DANGEROUS GOODS PANEL (DGP) WORKING GROUP MEETING (DGP-WG/20)

Virtual, 19 to 23 October 2020

Agenda Item 2: Managing air-specific safety risks and identifying anomalies

2.2: Develop proposals, if necessary, for amendments to the *Technical Instructions for* the Safe Transport of Dangerous Goods by Air (Doc 9284) for incorporation in the 2023-2024 Edition

REVISIONS TO NAMES OF SELF-REACTIVE SUBSTANCES

(Presented by A.D Song)

SUMMARY

This working paper proposes to revise the name of self-reactive substances in Table 2-6.

Action by the DGP-WG: The DGP-WG is invited to consider the revisions to the chemical name of some self-reactive substances in Table 2-6, to align with the UN Recommendations as shown in the appendix to this working paper.

1. **INTRODUCTION**

- 1.1 Self-reactive substances currently designated for packaging are listed in Table 2-6 of the Technical Instructions.
- 1.2 Some chemical names do not conform to International Union of Pure and Applied Chemistry (IUPAC) nomenclature, which is a method of naming organic compounds as recommended by that federation, including:

As shown in Table 2-6 of the Technical Instructions: 2-(n,n-Ethoxycarbonylphenylamino)-3-methoxy-4-(n-methyl-n-cyclohexylamino) benzenediazonium zinc chloride

Correct chemical name: 2-(nN, nN-Ethoxycarbonylphenylamino)-3-methoxy-4-(nN-methyl-nN-cyclohexylamino) benzenediazonium zinc chloride

1.3 The letter **n** and **N** have a completely different meaning in IUPAC nomenclature.

1.4 Part 2;4.2.3.2.4 of ICAO *Technical Instructions* (2021-2022 Edition) has been revised based on the latest revision of the UN Model Regulations. However, the 18th revised edition of the UN Model Regulations is referred to.

2. **ACTION BY THE DGP-WG**

2.1 The DGP-WG is invited to consider the proposed amendments to the edition of the UN Model Regulations and names of self-reactive substances in Part 2;4.2.3.2.4 of the Technical Instructions as shown in the appendix to this working paper.

APPENDIX

PROPOSED AMENDMENT TO PARTS 2 OF THE TECHNICAL INSTRUCTIONS

Part 2

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4.2 FLAMMABLE SOLIDS, SELF-REACTIVE SUBSTANCES, DESENSITIZED EXPLOSIVES AND POLYMERIZING SUBSTANCES

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4.2.3 Division 4.1 — Self-reactive substances

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4.2.3.2.4 List of currently assigned self-reactive substances in packages

The following table (Table 2-6) is reproduced from 2.4.2.3.2.3 of the UN *Recommendations on the Transport of Dangerous Goods* (Eighteenth-Twenty-first revised edition), with irrelevant material removed.

Table 2-6. List of currently assigned self-reactive substances in packagings

Note.— Self-reactive substances to be transported must fulfil the classification and the control and emergency temperatures (derived from the self-accelerating decomposition temperature (SADT)) as listed.

Self-reactive substance	Concentration (%)	Control temperature (°C)	Emergency temperature (°C)	UN generic entry	Notes
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$2\text{-}(\underline{\textbf{nN}},\underline{\textbf{nN}}\text{-}Ethoxycarbonylphenylamino})\text{-}3\text{-}methoxy\text{-}4\text{-}(\underline{\textbf{nN}}\text{-}methyl-\underline{\textbf{nN}}\text{-}cyclohexylamino}) benzenediazonium zinc chloride$	63-92	+40	+45	3236	
2-($\frac{nN}{n}$ -Ethoxycarbonylphenylamino)-3-methoxy-4-($\frac{nN}{n}$ -methyl- $\frac{nN}{n}$ -cyclohexylamino) benzenediazonium zinc chloride	62	+35	+40	3236	
2-(nN, nN-Methylaminoethylcarbonyl)-4-(3,4-dimethylphenylsulphonyl) benzenediazonium hydrogen sulphate	96	+45	+50	3236	

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