

Updated CONCAWE guidance for classification and labelling of petroleum substances

Impacts on petroleum substances containing benzene, 1,3-butadiene or toluene

Introduction

The 29th Amendment to Technical Progress (ATP) to the Dangerous Substances Directive (DSD) was published in 2004, and introduced specific changes to the hazard classification (Annex 1 entries) for Petroleum Gases and for certain individual hydrocarbons present in Low Boiling Point Naphthas (LBPN, including gasoline). CONCAWE guidance on hazard classification and labelling for petroleum substances has recently been updated and re-issued to take account of these changes (Report No. 6/05). The purpose of CONCAWE's recommendations is to promote harmonisation in the classification and labelling of petroleum substances throughout Europe and thereby to help in the safe handling and use of petroleum substances.

As previously, the guidance includes details of mandatory hazard classification (as presented in Annex 1 to the DSD), along with recommendations for industry self-classification for the full range of safety, health and environment endpoints according to the criteria laid down in the DSD. The 29th ATP is due to be implemented into Member States' legislation for compliance by 31 October 2005.

Summary of changes

Petroleum Gas entries: Revised entries now appear in the 29th ATP as a result of the revised hazard classification for 1,3-butadiene in the 28th ATP. Both 1,3-butadiene and Petroleum Gases containing more than 0.1% m/m of 1,3-butadiene are now classified as **Carcinogenic Category 1 - R45** and **Mutagenic Category 2 - R46: May**

cause heritable genetic damage. Since petroleum gases containing more than 0.1% of 1,3-butadiene were previously classified as Carcinogenic Category 2 - R45, the inclusion of the new hazard classification (R46) does not require the application of additional precautions regarding exposure.

Low Boiling Point Naphthas (Gasolines): Changes follow from updating of the hazard classifications for benzene and toluene in the 29th ATP. Benzene is now classified as Mutagenic - Category 2, and CONCAWE recommends inclusion of self-classification **Mutagenic Category 2 - R46: May cause heritable genetic damage** to LBPN when benzene is present at more than 0.1% m/m. Since LBPN containing more than 0.1% of benzene are already classified as Carcinogenic Category 2 - R45, the inclusion of this classification does not require the application of additional precautions regarding exposure.

 EXTREMELY FLAMMABLE		 DANGEROUS FOR THE ENVIRONMENT	<p>Low boiling point naphtha - unspecified, EC No. 289-220-8 May cause cancer. May cause heritable genetic damage. Possible risk of harm to the unborn child. Also harmful: may cause lung damage if swallowed. Irritating to skin. Vapours may cause drowsiness and dizziness. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> <p>[Keep out of the reach of children.] Do not breathe vapour. Avoid exposure - obtain special instructions before use. In case of accident, or if you feel unwell, seek medical advice immediately (show the label where possible). [If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.] In case of fire, use ... (indicate in the space the precise type of fire-fighting equipment. If water increases risk, add - 'Never use water'). Avoid release to the environment. Refer to special instructions/Safety data sheets.</p> <p>EC Label COMPANY NAME, ADDRESS and TELEPHONE No.</p>
--	---	---	---

 EXTREMELY FLAMMABLE		<p>Petroleum gas - EC No. 270-704-2 May cause cancer. May cause heritable genetic damage.</p> <p>Avoid exposure - obtain special instructions before use. In case of accident, or if you feel unwell, seek medical advice immediately (show the label where possible).</p> <p>Keep away from sources of ignition - No smoking. Restricted to professional users.</p> <p>EC Label COMPANY NAME, ADDRESS and TELEPHONE No.</p>
---	---	--

Similarly, following updating of the hazard classification for toluene (now classified as Reproductive toxicant - Category 3), CONCAWE recommends inclusion of self-classification **Reproductive toxicant Category 3 - R63: Possible risk of harm to the unborn child** to LBPN when toluene is present at more than 5% m/m. In view of the other hazards of LBPN, the inclusion of this additional hazard classification does not require the application of additional precautions regarding exposure.

Updated CONCAWE guidance for classification and labelling of petroleum substances

Impacts on petroleum substances containing benzene, or 1,3-butadiene or toluene

For both LBPB self-classifications, the recommendations follow the precedent established by the Member States Classification and Labelling Working Group (application of the administrative rules of the Dangerous Preparations Directive) for hydrocarbon constituents of complex petroleum substances. However, in relation to both of these health end-points, there are test data to indicate that LBPB are neither mutagenic nor toxic to reproduction. The application of the administrative rules and inclusion of these additional Risk Phrases should not be taken to indicate that the underlying hazards of these products have changed in any way.

It is CONCAWE's intention to formally discuss with Member States the decision to self-classify LBPB in this way.

Future changes to hazard classification

This latest edition of the CONCAWE classification guidance highlights that there are two issues potentially impacting on the classification and labelling of petroleum substances that remain under discussion—the use of 'Indication of Danger' on labels for substances classified as carcinogenic and the environmental hazards of heavy fuel oil components.

The European Commission has also already signalled its intention to publish at least one further ATP that is likely to have relevance for petroleum substances.

Any changes resulting from these initiatives will be incorporated in a future update to the classification guidance.