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*Ministero delle Infrastrutture
e dei Trasporti*

Dipartimento per i trasporti, la navigazione, gli affari
generali ed il personale

Direzione generale per la motorizzazione
Divisione 2

Prot. n. 22334 del 13/10/2014

All.: 4

Ai Dirigenti Generali Territoriali

<u>Loro Sedi</u>	All' UNRAE	<u>Roma</u>
Al C.S.R.P.A.D. <u>Roma</u>	Alla ASSOGASLIQUIDI	<u>Roma</u>
Ai C.P.A. <u>Loro Sedi</u>	Alla ASSOMECO/ASSOMETANO	<u>Reggio Emilia</u>
A tutti gli UMC <u>Loro Sedi</u>	Alla ASSOCIAZIONE ITALIANA COMMERCIO CHIMICO	<u>Milano</u>
Alle Divisioni della Direzione Generale per la Motorizzazione <u>Loro Sedi</u>	All'ASSOGASLIQUIDI	<u>Roma</u>
All' Assessorato delle Infrastrutture e della Mobilità <u>Palermo</u>	Alla ASSOGASMETANO	<u>Bologna</u>
Alla Provincia Autonoma di Trento - Servizio Motorizzazione Civile ed Infrastrutture <u>Trento</u>	Al Consorzio Italiano GPL	<u>Roma</u>
Alla Provincia Autonoma di Bolzano - Alto Adige- Ripartizione 38 Traffico e Trasporti <u>Bolzano</u>	Alla FEDERCHIMICA	<u>Milano</u>
Alla Regione autonoma Friuli Venezia Giulia Direzione Centrale Mobilità Energia ed Infrastrutture di trasporto <u>Trieste</u>	Alla FEDERMETANO	<u>Bologna</u>
<u>e. p.c.</u>	Alla NGV System Italia	<u>Milano</u>
All' ANFIA <u>Torino</u>	Alla UNIONE PETROLIFERA Via Giorgione 129	<u>Roma</u>
Alla CUNA <u>Torino</u>	Al Comitato Tecnico Prof.le GPL	<u>Milano</u>

**OGGETTO: Accordo ADR "Trasporto di merci pericolose".
Adozione degli Accordi Multilaterali M228, M258, M268 e M272.**

Si informano codesti Uffici che l'Italia ha sottoscritto gli Accordi Multilaterali **M228, M258, M268 e M272**.

Gli Accordi summenzionati, di cui si allega copia, prevedono deroghe per il trasporto su strada di merci pericolose.

In particolare:

ACCORDO M 228

La disposizione speciale SP310 dell'ADR 2013 prevede che i prototipi e le preserie di batterie al litio-ione, non testati secondo la sezione 38.3 del Manuale ONU dei Test e Criteri, possano essere trasportati solo in imballaggi omologati di Gruppo I.

L'Accordo M228 introduce deroga a detta disposizione per il trasporto di grandi batterie di peso superiore a 100 kg. che necessiterebbero di imballaggio molto grande difficilmente reperibile sul mercato.

L'Accordo M228 introduce quindi condizioni di applicabilità per le batterie: requisiti tecnici di costruzione e dei moduli contenitori oltre alle caratteristiche costruttive degli imballaggi e dei materiali di isolamento non combustibili diversi a seconda dell'orientamento della batteria (orizzontale o verticale) consentendo quindi l'uso di robusti imballaggi non omologati.

ACCORDO M 258

Gli heat pipes sono tubi ermetici di metallo termoconduttori utilizzati nella costruzione di satelliti. Essi sono in grado di trasferire grandi quantità di calore da un estremo (caldo) all'altro (freddo) del condotto, per mezzo dell'evaporazione e della condensazione del fluido refrigerante. L'Ammoniaca Anidra (UN 1005, Classe 2) è un gas tossico e corrosivo che viene utilizzato in piccole quantità all'interno degli heat pipes, come refrigerante.

L'Accordo M258 sostituisce l'Accordo M190 scaduto il 1° Aprile 2013 e permette il trasporto su strada di heat pipes contenenti Ammoniaca Anidra, in condizioni semplificate rispetto al regime ADR. L'Accordo, in particolare, permette di derogare dall'istruzione di imballaggio P200, a favore dell'istruzione di Imballaggio P003, imponendo il rispetto di alcuni parametri e di controlli addizionali e una opportuna indicazione da riportare sul documento di trasporto.

L'istruzione di imballaggio P003 è la stessa attribuita anche alle cartucce di gas e alle macchine frigorifere ed è più idonea agli heat pipes rispetto all'istruzione di Imballaggio P200, attribuita a bombole e fusti ai pressione.

Tutte le altre prescrizioni ADR relative al trasporto dell'Ammoniaca Anidra devono essere rispettate.

ACCORDO M 268

La 18° Edizione delle Raccomandazioni ONU sui Trasporto delle Merci Pericolose ha introdotto, dal 1° gennaio 2013, la nuova rubrica corrispondente al Numero UN 3509 IMBALLAGGI SCARTATI, VUOTI NON RIPULITI.

L'Accordo M268 anticipa le nuove disposizioni per la modalità stradale, disposizioni che sono state già approvate per l'edizione ADR 2015.

L'Accordo facilita gli utenti che devono inviare allo smaltimento o al riciclo imballaggi vuoti non ripuliti, contenenti residui di merci pericolose diverse, con una unica rubrica e fornisce indicazioni più puntuali per il loro trasporto in sicurezza, rispetto alle disposizioni previste alla sezione 1.1.3.5 del Regolamento ADR.

ACCORDO M 272

Nella 95° Sessione del novembre 2013 il WP.15 (Gruppo di lavoro per gli aggiornamenti dell'Accordo ADR) ha approvato emendamenti alla disposizione speciale SP636 e introdotto l'istruzione di imballaggio P909 sul trasporto di batterie al litio metallico e litio-ione e apparecchiature contenenti tali batterie, per lo smaltimento o il riciclaggio, rendendole più specifiche nella scelta dei contenitori idonei e differenziando le misure di protezione e sicurezza prescritte in base al contenuto energetico delle batterie stesse, alla loro massa e alla loro presenza all'interno di apparecchiature.

Queste disposizioni saranno applicabili per il trasporto stradale nell'edizione 2015 dell'ADR, a partire dal 1° gennaio 2015 su base volontaria, e obbligatorie dal 1° luglio 2015.

Per iniziativa della Germania, è stato presentato l'accordo multilaterale M272 che permette di anticipare l'applicazione delle nuove disposizioni già approvate.

L'applicazione dei medesimi Accordi è limitata ai territori dei Paesi che hanno sottoscritto gli stessi entro la data di scadenza indicata in ogni singolo Accordo.

AS/as

IL DIRETTORE GENERALE
(Arch. Maurizio VITELLI)
F.to Vitelli

Allegati: **M228, M258, M268 e M272**

MULTILATERAL AGREEMENT M 228

under Section 1.5.1 of ADR concerning the carriage of pre-production prototypes of large Lithium-ion batteries assemblies (UN 3480)

(1) By derogation from special provision 310 in chapter 3.3, pre-production prototypes of large Lithium-ion batteries assemblies, not tested according to sub-section 38.3 of the manual of tests and criteria, with a gross mass exceeding 100 kg, conforming to the requirements mentioned in paragraph (2) hereafter, may be carried in strong, non approved according to chapter 6.1 packagings, conforming to paragraph (3) hereafter.

(2) Construction of the battery assembly:

- The elementary battery modules or cells shall be assembled in an insulated and sturdy structure that protects the cells mechanically, and attached in this structure in such a way that no movement is possible;
- Each module or cell shall be rigidly and strongly attached inside a sturdy cabinet or casing, made of metal or a composite material of equivalent strength, with full sheet panels of adequate strength and design in relation to the intended use of the cabinet or casing and to the mass of the elements contained inside.

(3) The packaging shall conform to the following requirements:

(a) If the battery assembly is to be transported vertically:

- The battery assembly shall be placed in an inner packaging consisting in a heat sealable aluminium foil bag and wrapped into enough non-combustible absorbent cushioning material to avoid any accidental leakage from the battery system out of the package;
- The battery assembly shall be strongly attached to a pallet through dampers capable of minimising the effect of shocks or vibrations, allowing handling, lifting, and tilting to the point of toppling, without rupture;
- The pallet is forming the bottom of the outer packaging consisting in a strong box made of plywood, plastic or metal, respectively conforming to construction requirements of 6.1.4.10, 6.1.4.13, or 6.1.4.14;
- A material with a minimum thickness of 40 mm, that is insulating and non-combustible, shall be placed between the inner packaging and the outer packaging, and shall be strongly attached to their walls;
- The outer packaging shall be marked with package orientation arrows according to sub-section 5.2.1.9 of ADR.

(b) If the battery assembly is to be transported horizontally:

- The battery assembly shall be placed in an inner packaging consisting in a heat sealable aluminium foil bag;
- The battery assembly and its packaging sheet shall be placed in a strong box made of plywood, plastic or metal, respectively conforming to construction requirements of 6.1.4.10, 6.1.4.13, or 6.1.4.14, in which it is held in a way that no movement is possible in the packaging, and shall be wrapped in enough non-combustible absorbent cushioning material to avoid any accidental leakage from the battery assembly out of the package;
- The box containing the battery assembly shall be placed in an outer packaging made of plywood, plastic or metal, respectively conforming to construction requirements of 6.1.4.10, 6.1.4.13, or 6.1.4.14, and kept separate from the packaging by dampers, capable of minimising the effect of shocks or vibrations, spread all around it;
- A material that is insulating and non-combustible shall be placed between the inner box and the outer box.

(4) In this agreement, the term "non-combustible" refers to a definition set by an appropriate standard recognised in the country of packing (e.g. the EN 13 501 - 1 standard in the European Union).

(5) All the other provisions of ADR relating to the carriage of Lithium-ion batteries (UN 3480) shall apply.

(6) This agreement shall apply to transport between Contracting Parties to ADR which have signed this agreement up to 26 December 2015 unless it is revoked before that date by at least one of the signatories, in which case it shall remain applicable only to transport between the Contracting Parties to ADR which have signed but not revoked this agreement, on their territory, up to that date.

Issued in Paris, December 27th, 2010

The competent authority for ADR
in France


Pour le ministre par délégation :
L'ingénieur général des mines,

Jérôme GOELLNER

Roma, 22 September 2014

The competent authority for ADR
in the Republic of Italy

Dr. Amedeo Fumero

Head of Department


Multilateral Agreement M258

under section 4.1.4 of ADR,
concerning the carriage of heatpipes containing anhydrous ammonia

1. By derogation from the provisions of ADR packing instruction P200, heatpipes containing anhydrous ammonia, UN 1005, may be carried under the following conditions :
 - a) The heatpipes shall be packed according to packing instruction P003.
 - b) Each heatpipe shall additionally meet the following requirements :
 - the heatpipe consists in a extruded profiled aluminium section containing anhydrous ammonia,
 - closing is ensured by a crimped end and a stopper, both welded at its ends,
 - the maximum ammonia capacity in a heatpipe is 250 grams,
 - the minimum bursting pressure of a profiled aluminium section is 125 bars,
 - the interior pressure with 20 °C shall not exceed 10 bars.
 - c) During its manufacturing, each heatpipe shall undergo the following controls :
 - x-ray inspections of the weldings,
 - a leakage test to Helium,
 - a heating test to 125 °C during 30 minutes,
 - a test with 90 °C using pH paper in order to detect any ammonia leakage.
2. A documentation relating to the various tests shall remain available to the competent authorities.
3. All the other provisions of ADR relating to the carriage of anhydrous ammonia are applicable.
4. In addition to the indications prescribed by ADR, the consignor shall mention in the transport document the following elements of information :

« Carriage agreed under the terms of section 4.1.4 de l'ADR (M258) »
5. This agreement is valid until 5th March 2018 for the carriage on the territories of those ADR Contracting Parties signatory to this agreement. If it is revoked before then by one of the signatories, it shall remain valid until the above mentioned date only for carriage on the territories of those ADR Contracting Parties signatory to this agreement which have not revoked it.

Done in Paris on March 6th, 2013.

The competent authority for ADR in France

Pour la Ministre et par délégation :

L'ingénieur général des mines,

Jérôme GOELLNER

Roma, 22 September 2014

The competent authority for ADR
in the Republic of Italy

Dr. Amedeo Fumero

Head of Department

Multilateral Agreement M268

under section 1.5.1 of ADR
concerning the carriage of packagings, discarded, empty, uncleaned (UN 3509)

1. By derogation from the provisions of chapter 2.1, of sections 2.2.9, 3.2.1, 7.3.2 and 7.3.3, of subsection 4.1.1.11, and of paragraph 5.4.1.1.1 of ADR, and in accordance with the new special provision 663 adopted by the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods on its autumn 2013 session, empty uncleaned packagings that are discarded may be classified under UN 3509 provided that they comply with paragraph a) hereafter, and may be then carried under the provisions of paragraph b) hereafter:

- a) Empty, uncleaned packagings, large packagings or intermediate bulk containers (IBCs), or parts thereof, carried for disposal, recycling or recovery of their material, other than reconditioning, repair, routine maintenance, remanufacturing or reuse, and which have been emptied to the extent that only residues of dangerous goods adhering to the packaging parts are present when they are handed over for carriage, may be assigned to UN 3509 "PACKAGINGS, DISCARDED, EMPTY, UNCLEANNED".

These goods are then assigned to Class 9, hazard identification number 90 and transport category 4 (tunnel restriction code E).

Residues present in goods classified under UN number 3509 shall only be substances of Classes 3, 4.1, 5.1, 6.1, 8 or 9. In addition, they shall not be:

- Substances assigned to packing group I or that have "0" assigned in Column (7a) of Table A of Chapter 3.2, or;
- Substances classified as desensitized explosive substances of Class 3 or 4.1, or;
- Substances classified as self-reactive substances of Class 4.1, or
- Substances presenting a risk of radioactivity, or
- Asbestos (UN 2212 and UN 2590), polychlorinated biphenyls (UN 2315 and UN 3432), polyhalogenated biphenyls or polyhalogenated terphenyls (UN 3151 and UN 3152).

- b) Loading provisions:

PACKAGINGS, DISCARDED, EMPTY, UNCLEANNED, with residues presenting a risk or a subsidiary risk of Class 5.1, shall not be packed together with other PACKAGINGS, DISCARDED, EMPTY, UNCLEANNED, or loaded together with other PACKAGINGS, DISCARDED, EMPTY, UNCLEANNED in the same container, vehicle or bulk container.

Documented sorting procedures shall be implemented on the loading site to ensure compliance with the provisions applicable to this entry.

Provisions concerning the use of packagings:

Packagings authorized for the carriage of dangerous goods of UN 3509 are packagings, IBCs or large packagings that satisfy respectively to packing provisions P003 for packagings, IBC08 for IBCs, or LP02 for large packagings. In addition, the following provisions apply:

- packagings, IBCs or large packagings are not required to meet the requirements of 4.1.1.3;
- packagings, IBCs or large packagings that meet the respective requirements of 6.1.4, 6.5.5 or 6.6.4, and are made leak tight or are fitted with a leak tight and puncture resistant sealed liner or bag, shall be used;
- when the only residues contained are solids which are not liable to become liquid at temperatures likely to be encountered during carriage, flexible packagings, IBCs or large packagings may be used. When liquid residues are present, rigid packagings, IBCs or large packagings that provide a means of retention (e.g. absorbent material) shall be used;
- before being filled and handed over for carriage, every packaging, IBC or large packaging shall be inspected to ensure that it is free from corrosion, contamination or other damages. Any packaging, IBC or large packaging showing signs of reduced strength, shall no longer be used

(minor dents and scratches are not considered as reducing the strength of the packaging, IBC or large packaging);

- packagings, IBCs or large packagings, intended for the carriage of PACKAGINGS, DISCARDED, EMPTY, UNCLEANNED with residues of Class 5.1, shall be so constructed or adapted that the goods cannot come into contact with wood or any other combustible material.

Provisions concerning the carriage in bulk:

The carriage in bulk of dangerous goods of UN 3509 is authorized

- either in closed bulk containers (code BK2)
- either in sheeted vehicles or closed containers (codes VC2 + AP10 to enter into force on 1st January 2015)

that are made leak tight or fitted with a leak tight and puncture resistant sealed liner or bag, and shall have a means of retaining any free liquid that might escape during carriage, e.g. absorbent material.

Moreover, when PACKAGINGS, DISCARDED, EMPTY, UNCLEANNED with residues presenting a risk or subsidiary risk of Class 5.1 are carried in containers, vehicles or bulk containers, those containers, vehicles or bulk containers shall be so constructed or adapted that the goods cannot come into contact with wood or any other combustible material.

Provisions concerning documentation:

The proper shipping name specified in 5.4.1.1.1 (b) shall be complemented with the words "(WITH RESIDUES OF [...])" followed by the Class(es) and subsidiary risk(s) corresponding to the residues, in the Class numbering order. Moreover, 5.4.1.1.1 (f) does not apply.

Example: PACKAGINGS, DISCARDED, EMPTY, UNCLEANNED having contained goods of Class 4.1 packed together with PACKAGINGS, DISCARDED, EMPTY, UNCLEANNED having contained goods of Class 3 with a Class 6.1 subsidiary risk should be referred in the transport document as:

*"UN 3509 PACKAGINGS, DISCARDED, EMPTY, UNCLEANNED (WITH RESIDUES OF 3, 4.1, 6.1),
g"*

2. All the other provisions of ADR apply.
3. In addition to the indications given in ADR and the agreement hereby, the consignor shall enter in the transport document:

"Carriage agreed under the terms of section 1.5.1 of ADR (M268)"

4. This agreement shall be valid until 31st December 2014 for the carriage on the territories of those ADR Contracting Parties signatory to this Agreement. If it is revoked before that date by one of the signatories, it shall remain valid until the above mentioned date only for carriage on the territories of those ADR Contracting Parties signatory to this Agreement which have not revoked it.

Done in Paris on 3rd December 2013

The competent authority for ADR in France

Pour la Ministre et par délégation :

L'ingénieur général des mines,


Jérôme GOELLNER

Roma, 22 September 2014

The competent authority for ADR
in the Republic of Italy

Dr. Amedeo Fumero

Head of Department


Multilateral Agreement M 272

under section 1.5.1 of ADR

concerning the carriage of lithium ion and lithium metal cells and batteries and equipment containing such cells and batteries carried for disposal or recycling under special provision 636

- (1) By derogation from Chapter 3.2 in conjunction with section 4.1.4.1 of ADR, lithium ion and lithium metal cells and batteries and equipment containing such cells and batteries which are carried for disposal or recycling and are packed together with or without other non-lithium batteries may be packed in accordance with Packing Instruction P909 as set out under no. 5 below.
- (2) These cells and batteries shall not be subject to the provisions of paragraph 2.2.9.1.7 (a) to (e).
- (3) The packages shall be marked with "LITHIUM BATTERIES FOR DISPOSAL" or "LITHIUM BATTERIES FOR RECYCLING".
- (4) Batteries identified as being damaged or defective shall be carried in accordance with Special Provision 661.
- (5)

P909	PACKING INSTRUCTION	P909
This packing instruction applies to UN Nos. 3090, 3091, 3480 and 3481 carried for disposal or recycling, either packed together with or packed without non-lithium batteries:		
<p>(1) Cells and batteries shall be packed in accordance with the following:</p> <p>(a) The following packagings are authorized, provided that the general provisions of 4.1.1 and 4.1.3, are met:</p> <p style="padding-left: 40px;">Drums (1A2, 1B2, 1N2, 1H2, 1D, 1G); Boxes (4A, 4B, 4N, 4C1, 4C2, 4D, 4F, 4G, 4H2); and Jerricans (3A2, 3B2, 3H2).</p> <p>(b) Packagings shall conform to the packing group II performance level.</p> <p>(c) Metal packagings shall be fitted with a non-conductive lining material (e.g., plastics) of adequate strength for the intended use.</p>		

- (2) However, lithium ion cells with a Watt-hour rating of not more than 20 Wh, lithium ion batteries with a Watt-hour rating of not more than 100 Wh, lithium metal cells with a lithium content of not more than 1 g and lithium metal batteries with an aggregate lithium content of not more than 2 g may be packed in accordance with the following:
- (a) In strong outer packaging up to 30 kg gross mass meeting the general provisions of 4.1.1, except 4.1.1.3, and 4.1.3.
 - (b) Metal packagings shall be fitted with a non-conductive lining material (e.g., plastics) of adequate strength for the intended use.
- (3) For cells or batteries contained in equipment, strong outer packagings constructed of suitable material, and of adequate strength and design in relation to the packaging capacity and its intended use, may be used. Packagings need not meet the requirements of 4.1.1.3. Large equipment may be offered for carriage unpackaged or on pallets when the cells or batteries are afforded equivalent protection by the equipment in which they are contained.
- (4) In addition, for cells or batteries with a gross mass of 12 kg or more employing a strong, impact resistant outer casing, strong outer packagings constructed of suitable material and of adequate strength and design in relation to the packagings capacity and its intended use, may be used. Packagings need not meet the requirements of 4.1.1.3.

Additional requirements:

1. Cells and batteries shall be designed or packed to prevent short circuits and the dangerous evolution of heat.
2. Protection against short circuits and the dangerous evolution of heat includes, but is not limited to,
 - individual protection of the battery terminals,
 - inner packaging to prevent contact between cells and batteries,
 - batteries with recessed terminals designed to protect against short circuits, or
 - the use of a non-conductive and non-combustible cushioning material to fill empty space between the cells or batteries in the packaging.
3. Cells and batteries shall be secured within the outer packaging to prevent excessive movement during carriage (e.g. by using a non-combustible and non-conductive cushioning material or through the use of a tightly closed plastics bag).

- (6) By derogation from Special Provision 636 (b) in conjunction with Packing Instruction P903b of ADR, lithium cells and batteries with a gross mass of not more than 500 g each or lithium ion cells with a Watt-hour rating of not more than 20 Wh, lithium ion batteries with a Watt-hour rating of not more than 100 Wh, lithium metal cells with a lithium content of not more than 1 g and lithium metal batteries with an aggregate lithium content of not more than 2 g, whether or not contained in equipment, collected and handed over for carriage for disposal or recycling, also together with or without other used non-lithium cells or batteries, are not subject to the other provisions of ADR, if they meet the following conditions:

- (i) The provisions of packing instruction P909 apply except for the additional requirements 1 and 2;

- (ii) A quality assurance system is in place to ensure that the total amount of lithium cells or batteries per wagon or large container/transport unit does not exceed 333 kg;

NOTE: The total quantity of lithium cells and batteries in the mix may be assessed by means of a statistical method included in the quality assurance system. A copy of the quality assurance records shall be made available to the competent authority upon request.

- (iii) Packages are marked "LITHIUM BATTERIES FOR DISPOSAL" or "LITHIUM BATTERIES FOR RECYCLING" as appropriate.

- (7) This agreement shall be valid until 30 June 2015 for carriage on the territories of the ADR Contracting Parties signatory to this Agreement. If it is revoked before that date by one of the signatories, it shall remain valid until the above mentioned date only for carriage on the territories of those ADR Contracting Parties signatory to this Agreement which have not revoked it.

Bonn, 10 January 2014

The competent authority for ADR
of the Federal Republic of Germany

For the Federal Ministry of Transport
and digital Infrastructure



Silvia Prinz

Roma, 22 September 2014

The competent authority for ADR
in the Republic of Italy

Dr. Amedeo Fumero

Head of Department

