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

Nineteenth session
Geneva, 30 June–2 July 2010
Item 2 (a) of the provisional agenda
Updating of the third revised edition of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Physical hazards

Status of the dust explosion hazards correspondence group

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

I. Introduction

1. At the 17th session of the Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, a correspondence group was formed, comprised of representatives that are subject matter experts, to collect information on dust explosion hazards from the members. The information to be requested includes:

(a) Existing definitions or criteria for dust explosion hazards including any analytical methods used and any methods for determining related relevant safety data used;

(b) Requirements (if any) for hazard communication on labels and SDSs;

(c) Explosion protection concept and derived safety measures; and

(d) Identification of issues related to addressing dust explosion hazards in the GHS, if any.

2. The correspondence group was also charged with analyzing the information collected and preparing an informal paper to be presented to the Sub-Committee summarizing the issues, as well as documenting the current practices/regulations that address dust explosion hazards. If appropriate, depending on the outcome of the analysis, the informal paper may propose future work to the Sub-Committee to develop a hazard communication scheme for dust explosion hazards in workplaces.

II. Background

3. Members of the correspondence group were identified in September 2009.

4. A conference call kick-off meeting was conducted on October 28, 2009.

5. Members of the correspondence group developed a survey instrument.

III. Status

6. The correspondence group distributed the survey (see Annex I) to the heads of delegation, requesting feedback by May 31, 2010. Seven countries have responded, but the correspondence group would appreciate feedback from those interested member countries that have yet to respond to the survey.

7. The correspondence group will meet during the GHS Sub-Committee's 19th session to discuss the results of the survey.

Annex I

Dust explosion hazard survey

Government/Member State:

Name: Contact information:

A. Definition

1. How should explosible dust be defined - by minimum particle size, without regard for particle size, or should the definition vary for the type of dust?

2. Do you determine whether a dust is considered explosible by reference to published data, testing, safety data sheets (SDSs), or some other means? Please explain.

B. Testing

3. Is responsibility assigned (by law) for determining if a dust presents an explosion hazard? If so, must the person making the determination have any expertise or qualifications?

4. Are there any prescribed tests to determine the explosibility of materials when in dust form? If so, please provide copies (in English, if possible).

5. Indicate what additional tests are conducted to determine the level of explosibility of a particular dust. If there are tests, are they generic or specific to the circumstances of the particular dust?

6. Do you have any dusts that you assume to be explosible or that present an explosion hazard, and, thus, preclude the need or expense of testing? If so, please indicate what type of dust.

C. Hazard Communication

7. Do you require SDSs to communicate the hazards associated with dust explosions? Do you require SDSs to list mitigation measures? If so, please provide the reference for these requirements.

8. How is information on the hazards of, and controls for, dust explosions communicated to workers?

9. If appropriate, what information is placed on labels to identify the possibility of a dust explosion hazard?

D. Standards

10. What standards or guides are used in your country to address explosible dusts in any manner (definition, testing, hazard recognition, hazard assessment, hazard communication, mitigation methods, emergency response, investigation, etc.)? Indicate if they are used throughout your country, or in a portion (state, province, city, etc.). Please provide a copy (in English, if possible).