



WORKING PAPER

**DANGEROUS GOODS PANEL (DGP)
MEETING OF THE WORKING GROUP OF THE WHOLE**

Atlantic City, United States, 4 to 8 April 2011

Agenda Item 3: Development of recommendations for amendments to the *Supplement to the Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Doc 9284SU) for incorporation in the 2013-2014 Edition

SPECIAL PROVISION A202

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SUMMARY

This paper proposes amendment to S-3-3-1 Special Provision A202 to include Air, compressed UN 1002 as being permitted to provide life support for aquatic animals during transport.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 Special Provision A202 sets out the requirements to be met for the transport of live aquatic animals where life is supported by a supply of Oxygen, compressed UN 1072.

1.2 The experience gained in Australia relating to the transport of aquarium specimens is that the use of Oxygen, compressed UN 1072 can sometimes provide an excessive oxygenation of water.

1.3 It has been identified that Air, compressed UN1002 can be used instead of Oxygen, compressed, UN1072 for some transport tasks. It was found that Oxygen, compressed UN1072 could be used prior to aircraft loading and then shut off. Air, compressed UN 1002 could then be used during air transport. After arrival, the oxygen levels in the water are checked and the air shut off. Oxygen is then used to increase the level in the water prior to road transport where again the oxygen is shut off and air, compressed is used..

1.4 This evaluation took place for the transport of sharks with the use of Air, compressed rather than Oxygen, compressed. Air, compressed provided adequate oxygenation of the water and was

first tested for a number of days on the ground prior to the air transport to ensure the animals could be sustained.

1.5 Where it is possible to use Air, compressed UN 1002 during flight instead of Oxygen, compressed UN 1072, the option should be available as this presents a safer form of transport.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to:

- a) consider a minor amendment to Special Provision A202 to permit the use of Air, compressed UN 1002 as an alternative to Oxygen, compressed, UN1072 in order to provide an alternative and safer transport scenario.
- b) consider adding Air, compressed UN 1002 to Table S-3-1 including the application of Special Provision A202.

Name	UN No.	Class or division	Subsidiary risk	Labels	State variations	Special provisions	UN packing group	Excepted quantity	Passenger aircraft		Cargo aircraft	
									Packing instruction	Max. net quantity per package	Packing instruction	Max. net quantity per package
1	2	3	4	5	6	7	8	9	10	11	12	13
Air, compressed	1002	2.2		Gas non-flammable		A202		E0	200	75 kg	200	150kg

A202 For the purpose of providing life support for aquatic animals during transport, the appropriate authority of the States of Origin, of Destination and of the Operator may approve the carriage of ~~a~~ cylinders containing oxygen compressed, UN 1072 and Air, compressed UN 1002, with the valve(s) open to supply a controlled quantity of oxygen or air through a regulator into water containing the aquatic animals. The cylinder or cylinder valve must be fitted with a self-sealing device to prevent uncontrolled release of oxygen or air should the regulator malfunction or be broken or damaged. The oxygen or air cylinder must meet those parts of Packing Instruction 200 which apply, except for the need for valves to be closed. In addition, the following conditions apply as a minimum:

- a) the water container with the attached oxygen and/or air cylinder (transportation unit) must be engineered and constructed to withstand all anticipated loads;
- b) the water container must be tilt-tested at an angle of 45° in four directions from the upright for a 10-minute minimum duration in each direction with the oxygen supply operating, without leakage of water;
- c) the oxygen or air cylinder and regulator must be restrained and protected within the equipment;
- d) the oxygen or air regulator used must have a maximum flow rate of not more than five litres per minute;
- e) the oxygen or air flow rate to the container must be limited to that sufficient to provide life support to the aquatic animals;
- f) the quantity of oxygen or air provided must not exceed 150 per cent of the oxygen or air required for the normal duration of air transport; and
- g) only one cylinder may be carried for each 15 cubic metres of gross cargo hold volume. In no circumstances may the rate of oxygen or air flow from the cylinder exceed one litre per minute per five cubic metres of gross cargo hold volume.

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