|  |  |  |
| --- | --- | --- |
|  | **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)**  **Thirty-first session**  Geneva, 28-31 August 2017 Item 4 (b) of the provisional agenda  **Proposals for amendments to the Regulations annexed to ADN:**  **other proposals** | | English  19 June 2017 |

Addendum to document ECE/TRANS/WP.15/AC.2/2017/39

Submitted by Germany

**Annex I:** (D Assignment of subgroups of explosion group IIB)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A. Positions that deviate from the norm:** | | | | | | | | | |
|  |  |  |  |  |  |  |  |  | |
| **UN no.** | **CAS –No.** | **Name** | **MESG [mm]** | **Equipment Group** |  |  | **Bemerkung** | **Ergebnis** | |
| 1120 | 71-36-3 | BUTANOLS (sec.- BUTYLALCOHOL) | 0,91 | IIA |  |  | entspricht der Norm | **IIA** | |
| 1163 | 57-14-7 | DIMETHYLHYDRAZINE | 0,85 | IIB1 |  |  | entspricht der Norm | **IIB1** | |
| 1188 | 109-86-4 | ETHYLENE GLYCOL MONOMETHYL ETHER | 0,85 | IIB1 |  |  | Messwert der PTB: 0,81 mm | **IIB2** | |
| 1229 | 141-79-7 | MESITYL OXYDE | 0,93 | IIA |  |  | entspricht der Norm | **IIA** | |
| 1274 | 71-23-8 | PROPYLALCOHOL | 0,89 | IIB1 |  |  | entspricht der Norm | **IIB1** | |
| 1275 | 123-38-6 | PROPIONALDEHYDE | 0,86 | IIB3 |  |  | Messwert der PTB: 0,84 mm | **IIB2** | |
| 1280 | 75-56-9 | PROPYLENE OXIDE | 0,7 | IIB3 |  |  | Messwert der PTB: 0,7 mm | **IIB3** | |
| 2048 | 77-73-6 | DICYCLOPENTADIENE | 0,91 | IIA |  |  | entspricht der Norm | **IIA** | |
| 2053 | 108-11-2 | METHYLISOBUTYLCARBINOL (methylamylalcohol) | 1,01 | IIA |  |  | entspricht der Norm | **IIA** | |
| 2357 | 108-91-8 | CYCLOHEXYLAMINE |  | IIA |  |  | entspricht der Norm | **IIA** | |
|  |  |  |  |  |  |  |  |  | |
| **B. Specific positions that have been tested** | | | | | | | | | |
|  |  |  |  |  |  |  |  | |  |
| wird mit Vorschlag für neue Bemerkung 44 geregelt | | | | | | | | | |
|  |  |  |  |  |  |  |  | |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **C. Specific positions that have been calculated** | | | | | | | | |
|  |  |  |  |  |  |  |  |  |
| **UN no.** | **CAS –No.** | **Name** | **MESG** | **Equipment** |  |  | **Bemerkung** | **Ergebnis** |
| 3475 |  | ETHANOL AND GASOLINE MIXTURE > 90% ethanol |  | IIB1 |  |  | entspricht der Norm | **IIB1** |
| 1863 |  | FUEL, AVIATION, TURBINE ENGINE (with more than 10% BENZENE) |  | IIB1 |  |  | wird mit Vorschlag für neue Bem. 44 geregelt |  |
| 2983 |  | ETHYLENE OXIDE AND PROPYLENE OXIDE MIXTURE, WITH ≤ 30% ETHYLENE OXIDE |  | IIB3 |  |  | entspricht der Norm | **IIB3** |
|  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **D. Positions for which explosion protection is not necessary** | | | | | | | | |
|  |  |  |  |  |  |  |  |  |
| **UN no.** |  | **Name** | **Melting point [°C]** | **Flashpoint [°C]** |  |  | **Bemerkung** | **Ergebnis** |
| 1198 |  | FORMALDEHYD, SOLUTION – (Until max. 75 % formaldehyde and min 25% water) |  | > 85 |  |  | Fromaldehylösung mit Flp.>65°C ist UN 2209 | **keine Änderung im ADN** |
| 1578 |  | CHLORONITROBENZENES (P-CHL.NITROBENZE) |  | 127 |  |  | Ex-Schutz, wenn nur Ladungsheizmöglichkeit und keine Ladungsheizungsanlage an Bord gefordert wird  Vorschlag für neue Fußnote 14 | **IIB3 14)** |
| 1663 |  | NITROPHENOLS | 114 | 169 |  |  | Ex-Schutz, wenn nur Ladungsheizmöglichkeit und keine Ladungsheizungsanlage an Bord gefordert wird  Vorschlag für neue Fußnote 14 | **IIB3 14)** |
| 2078 |  | TOLUENE DIISOCYANATE |  | 127/131 |  |  | Ex-Schutz, wenn nur Ladungsheizmöglichkeit und keine Ladungsheizungsanlage an Bord gefordert wird  Vorschlag für neue Fußnote 14 | **IIB3 14)** |
| 2205 |  | ADIPONITRIL |  |  |  |  | Frage, ob Ex-Schutz oberhalb der Temperatur aus Bem. 6 erforderlich?  Vorschlag für neue Fußnote 14 | **IIB3 14)** |
| 2259 |  | TRIETHYLENETETRAMINE |  | 129 |  |  | Frage, ob Ex-Schutz oberhalb der Temperatur aus Bem. 6 erforderlich?  wird mit Vorschlag für neue Fußnote 14 geregelt | **IIB3 14)** |
| 3446 |  | NITROTOLUENES, SOLID, MOLTEN | 52 | 109 |  |  | Ex-Schutz, wenn nur Ladungsheizmöglichkeit und keine Ladungsheizungsanlage an Bord gefordert wird  Vorschlag für neue Fußnote 14 | **IIB3 14)** |
|  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E. “N.O.S. – positions”, which should be considered based on their composition** | | | | | | | | | | | | | |
|  |  |  |  | |  | |  | |  | |  | |  |
| wird mit Vorschlag für neue Bemerkung 44 geregelt | | | | | | | | | | | | | |
|  |  |  |  | |  | |  | |  | |  | |  |
| **F. Positions for which a less strict explosion (sub)group could be assigned, when compared to similar products** | | | | | | | | | | | | | |
|  |  |  | |  | |  | |  | |  | |  |  |
| **UN no.** |  | **Name** | | **Simulair to UN no.** | | **Simulair to CAS –No.** | | **MESG [mm]** | | **Equipment Group** | | **Bemerkung** | **Ergebnis** |
| 1191 |  | OCTYL ALDEHYDES (n-OCTALDEHYDE) | |  | | 24-13-0 | |  | | IIA | | entspricht der Norm | **IIA** |
| 1275 |  | PROPIONALDEHYDE | |  | | 123-38-6 | | 0,86 | | IIB3 | | siehe Punkt A. | **IIB2** |
| 1783 |  | HEXAMETHYLENEDIAMINE solution | | 1604 | | 107-15-3 | | 1.178 | | IIA | | entspricht der Norm | **IIA** |
| 1989 |  | ALDEHYDES NOS \*\*not containing formaldehyde\*\* | | 2363 | | 75-07-0 | | 0,92 | | IIB2 | | wird mit Vorschlag für neue Bem. 44 geregelt |  |
| 2057 |  | TRIPROPYLENE (nonene) | | 2057 | | 25377-83-7 | | 0,95 | | IIA | | entspricht der Norm | **IIA** |
| 2280 |  | HEXAMETHYLENEDIAMINE, SOLID | | 1783 | | 1 | |  | |  | | Ex-Schutz, wenn nur Ladungsheizmöglichkeit und keine Ladungsheizungsanlage an Bord gefordert wird  Vorschlag für neue Fußnote 14 | **IIB3 14)** |
| ->1604 | | 07-15-3 | | ,178 | | IA | |
| 2309 |  | OCTADIENE (1,7-OCTADIENE) | | 2458 | |  | |  | | IIA | | Messwert der PTB: 0,73 mm | **IIB3** |
| 1010 | |  | |  | | IIB2 | |
| 2485 |  | n-BUTYLISOCYANATE or ISOBUTYLISOCYANATE | |  | | 624-83-9 | | 1,21 | | IIA | | entspricht der Norm | **IIA** |
| 2786 |  | ISOBUTYL ISOCYANATE | |  | | 111-36-4 | |  | | IIA | | entspricht der Norm | **IIA** |
| 2531 |  | METHACRYLIC ACID | |  | | 80-62-6 | | 0,95 | | IIA | | entspricht der Norm | **IIA** |
|  |  |  | |  | |  | |  | |  | |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **G. Products that should be tested** | | | | | | | | |
|  |  |  |  |  |  |  |  |  |
| UN no. |  | Name |  |  |  |  | **Bemerkung** | **Ergebnis** |
| 1088 |  | ACETAL |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 1108 |  | 1-PENTENE (n-AMYLENE) |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 1157 |  | DIISOBUTYL KETONE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 1167 |  | DIVINYL ETHER |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 1179 |  | ETHYLBUTYLETHER (ETHYL-tert-BUTYLETHER) |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 1216 |  | ISOOCTENES |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 1224 |  | KETONES N.O.S |  |  |  |  | siehe Punkt E wird mit Vorschlag für neue Bem. 44 geregelt |  |
| 1545 |  | ALLYL ISOTHIO CYANATE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 1991 |  | CHLOROPRENE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2205 |  | ADIPONITRILE |  |  |  |  | siehe Punkt D wird mit Vorschlag für neue Fußnote 14 geregelt | **IIB3 14)** |
| 2215 |  | MALEIC ANHYDRIDE, MOLTEN |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2264 |  | N,N-DIMETHYLCYCLOHEXYLAMINE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2288 |  | ISOHEXENEN |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2323 |  | TRIETHYL PHOSPHITE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2324 |  | TRIISOBUTYLENE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2350 |  | BUTYLMETHYLETHER |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2370 |  | 1- HEXENE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2381 |  | DIMETHYL DISULPHIDE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2477 |  | METHYL ISOTHIOCYANATE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2527 |  | ISOBUTYLACRYLATE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2618 |  | VINYLTOLUENE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2683 |  | AMMONIUM SULPHIDE SOLUTION |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 2920 |  | HEXADECYLTRIMETHYLAMMONIUM CHLORIDE (50%) and ETHANOL 35%) |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 3079 |  | METHACRYLNITRILE |  |  |  |  | PTB prüft, ob Messergebnisse vorliegen |  |
| 3256 |  | ELEVATED TEMPERATURE LIQUID,FLAMMABLE, N.O.S. |  |  |  |  | siehe Punkt E wird mit Vorschlag für neue Bem. 44 geregelt |  |
| 9001 |  | SUBSTANCES WITH A FLASHPOINT FP > 60 °C, HANDED OVER FOR CARRIAGE AT A TEMP WITHIN 15 k FROM THE FLASHPOINT |  |  |  |  | siehe Punkt E wird mit Vorschlag für neue Bem. 44 geregelt |  |

**Annex II (Specification of requirements to be met by the shore side in the new explosion protection scheme)**

**7.2.4.25.5** The gas/air mixtures shall be returned ashore through a vapour return piping during loading operations when a closed ~~type vessel~~ cargo tank is required in column (7) of Table C of Chapter 3.2.

For substances for which explosion protection is required according to column (17) of Table C of Chapter 3.2, it shall be ensured that the vapour return piping is such that the vessel is protected against detonations and the passage of flames from the shore. ~~The protection against detonation and the passage of flames from the shore shall at least correspond to the explosion group / subgroup according to 3.2.3.2 Table C, column (16).~~

The protection of the vessel against detonations and the passage of flames from the shore are not required when the cargo tanks are inerted in accordance with 7.2.4.18.

**1.4.3.3 (r**) He shall ascertain that, when prescribed in 7.2.4.25.5 and explosion protection is necessary according to 3.2.3.2 Table C column (17), there is a flame-arrester in the vapour return piping to protect the vessel against detonations from the shore side ~~which corresponds at least to the explosion group/subgroup in column (16) of Table C in 3.2.3.2.~~

**1.4.3.7.1 (i)** Ascertain that, ~~when prescribed in 7.2.4.25.5~~ there is a flame-arrester in the vapour return piping in case a connection to the venting piping is necessary, and explosion protection is necessary according to 3.2.3.2 Table C column (17), to protect the vessel against detonations and passage of flame from the shore side ~~which corresponds at least to the explosion group/subgroup in column (16) of Table C in 3.2.3.2,~~;