

## Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Globally Harmonized  
System of Classification and Labelling of Chemicals

9 December 2015

### Thirtieth session

Geneva, 9 – 11 December 2015

Item 3 (a) of the provisional agenda

**Classification criteria and hazard communication:**

**Dust explosion hazards**

## Dust explosion hazard December correspondence group meeting results

**Transmitted by the expert from the United States of America on behalf  
of the informal correspondence group on dust explosion hazards**

### I Meeting Results

1. The correspondence group undertook work stream #3 at the December meeting. Work stream #3 is: Discuss and develop an outline or work plan for guidance or a separate chapter in the GHS containing more detailed information on the conditions under which a dust explosion hazard could be encountered.

Using a thought starter provided by experts from Germany as the basis for the discussion, there was general support in the working group that dust explosion hazards would be best addressed by means of annex to the GHS. The annex would include definitions and hazard identification criteria, address risk management, and provide guidance for harmonized hazard communication for competent authorities that wished to require it.

2. The group discussed the conditions under which a dust explosion occurs, and agreed that the following conditions are needed: sufficient concentration of the fuel [dust], an ignition source, dispersion in air.

3. The group discussed a potential definition for an explosive dust atmosphere: A mixture of a combustible substance with air in the form of a dust after which ignition occurs and the combustion spreads to the entire unburned mixture.

4. After some discussion, the group also agreed that there are two aspects to be considered: a) deflagration without confinement, and b) other conditions resulting from confinement [e.g., a pressure rise].

5. To progress the work, the Chair, with the help of several volunteers, agreed to draft an outline of the proposed annex by the end of February 2016, using chapter 3 of the thought starter from Germany as a guide. The outline would include discussions on the conditions necessary for dust explosion hazards, and the items noted in paragraph 1.

6. The draft outline will be the basis for the discussions at the next working group meeting, planned for mid-March 2016.