

WP.15/AC.2/16/INF.8

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods
Joint Meeting of Experts on the Regulations annexed to the
European Agreement concerning the International Carriage
of Dangerous Goods by Inland Waterways (ADN)
(ADN Safety Committee)

Sixteenth session
Geneva, 25-29 January 2010
Agenda item 7

SPECIAL AUTHORIZATIONS, DEROGATIONS AND EQUIVALENTS

Special authorization delivered to ExxonMobil for the transport of UN 1011 butane
(containing less than 0.1% 1,3 butadiene)

Submitted by the Government of Belgium

Bijzondere Machtiging Nr : 002/2009

volgens 1.5.1.2.1 ADNR

Gelet op 1.5.1.2.1 ADNR is het vervoer van de in de bijlage bij deze Bijzondere Machtiging vermelde stof onder de daar vastgestelde voorwaarden tot het vervoer in tankschepen toegelaten.

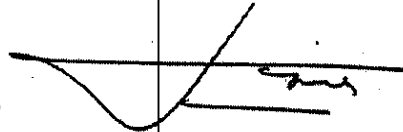
De vervoerder dient de stof, alvorens haar te vervoeren, door een erkend classificatiebureau in de in 7.2.2.8.3 ADNR genoemde lijst te laten opnemen.

Deze Bijzondere Machtiging geldt voor ExxonMobil Petroleum & Chemical BVBA, Hermeslaan 2 B- 1831 Machelen zonder staatkundige of geografische beperking op de Rijn.

Zij geldt twee jaren van de datum van dagtekening af behoudens eerdere intrekking.

Zij geldt voor eenieder, die de in de bijlage vermelde stof wenst te vervoeren.

Staat van afgifte: België
Bevoegde autoriteit: Directie Scheepvaartcontrole
09 december 2009 De directeur,



ir J. Heynderickx.

Ausnahmegenehmigung auf Grund 1.5.1.2.1 ADNR

Auf Grund von 1.5.1.2.1 ADNR ist die Beförderung des in der Anlage zu dieser Ausnahmegenehmigung bezeichneten Gutes unter den dort festgelegten Bedingungen zur Beförderung in Tankschiffen zugelassen.

Der Beförderer muß den Stoff vor dem Transport von einer zugelassenen Klassifikationsgesellschaft in die in 7.2.2.8.3 ADNR genannten Liste eintragen lassen.

Diese Ausnahmegenehmigung gilt für ExxonMobil Petroleum & Chemical BVBA, Hermeslaan 2 B- 1831 Machelen ohne staatliche oder geographische Einschränkung auf dem Rhein.

Sie gilt vom Tag der Unterzeichnung, vorbehaltlich vorherigen Widerrufs, zwei Jahre.

Sie kann nach Bekanntmachung von jedermann, der das in der Anlage bezeichnete Gut befördern möchte, in Anspruch genommen werden.

Autorisation Spéciale en vertu de 1.5.1.2.1 ADNR

En vertu de 1.5.1.2.1 ADNR le transport de la matière spécifiée à l'annexe à la présente autorisation spéciale est autorisé dans des bateaux-citernes sous les conditions y mentionnées.

Avant de transporter la matière, le transporteur est tenu de la faire inscrire dans la liste mentionnée au 7.2.2.8.3 ADNR par une société de classification agréée.

Cette autorisation spéciale est valable sur le Rhin sans restriction étatique ou géographique pour ExxonMobil Petroleum & Chemical BVBA, Hermeslaan 2 B- 1831 Machelen.

Elle est valable pendant deux ans à partir du jour de la signature, sauf abrogation antérieure.

Après sa publication cette autorisation spéciale est valable pour chacun qui voudrait transporter la matière mentionnée en annexe.

Bijlage bij Bijzondere Machtiging nr 002/2009

1	UN-NO. or substance Identification No.	1011
2	Name and description	BUTANE containing less than 0.1% 1,3 butadiene
3a	Class	2
3b	Classification code	2F
4	Packing groupe	
5	Dangers	2.1
6	Type of tank vessel	G
7	Cargo tank design	1
8	Cargo tank type	1
9	Cargo tank equipment	
10	Opening pressure of the high Velocity vent valve in kPa	
11	Maximum degree of filling in in %	91
12	Relative density at 20 °C	
13	Type of sampling device	1
14	Pump room below deck permitted	yes
15	Temperature Class	T2
16	Explosion group	IIA
17	Ant-explosion protection required	yes
18	Equipment required	PP, EX, A
19	Number of cones/blue lights	1
20	Additional requirements/Remarks	31

3.2.4.2 Application form for special authorizations under section 1.5.2

For applications for special authorizations, please answer the following questions and points.

*Data are used for administrative purposes only and are treated confidentially.

Applicant

Andrew P. Walton.....ExxonMobil
(Name) (Company)

ExxonMobil Petroleum & Chemical, BVBA
Office H494 Hermeslaan 2,
1831 Machelen, Belgium
(Address)

Summary of the application

Authorization for transport in tank vessels of Butane (containing <0.1% 1,3 Butadiene) as a substance of Class 2.

Annexes (with brief description) - Not applicable.

Application made:

At: Machelen, Belgium

Date: November 18th, 2009

Signature: *A. P. Walton*
(of the person responsible for the data)

1. General data on the dangerous substance

1.1 Is it a pure substance , a mixture , a solution ?

1.2 Technical name = Butane.

1.3 Synonym. Not applicable.

1.4 Trade name. Not applicable

1.5 Structure formula and, for mixtures, composition and/or concentration. Not applicable

1.6 Hazard class 2, Class. Code 2F, Packing group (Not applicable)

1.7 UN No. 1011

*For questions not relevant to the subject of the application, write "not applicable".

2. Physico-chemical properties

2.1 State during transport = Liquefied gas

2.2 Density of liquid = 0.58 @ 15C

2.3 Transport temperature (for substances heated or refrigerated during transport). Not applicable.

2.4 Melting point or range. Not applicable.

2.5 Boiling point or range = -1 °C

2.6 Vapour pressure at 20 °C 350 kPa. For liquefied gases, vapour pressure at 70 °C 410 kPa.

2.7 Cubic expansion coefficient K⁻¹ (Not applicable)

2.8 Solubility in water at 20 ° C = Negligible. Saturation concentration = Not applicable

2.9 Colour. Colorless

- 2.10 Odour = Characteristic
- 2.11 Viscosity mm²/s. Not applicable
- 2.12 Flow time (ISO 2431-1996)s. Not applicable
- 2.13 Solvent separation test Not applicable
- 2.14 pH of the substance or aqueous solution (indicate concentration). Not applicable
- 2.15 Other information. Not applicable

3. Technical safety properties

- 3.1 Auto-ignition temperature in accordance with IEC 60079-4 (corresponds to DIN 51 794) ° C; where applicable, indicate the temperature class in accordance with EN 50 014: 1994. Not applicable.
- 3.2 Flash-point - FLASH POINT TAG method: ASTM D 56-02 -60 °C
- 3.3 Explosion limits: UEL 8.4 LEL 1.8. Determination of upper and lower explosion limits in accordance with EN 1839:2004.
- 3.4 Maximum safe gap in accordance with IEC 60079-1:2003. Not applicable.
- 3.5 Is the substance stabilized during transport? If so, provide data on the stabilizer: Not applicable.
- 3.6 Decomposition products in the event of combustion on contact with air or under the influence of an external fire: Oxides of carbon, Incomplete combustion products.
- 3.7 Is the substance fire intensifying? Yes
- 3.8 Abrasion (corrosion) mm/year. Not applicable
- 3.9 Does the substance react with water or moist air by releasing flammable or toxic gases? Yes/no. Gases released: No
- 3.10 Does the substance react dangerously in any other way? No
- 3.11 Does the substance react dangerously when reheated? No

4. Physiological hazards

- 4.1 LD₅₀ and/or LC₅₀ value. Necrosis value (where applicable, other toxicity criteria in accordance with 2.2.61.1 of ADN). CMR properties according to Categories 1A and 1B of chapters 3.5, 3.6 and 3.7 of GHS. Not applicable.
- 4.2 Does decomposition or reaction produce substances posing physiological hazards? No.
- 4.3 Environmental properties (see 2.4.2.1 of ADN):

Acute toxicity:

- LC₅₀ 96 hr for fish >1000 mg/l
- EC₅₀ 48 hr for crustacea mg/l. Not applicable
- ErC₅₀ 72 hr for algae mg/l. Not applicable

Chronic toxicity:

- NOEC mg/l. not applicable
- BCF 2.3 - 2.8 log K_{ow}
- Easily biodegradable Yes, Butane is classified as "inherently biodegradable" under EU criteria.

5. Data on hazard potential

- 5.1 What specific damage is to be expected if the hazard characteristics produce their effect?
 - Combustion
 - Injury
 - Corrosion
 - Intoxication in the event of dermal absorption

Intoxication in the event of absorption by inhalation Exposure to concentrations above 10% of the LEL may cause a general central nervous system (CNS) depression typical of anesthetic gases or intoxicants.

Mechanical damage

Destruction

Fire

Abrasion (corrosion to metals)

Environmental pollution

6. Data on the transport equipment

6.1 Are particular loading requirements envisaged/necessary (what are they)? Not applicable

7. Transport of dangerous substances in tanks

7.1 With which materials is the substance to be carried compatible? Not applicable

8. Technical safety requirements

8.1 Taking into account the current state of science and technology, what safety measures are necessary in the light of the hazards posed by the substance or liable to arise in the course of the transport process as a whole? Associated fire precautions.

8.2 Additional safety measures. Not applicable.