	Content [mass%] <i>Ester</i> (calculated as: <i>Ethyl acetate</i> )	< 0,00025 %	Supplier's method
9	Content [mass%] <i>Dehydration agent</i>	< 0,00013 %	Supplier's method
10	Content of [V/V%] <i>Ethanol</i>	> 99,8 %(V)	Supplier's method
11	Evaporation loss before denaturing	< 0,002 %	Supplier's method
12	Ignition loss before denaturing	< 0,0004 %	Supplier's method
13	Boiling point/range	78 - 79 °C	Supplier's method
14	Flash point	13 °C	Supplier's method
15	Density	0,789 - 0,793 g/cm <sup>3</sup>	Supplier's method
16	Furfural- test 0 = negative	0	Supplier's method
17	Permanganat-test (Unit: min) before denaturing	> 23	Supplier's method
18	Volatiles nitrogen base in mg / 100 cm <sup>3</sup> (calculated as N)	< 0,1	Supplier's method
19	UV absorption 220 nm 1 cm cell (before denaturing)	< 0,3	Supplier's method
20	UV absorption 230 nm 1 cm cell (before denaturing)	< 0,18	Supplier's method
21	UV absorption 240 nm 1 cm cell (before denaturing)	< 0,08	Supplier's method
22	UV absorption 270 nm 1 cm cell (before denaturing)	< 0,02	Supplier's method
23	Fusel oil test in mg / 100 cm <sup>3</sup> (before denaturing)	< 0,4	Supplier's method

**The following parameters are to be certified for each delivery:**

Not indicated for RU - Density

Not indicated for RU - Fusel oil test

Not indicated for RU - Permanganat-test

Not indicated for RU - Volatiles nitrogen base

General description

**Content of Denatonium benzoate**

**Ethanol**

Not expected - t-Butanol

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Not indicated for RU -	Water
Not indicated for RU -	Ester
Not indicated for RU -	Acetaldehyde
Not indicated for RU -	Methanol
Not indicated for RU -	Acetic acid

**Additional properties:**

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