

## ESIG SUPPORTS THE EUROPEAN AGENCY FOR SAFETY AND HEALTH AT WORK



ESIG is proud to be supporting the European Agency for Safety and Health at Work (EU-OSHA) in the Healthy Workplaces Campaign. EU-OSHA was established by the European Union in 1996 to improve the protection of the safety and health of workers and working environment in Europe by providing information in the field of safety and health at work. The Agency focuses on research, development and the distribution of reliable, balanced and impartial health and safety information to pan-European awareness raising campaigns. These campaigns reach out to

governments, employers' and workers' organizations, EU bodies and networks, and private companies as well as leading experts, to contribute towards making Europe a safer, healthier and more productive place to work.

The Healthy Workplaces Campaign focuses on risk prevention and managing risks. The campaign is designed to help national authorities, companies, organisations, managers, workers and other stakeholders to work together to enhance safety and health in the workplace, thereby laying the foundations for a more sustainable risk prevention culture in Europe.

ESIG believes that proper implementation of companies protocols on safety and security also creates significant opportunities for both employers and workers who are healthier, happier and better motivated.

Central to the campaign are a range of materials that will further support these goals. These include reports, practical guides, flyers, posters and DVDs. In addition, ESIG will be joining forces with its partners and national focal points to promote the European Week for Safety and Health at Work, as well as helping to organise training seminars, conferences and exhibitions.

## NEW IBC DVD AVAILABLE AND FLAMMABILITY GUIDE SOON TO BE RELEASED

Over the summer, we released our new DVD on Intermediate Bulk Containers (IBCs) which has been produced in cooperation with the Solvents Industry Association (SIA) in the UK to increase the awareness of safe IBC handling among solvent users and to promote best practice techniques throughout the supply chain.

The video offers practical advice on the different types of IBCs available for the transport and storage of fluids and bulk materials as well as comprehensive recommendations on storage, stacking and regular inspection.

This production is another example of the strong commitment of the solvents industry towards the support of a safe and responsible use of solvents. The DVD includes five language options, English, German, French, Spanish and Italian and can be watched online or downloaded from the ESIG website. It can also be obtained free of charge from [esig@cefic.be](mailto:esig@cefic.be)

In addition to this, we are updating the current Best Practice Guidelines on Flammability to play an integral part in ESIG's product stewardship offerings which we expect to be completed in the first half of next year.

For other articles please follow us online :

[www.esig.org](http://www.esig.org)

### HAPPY HOLIDAYS

ESIG wishes all Solutions readers a **Merry Christmas** and a **Happy New Year!**



SOLUTIONS IS PRODUCED BY THE EUROPEAN SOLVENTS INDUSTRY GROUP.

For further information, please visit our website at [www.esig.org](http://www.esig.org)

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# SOLUTIONS

THE NEWSLETTER OF THE EUROPEAN SOLVENTS INDUSTRY GROUP

SOLVENTS: SIMPLY ESSENTIAL

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## FROM THE DIRECTOR GENERAL

Dear Readers,

In addition to our season's greetings to you all, we are pleased to present some developments in the solvents industry in this issue of Solutions.

Our main news from this year's activities is the expansion of a new methodology to calculate Volatile Organic Compound (VOC) emissions from solvents across the 27 EU Member States. This new methodology considers the volumes of solvents sold in Europe instead of using current official numbers which estimate end use volumes, leading to uncertainties. We came to the result that today's VOC emissions from solvents in Europe are overestimated by more than 35%. Numerous exchanges with official representatives and independent air quality experts at European and Member State level have concurred with this statement. In October, we supported an Urban Air Quality Workshop in Istanbul along side the Istanbul Technical University, EUROCHAMP-2 and the University of Wuppertal. This workshop allowed us to, once more, review the methodology with nearly 40 representatives from European Universities. These discussions encouraged us to share our new approach with the European Institutions involved in air quality measurement and modelling.



Furthermore, Professor Karl Heinz Becker from the University of Wuppertal reaffirmed that the ESIG study provides a new robust approach confirming what many experts have anticipated for years, that Solvents VOC emissions in Europe are, by far, overestimated by authorities.

We are also pleased to inform you about other important activities that we are engaging in to support the safe use of solvents. This year we entered into a new partnership with the European Agency for Safety and Health at Work (EU-OSHA), participating in their two year campaign "Working together for risk prevention".

The new Best Practice Guidelines on Safety and updated Generic Exposure Scenarios will soon be published. In addition to this, our new DVD about the safe use of Intermediate Bulk Containers, which we have produced in cooperation with the UK Solvents Industry Association is now available.

With this winter edition of Solutions you will also receive our 2013 calendar, which I hope will find (as with last year's Calendar) a home on your desk. You may be surprised to see how many applications of Solvents are contributing to solutions in our daily life and future challenges!

I look forward to reporting on the future progress of our activities and hope you enjoy our latest Newsletter and the holiday season!

Antoinette Brossier

## CEPIC PAN EUROPEAN SURVEY

This summer, Cefic carried out their bi-annual Pan European Survey measuring the reputation of the chemical industry.

For 2012, 5,900 Europeans including the general public and opinion-leading citizens from the Member States responded to the survey. The favourability index results were extremely encouraging with 88% of respondents being favourable or neutral towards the chemical industry.

The overall European public sees the quality of life as the biggest benefit that the chemical industry is bringing. They also recognise our role as an enabler of innovation in other industries. Energy efficiency also proves to be a top asset, when addressing environmental impact and sustainability.

To obtain additional information on solvents, please visit the European Solvents Industry Group website: [www.esig.org](http://www.esig.org)



## INVENTORY TO CALCULATE VOC EMISSIONS FROM SOLVENTS



The comparison of ESIG Solvent VOC Inventories with EEA data has indicated that total VOC emissions from solvents in the 27 EU Member States were 65% for 2008 and 63% for 2009 of the EEA estimate.

This data and analyses were presented to leading European experts in Air Quality and atmospheric science at their annual conference in October this year (Istanbul 14-17<sup>th</sup> October), and both the approach and final results were in line with other workers who have measured VOC emissions in Europe, notably in France and Germany. In this way, our work has been endorsed by the scientific community on Air Quality Research.

This ESIG study concludes that EEA inventories have substantially overestimated VOC solvent emissions in the EU27.

TABLE: EU27 solvent VOC emissions in 2008 and 2009 in ktonnes

	EEA	ESIG	% ESIG results versus EEA
2008	3.335	2.159	65
2009	3.050	1.916	63

At an international level, the United Nations Economic Community for Europe (UNECE) has also set targets for emissions of Nitrogen Oxides (NO<sub>x</sub>), Non-Methane Volatile Organic Compounds (NMVOCs), Sulphur Dioxide (SO<sub>2</sub>), Ammonia (NH<sub>3</sub>) and fine particles (PM2.5) to be met by 2020. The Gothenburg Protocol, an extension of the 1979 Geneva Convention on Long-Range Transboundary Air Pollution, also aims to abate acidification, eutrophication and ground-level ozone and particles for countries outside Europe by setting upper limits for Russia, Canada and the US.

In May 2012, a revised Gothenburg Protocol was agreed, following an assessment of its progress since 2010. The EU, Norway, Switzerland and the United States are now required to formally ratify the revised text. Russia, Canada, the Ukraine and Georgia, who participated in the negotiations, may seek to ratify this new text.

The revised Protocol sets more ambitious air quality objectives for 2020, whilst aiming to increase the number of parties committed to it. It is the oldest international convention addressing air pollution on a global scale. ESIG is keen to communicate detailed VOC emissions from solvents data with the EU institutes and to work together with legislators and experts to improve air quality in the European Union in advance of the 2013 EU year of air.

“The new inventory from ESIG based on solvent volumes sold in the EU27 brings a new interesting perspective which will help us to challenge our estimates of VOC emissions.”

Nadine Allemand  
Deputy Director, CITEPA

The Air Quality Team of ESIG, chaired by John Pearson, has developed a new methodology for a more accurate calculation of Volatile Organic Compounds (VOCs) emissions from solvents for each end-use sector, country or group of countries within the 27 EU Member States. The methodology aims at improving the quality and robustness of emissions' data by basing calculations on actual volumes of solvents rather than estimates. Moreover, this new methodology is aligned with REACH via the use of similar market sectors, further enabling Member States with their submission of data to the European Chemicals Agency.

ESIG has been actively working on controlling VOC emissions from solvents for over 15 years to contribute to the improvement of air quality at EU level. The calculation of VOC emissions is complex due to the fact that both natural and man-made emissions originate from many sources. Member States currently submit VOC emissions from solvents inventories to the European Union institutes: the European Environment Agency (EEA) and the International Institute for Applied Systems Analysis (IIASA) both of whom greatly influence the EC on future air quality targets.

For the purpose of the ESIG inventories, European solvent producers were invited to submit their solvent sales data (both Hydrocarbon and Oxygenated) for 2008 and 2009. VOC emissions from solvents were then calculated in detail for all 27 EU Member States for these two years by applying emissions factors for each market sector. The total chlorinated solvents data was also available for the years 2008 and 2009, and these are assumed to be emitted at 100%. The development of this methodology should enable a more accurate calculation of Solvent VOCs emissions, providing policymakers with reliable information on actual emissions as opposed to estimates.

## MULTISOL CELEBRATES ESIG PRODUCT STEWARDSHIP AWARD

In September Multisol celebrated their 2011 ESIG Product Stewardship Award at their greater Manchester site. Multisol was presented with the ESIG Product Stewardship Award at the annual Cefic Responsible Care Conference in Brussels for their project "Changing the Perception of our Industry Group". The event provided an opportune moment to underline their commitment to the safe use of solvents in the presence of local employees and school representatives involved in the winning project as well as customers, local authorities and ESIG representatives.

Multisol is an independent, specialist chemical distributor and formulator based in the UK and operating across continental Europe, Africa and the Middle East. Multisol uses its technical support and product development to deliver high performance and environmentally efficient products.

Since 1999, the ESIG Product Stewardship Award has been rewarding companies that demonstrate excellence, innovation and continuous improvement in the use of solvents, health and safety and environmental protection beyond regulatory requirements. The next ESIG Product Stewardship Award will take place in 2014 with the application phase opening at the end of 2013.



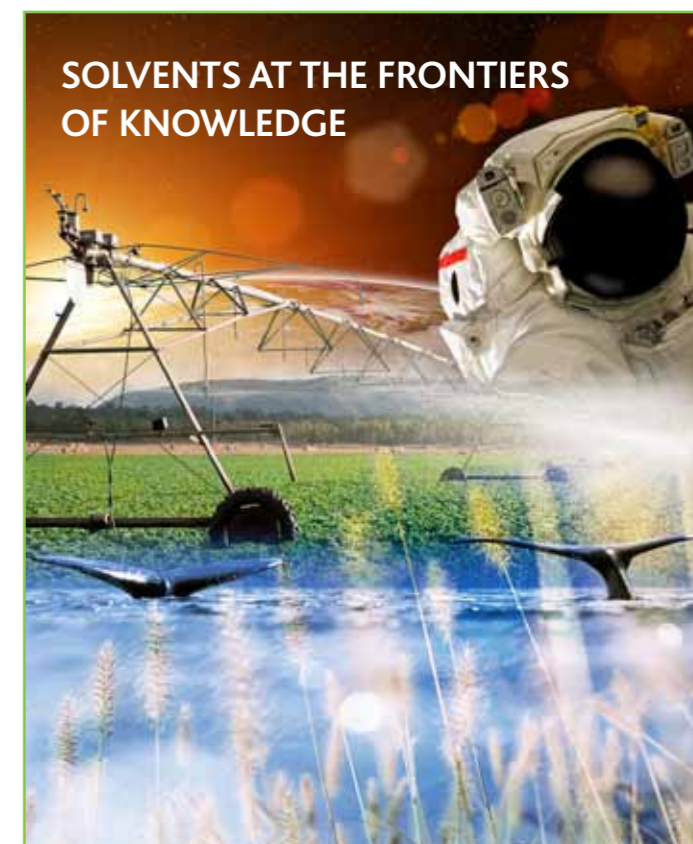
## NEW ADDITIONS TO THE GENERIC EXPOSURE SCENARIOS LIBRARY

As part of its commitment to encourage compliance with REACH throughout the supply chain, ESIG has developed 22 Generic Exposure Scenarios (GES) in collaboration with the downstream users who participate in the European Solvents VOC Co-ordination Group (ESVOC) bringing together over 30 associations. Five of these associations, namely the International Association for Soaps, Detergents and Maintenance Products (AISE), the European Council of Producers and Importers of Paints, Printing Inks and Artists Colours (CEPE), the European Aerosol Federation (FEA), the European Association of Chemical Distributors (FECC) and the Association of European Adhesives and Sealants Manufacturers (FEICA), were actively involved in the process which covers all common industrial, professional and consumer uses of solvents.

The GES tools have been available on the ESIG website in the GES Library<sup>1</sup> since 2010, providing companies with standardised communication materials by simplifying the process of submitting exposure scenarios under REACH. The tools also offer guidance on how to build solvent exposure scenarios for workers and consumers and environmental exposure scenarios.

As a result of the European Chemical Agency's (ECHA) initiative to identify industry best practices when drafting exposure scenarios, a workshop was organised last year by the Exchange Network on Exposure Scenarios (ENES) in November. The ENES event involved the participation of approximately 100 representatives from different industries, downstream users and legislators. It was an adequate occasion for ESIG to present its work on developing GES for solvents. ESIG is committed to regularly reviewing the GES Library in order to support the second version of the safety assessment and reporting (CHESAR) tool. The update of these GES will involve two subgroups, one responsible for updating the worker and consumer exposure and another for the update of environmental exposure and it will also be useful for the 2013 REACH registration deadline.

## SOLVENTS AT THE FRONTIERS OF KNOWLEDGE



Solvents are at the cutting edge of innovative technologies in society's effort to discover new know-how to make the world a better place to live. It is with solvents at the frontiers of knowledge in mind, that we have developed a 2013 calendar capturing some of the exciting next generation research and development under way in pharmaceuticals, electronics, transport, agriculture, palaeontology and renewable energy.

<sup>1</sup> <http://www.esig.org/en/regulatory-information/reach/ges-library/ges-library-3>