ECHA Consultation on the regulatory fitness of chemicals legislation (excluding REACH) May 2016

CLEAPSS response: Position paper and supporting notes

About CLEAPSS

CLEAPSS supports science, design & technology and art & design in schools and colleges, covering students aged 3-19. We support most schools and FE colleges in England, Wales and Northern Ireland, and others in Ireland, the rest of Europe and the world. We also support companies that supply chemicals and equipment to schools.

http://www.cleapss.org.uk/about-cleapss

Our current secondary science guidance is available to members:

http://science.cleapss.org.uk/

CLEAPSS therefore acts as an industry association and engages with actors throughout the chemicals supply chain. As our focus is on education, we are well placed to comment on both risk management and communication, both within the supply chain and to workers and other individuals who may be exposed to chemical agents.

CLEAPSS also is a member of HSE's GHS Stakeholders Group and attends DEFRA's UK Chemicals Stakeholder Forum. We therefore engage with a wide range of stakeholders.

We would welcome the opportunity to engage further with ECHA in its role in communicating chemical hazards.

Please also contact us if you would like us to provide you with access to our resources.

CLEAPSS Position paper: main points

In general, EC chemicals legislation helps to protect people from chemical hazards. However, we appreciate this opportunity to raise issues that require further attention. In particular:

- The framework is generally balanced, but needs to allow for small-scale use involving low risks of exposure to chemicals that pose relatively low risk. The current emphasis tends to cause unnecessary alarm in situations where the real risk is relatively low. Alternatively, disproportionate attention may be given to risks that are actually quite low, masking or diluting the need to consider and control more-significant risks
- There is a need for more public engagement and, in places, clearer, more-accurate guidance
- Some gaps and inconsistencies need to be addressed, particularly regarding the quality of some of the data available and the potential for confusion over inconsistencies between the use of symbols in different legislation.

Supporting notes to the questionnaire

Q16 In your view, to what extent are the following elements of the overall EU legislative framework for chemicals satisfactory?

While there is plenty of guidance:

- It does not necessarily address the needs of a user who 'does not know what she/he doesn't know'. There is room for more-general guidance on working safely with chemicals.

  An example of this deficiency relates to CLP labelling. Some of the pictograms have caused confusion eg,

  - GHS08: there is a widespread perception that this stands only for carcinogenicity.

- GHS02: this covers a wide range of hazards, not all of which have compatible properties. Eg, dilauroyl peroxide (EC 203-326-3): H242 *Heating may cause a fire*.

This is not addressed in the simple guidance eg,

http://echa.europa.eu/web/guest/chemicals-in-our-life/clp-pictograms

This does not explain what the pictograms mean. As it may be the single piece of advice an inexperienced user will access, more explanation would be helpful. While various directives require employers to train employees, experience in the real world demonstrates that this does not always occur or cover all that is required. Public awareness is therefore important.

- Not all users are aware of the available guidance. ECHA needs to engage more directly with individual stakeholders. Eg, not all self-employed individuals, micro-enterprises and SMEs that work with chemicals belong to a trade association that engages with ECHA and disseminates information and advice.
- Infocards: These are a good portal to more-detailed information on chemicals. However, the 'front page' information on classification and labelling is often potentially misleading because it reflects a combination of information including that from CLP notifications. The data on which these classifications are based is not provided, and classifications can vary widely. Eg, for dilauroyl peroxide: 20% of notified classifications differ from both the harmonised classification and that provided by the registrant and for Methylene blue: again, classification vary widely.

Examples of unclear Infocards

3,7-Bis(dimethylamino)phenazathionium chloride (Methylene blue) EC / List no.: 615-731-6; CAS no.: 7220-79-3	
Infocard http://echa.europa.eu/substance-information/-/substanceinfo/100.130.908 GHS07, GHS08 Warning! According to the classification provided by companies to ECHA in CLP notifications this substance is harmful if swallowed, causes serious eye irritation, may cause damage to organs through prolonged or repeated exposure, causes skin irritation and may cause respiratory irritation.	**Note on the Infocard** This gives a combination of notified classifications: http://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/122089 In addition, roughly 20% of notifiers (12/59) do not classify this chemical at all.
Dilauroyl peroxide (diundecylperoxyanhydride); EC / List no.: 203-326-3 CAS no.: 105-74-8	
Infocard http://echa.europa.eu/brief-profile/-/briefprofile/100.003.025 GHS02 (GHS01) Danger! According to the harmonised classification and labelling (CLP00) approved by the European Union, this substance if heated may cause a fire.	**Note on Infocard** This gives the harmonised classification and also the classification provided by the registrant and 90% of CLP notifications. However, GHS01 is also shown. This does not match any of the sources used. See CLI: http://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33641

Such variations and uncertainties should be indicated eg, by presenting a range of pictograms and H statements, stating whether these are from registrations or notifications and making clear that they are not definitive.

Q17 In your view, to what extent are the following elements of risk management satisfactory?

- The framework is generally balanced, but needs to allow for small-scale use involving low risks of exposure to chemicals that pose relatively low risk. Examples include:
    - Young people at work (Directive 1994/33/EC): while the need for the employer to assess the risk is noted, much of the requirements will not apply to such 'low risk' situations
    - • Pregnant workers (Directive 1992/85/EEC): as for Directive 1994/33/EC
    - • Signs at work (Directive 92/58/EEC): the containers used by most small-scale users will be those in which the relatively small quantities of chemicals were supplied in.

  The current emphasis tends to cause unnecessary alarm in situations where the real risk is relatively low. For example, many small users work with gram and milligram quantities, and some school activities are carried out on a microscale. See eg:

  http://science.cleapss.org.uk/Resource-Info/Microscale-Electrolysis-of-Copper-Chloride.aspx

  A poster displaying further microscale activities is also attached.

- The data provided by registrants does not always match the classification which (should be) based on that data. More-stringent checks on this aspect are needed before registrations are accepted. We refer to this point again in our response to question 34.
- Most legislation is fairly general eg, specific PPE is not specified. However, this is entirely appropriate as such details in the choice of risk management measures can only be addressed by the employer who is best placed to assess needs in the light of its particular activities and in the context of exposure by its particular users.
- Hazard risk communication via labels causes some confusion (see comments to question 16). In addition, when more than one hazard is present and the overall classification is at Danger level, identifying the hazard(s) leading to classification at that level is not immediately obvious. This could be resolved by specifying that the H statement(s) that contribute to classification Danger level are printed in bold font to highlight them.
- Labels for very small packages: much work has been done to assist in this area. However, there is no limit below which a labelling need not be fully CLP-compliant. For example, very small samples of restriction enzymes, which pose no risk in the tiny quantities supplied (below the scale of micrograms), packed in very tiny containers (maybe smaller than 15 mm high x 5 mm diameter), need labels that comply with the small-quantity requirements. In addition to the logistical problems this raises, provision of such detailed information that does not really apply to the sample to which it relates vastly and disproportionately increases the perception of risk.

Q20 In your view, what are the most significant costs incurred by EU society due to EU chemical and chemical-related legislation? …

We are not qualified to respond regarding the authorities. We simply note that these bodies will bear a significant cost in the aspects of the legislation that falls within their remits.

Q26 Please indicate any incoherence (gaps or missing links, overlaps, inconsistencies etc.) between the different pieces of legislation which are under the scope of this fitness check. …

Gaps:

Packaging: *Classification, labelling and packaging* (Regulation No (EC) 1272/2008) (CLP) addresses packaging (*Article* 35). *Article* 35 (3) states that:

> The packaging of substances and mixtures shall be deemed to satisfy the requirements of paragraph 1(a), (b) and (c) if it complies with the requirements of the rules on the transport of dangerous goods by air, sea, road, rail or inland waterways.

Packing materials need to 'not be susceptible to damage by the contents' [Article 35 (1) (b)] and 'the packaging and fastenings shall be strong and solid throughout to ensure that they will not loosen and will safely meet the normal stresses and strains of handling' [Article 35 (1) (c)]. It would be helpful if CLP could consider packaging over the lifetime of the chemical in storage, not just during transport.

Many users, including schools and colleges, store reagents in the packaging in which it is supplied and may need to do so for long periods (many years). This can raise problems with certain reagents. For example, concentrated nitric acid can attack plastic containers over time to the extent that they leak, hydrogen chloride permeates through the plastic bottles containing hydrochloric acid and sulfuric acid reacts with the plastic bottle material. It is worth noting that while users could decant reagents into fresh containers, the transfer process would raise additional risks.

Manufacturers are reluctant to supply these chemicals in glass (which would be less susceptible to damage from the reagents) due to experiences of breakages in transit. These reagents are generally supplied as LQ and therefore often not sent via fully-ADR-trained carriers. The plastic containers used are fully UN-compliant, but not suitable for long term storage.

Inconsistencies:

Use of signs: *Classification, labelling and packaging* (Regulation No (EC) 1272/2008) (CLP) and *Signs at work* (Directive 92/58/EEC) (SAW)

- The 'General Danger' sign (an exclamation mark in a black triangle on a yellow background) in SAW can be confused with the CLP pictogram GHS07 which refers to 'moderate hazards'. Both employ and exclamation mark (!). This is significant because SAW allows the use of *either* SAW *or* CLP pictograms where signage is needed. There is therefore scope for confusion.
- Under CLP, GHS07 is accompanied by the signal word 'Warning', which is a lesser level of severity to the CLP signal word 'Danger'. It would be much clearer if the SAW sign could be renamed 'General warning', or a different sign was designed to denote 'General Danger'. The signs with which people are most familiar are road safety signs, where the exclamation mark is commonly (but not universally) used as a general caution warning. Also, in practice, the SSSR sign for General Danger is used in widely ranging contexts. The general mandatory sign also uses an exclamation mark, and is labelled *general mandatory sign* in SAW Annex II (3.3).
- This confusion is additionally significant because, while on stores containing only one chemical, the appropriate sign – either from SAW Annex II (if appropriate) or the appropriate CLP pictogram must be used, the SAW General Danger sign is required on stores containing mixed chemicals. Therefore, both stores with only chemicals classified with hazards covered by GHS07 and those with mixed chemicals, possibly including more-hazardous chemicals would have signs with an exclamation mark:

	
The GHS/CLP pictogram GHS07 for 'moderate hazards' **To be used on stores containing chemicals with only this hazard classification**	**The SAW sign for 'General danger'** **To be used on stores with chemicals with mixed hazards**

Given that warning signs (both for the workplace and for traffic) do not appear to be specified in a UN Directive, and therefore signs used in different countries may vary, could this issue be addressed? Possible solutions would be:

- Inventing a new sign, distinct from GHS07, to represent general danger / general warning / general caution. For example, a yellow triangle with three exclamation marks: '!!!' would retain the use of the familiar exclamation mark and the triple repetition would emphasise that it related to a more-severe level of hazard. This would help to reduce confusion.
- Renaming the SAW 'General Danger sign' as 'General Warning sign'. This would align the terminology with the signal word 'Warning' which accompanies the CLP GHS07 pictogram. However, this option is less satisfactory because the SAW sign is used in a range of contexts, which also vary in severity.

Please see the attached document with examples illustrating the potential for confusion.

Q30 How effective is the support to companies through formal guidance documents and national helpdesks?

We have already commended (response to question 16) on some weaknesses in ECHA guidance and the information displayed, and that ECHA needs to engage more directly with SMEs, micro enterprises, individual professional users and consumers. In contrast, our experience with ECHA's and the UK's Helpdesks have been positive.

Part V: Additional comments

Q35 In case you have any additional comments with relevance for this public consultation, please insert them here.

As mentioned in response to previous questions, we summarise comments on the consultation:

- It is important to be mindful of small-scale users for whom exposure is relatively low, and to distinguish between their situation and that for large-scale users.
- Many of our comments relate to guidance and public engagement, rather than the legislation itself. However, this aspect of ECHA communication is critical to its effective implementation. Kindly advise if a different forum would be appropriate for these points.
- Some questions do not appear to come within the remit of this consultation. Eg, Q17 and Q34: provision and contents of safety data sheets and harmonised classification and labelling: these come largely under REACH.
- Q20: we can't compare the costs for consumers and SMEs with those for other bodies.