

Meeting date: 5&6th October 2005**Open Govt. Status:** Fully Open**Type of paper:** For debate**Paper File Ref:****Exemptions:**

WATCH COMMITTEE

Colour Discrimination

Issue

1. Interpretation of data from tests of colour discrimination capability and the utilisation of such data in a risk management context, using styrene as an example.

Timing Considerations

2. No particular timing issues.

Recommendation

3. WATCH is invited to consider the issues noted in this cover paper and to respond to the actions in paragraph 12.

Background

4. Members will recall from the May 2005 meeting that HSE has carried out work looking at the effects of styrene and other organic solvent exposure on colour discrimination. The work culminated in a review published in the scientific literature in 2004 (Annex 1, not available electronically).

5. The review was considered by WATCH at the May meeting with an aim of reaching a position on how to interpret and utilise, in a risk management context, data from tests of colour discrimination capability. However, members had difficulty in reaching a position on the interpretation of the health significance of results from such tests in general and specifically in relation to the data for workers exposed to styrene (see Annex 2 for extract of minutes from May 2005 meeting).

6. It was agreed that HSE would try to arrange for a practitioner of colour discrimination tests to attend the October 2005 meeting to help WATCH interpret the results and health significance of the tests. To this end, Professor Ian Grierson of the Unit of Ophthalmology, Department of Medicine, University of Liverpool, has been invited to the October meeting as an ad hoc member.

Argument

7. On the evening of 5th October at The Palace Hotel, Buxton, members are invited to meet with Professor Grierson, to witness how colour discrimination tests are conducted and to take the opportunity to be tested for their own colour discrimination capabilities.

8. On the morning of 6th October members will be invited to consider colour discrimination generally, with Professor Grierson being available as an ad hoc member to answer questions and clarify issues with respect to the interpretation of the results of the various tests that are available. Members will then be invited to address again the issues within the published review (Annex 1) and to relate these specifically to the data for styrene (the WATCH paper on styrene, as presented in May 2005 and the summary of the Existing Substances Regulation hazard assessment are provided again at Annexes 3 & 4, respectively).

Link to HSC Strategy

9. The issue of colour discrimination capabilities and the consequences for the assessment and management of risk to health from styrene are part of HSE's work as part of the UK competent authority for ESR – an area of “mandatory” responsibilities within HSE's chemicals agenda.

Consultation

10. No wider consultation on the content of this cover paper beyond HSE has been undertaken at this stage.

European Context

11. Styrene is a “first priority list substance” under the Existing Substances Regulation (ESR)”

Action

12. WATCH is asked to consider the issues in this paper and to :
- i) Reach a position on the interpretation of the results from colour discrimination tests, with respect to significance for health.
 - ii) Apply its position to styrene, determining how its conclusion compares with the current UK occupational risk management position for this substance.

Contact:

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References / Attachments

Annex 1 R.B.Lomax, P. Ridgway and M.Meldrum. Does Occupational Exposure to Organic Solvents affect Colour Discrimination? Toxicol Rev 2004; 23 (2): 91-121.

Annex 2 Extract from minutes of May 2005 WATCH meeting

Annex 3 WATCH/2005/11

Annex 4 Summary of the ESR Hazard assessment for styrene