

**PRODUCT CODE: 364343****1-Chlorobutane for UV, IR, HPLC**

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C<sub>4</sub>H<sub>9</sub>ClC<sub>4</sub>H<sub>9</sub>Cl

M.= 92,57

CAS [109-69-3]

EINECS 203-696-6

TARIC 2903 19 80 00

**SYNONYMS:** Butyl Chloride•**PHYSICAL DATA:** liquid, Clear, Colourless, Soluble in water 1,1 g/l at 20 °C D 20/4 0,8862 • M.P.: -123,1 °C • B.P.: 78,4 °C • n<sub>20</sub>/D : 1,4021 • Flash P.: -6 °C • Vap. press. (20 °C) 110 hPa • Viscosity 25 °C 0,42 mPa.s • Dielec. constant 20 °C 7,4 • Heat evap. 78 °C 334 KJ/Kg • Expl. limit 1 %(V) 10,1 %(V) •**BIBLIOGRAPHY:** Merck Index **12**, 1.595 13, 1.559 Sax **BQQ**750 • Safety **2** , **754 D** • Kühn-Birett **B** 54 • Beilstein **1** , **118 I** , **38 II** , **80 III** , **275 IV** , **246** • BRN 1730909 •**HAZARDOUS:** C.E: 602-059-00-3 • RTECS: EJ 6300000 • LD50 oral rat 2.670 mg/kg • LC L0 inh rat 8000 ppm / 4h • LD L0 skn rbt 20.000 mg/kg •

H: H225 •

P: P210 • P233 • P240 • P241 • P242 • P501 • P243 • P280 • P303+P361+P353 • P370+P378 • P403+P235 •

**TRANSPORT REGULATIONS:** UN: 1127 • ADR: 3/II • IMDG: 3/II • IATA: 3/II • PAX: 353 • CAO: 364 • (D/E) •**WEIGHT/VOLUME INFORMATION:** 1l~0,886 kg 1kg~1,128 l**SPECIFICATIONS:**

Minimum assay (G.C.)

99,8%

Density at 20/4	0,885-0,887
<b>Maximum limit of impurities</b>	
APHA colour	10
Acidity	0,0002 meq/g
Alkalinity	0,0002 meq/g
Non-volatile matter	0,0002 %
Water (H2O)	0,01 %
Suitability for IR spectrometry:	passes test
UV Spectrum (1cm cell; Ref.: water):	
Transmittance at 220 (Cut off) nm	<sup>3</sup> 10 %
Transmittance at 227 nm	<sup>3</sup> 60 %
Transmittance at 232 nm	<sup>3</sup> 80 %
Transmittance at 250 nm	<sup>3</sup> 98 %
Transmittance at 260-400 nm	<sup>3</sup> 99 %
Data of interest in HPLC:	
P' + 0.25 E	2,8
Rohrschneider Polarity	1,0
Eluotropic value e° (Al2O3)	0,26

**For critical jobs, purge with nitrogen.**

**Microfiltered product (0.2 µm) and bottled under nitrogen atmosphere.**