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BLG.1/Circ.32  
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### **CARRIAGE CONDITIONS AND SPECIAL REQUIREMENTS ASSIGNED TO MIXED C4**

1 The Sub-Committee on Bulk Liquids and Gases (BLG), at its fifteenth session (7 to 11 February 2011), approved the issuance of BLG.1/Circ.32 on Carriage conditions and special requirements assigned for Mixed C4, for inclusion as a new entry into the IGC Code, as set out in annexes 1 and 2, which was endorsed by the Maritime Safety Committee, at its eighty-ninth session, and the Marine Environment Protection Committee, at its sixty-second session.

2 Member Governments are invited to bring the attached information on the Carriage conditions and special requirements assigned for Mixed C4 to the attention of shippers, terminal operators, shipowners, ship operators, charterers, shipmasters and all other entities concerned.

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**ANNEX 1**

**EVALUATION OF MIXED C4 FOR INCLUSION  
IN THE IGC CODE**

<b>Column in the IGC Code</b>	<b>Property</b>	<b>Entry</b>
a	Product name	Mixed C4
b	UN number	-
c	Ship Type	2G/2PG
d	Independent tank type "C" required	-
e	Control of vapour space within cargo tank	-
f	Vapour detection	F+T
g	Gauging	C
h	MFAG table no.	-
i	Special requirements	14.4.2, 14.4.3, 17.2.2, 17.4.2, 17.4.3, 17.6, 17.22

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## ANNEX 2

### ADDITION TO CHAPTER 17 (SPECIAL REQUIREMENTS) IN THE IGC CODE

#### 17.22 Mixed C4 cargoes

17.22.1 Cargoes that may be carried individually under the requirement of this Code, notably Butane, Butylenes and Butadiene, may be carried as mixtures subject to the provisions of this section. These cargoes may variously be referred to as 'Crude C4', 'Crude Butadiene', 'Crude steam-cracked C4', 'Spent steam-cracked C4', 'C4 stream', 'C4 raffinate' or may be shipped under a different description. In all cases, the Material Safety Data Sheet (MSDS) shall be consulted as the Butadiene content of the mixture is of prime concern as it is potentially toxic and reactive. While it is recognized that Butadiene has a relatively low vapour pressure, if such mixtures contain Butadiene they shall be regarded as toxic and the appropriate precautions applied.

17.22.2 If the Mixed C4 cargo shipped under the terms of this section contains more than 50% (mole) of Butadiene, the inhibitor precautions in 17.8 shall apply.

17.22.3 Unless specific data on liquid expansion coefficients is given for the specific mixture loaded, the Filling Limit restrictions of chapter 15 shall be calculated as if the cargo contained 100% concentration of the component with the highest expansion ratio.

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