

33rd Annual Report

ETAD[®]

**ECOLOGICAL AND
TOXICOLOGICAL
ASSOCIATION OF
DYES AND ORGANIC
PIGMENTS
MANUFACTURERS**



Mission Statement

THE PURPOSES OF THE ASSOCIATION
ARE THE FOLLOWING :

To coordinate and unify the efforts of manufacturers of synthetic organic colorants to minimize possible impacts of these products on health and the environment



To achieve these ends by the most economic means without reducing the level of protection of health and the environment



To encourage harmonization of health and environmental regulations in key geographical areas

To represent the positions and interests of the manufacturers of organic colorants towards authorities, public institutions and media



To promote responsible environmental and health risk management during manufacture, transport, use and disposal



To enhance the recognition of the commitment of ETAD members to responsible behaviour with respect to health and the environment

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Introduction

ETAD MEMBER COMPANIES

ALBION COLOURS LTD.
England

ATUL LIMITED
India

BASF AG
Germany

BEZEMA AG
Switzerland

CAPPELLE PIGMENTS N.V.
Belgium

CAREY INDUSTRIES, INC.*
USA

**CIBA SPECIALTY
CHEMICALS INC.**
Switzerland

**CLARIANT PRODUCTS
(SWITZERLAND) LTD.**
Switzerland

CLARIANT CORPORATION*
USA

**COLOURTEX INDUSTRIES
PVT. LTD.**
India

**DAINICHISEIKA
COLOR & CHEMICALS MFG.
CO., LTD.**
Japan

**DAINIPPON INK &
CHEMICALS INC.**
Japan

DYSTAR L.P.*
USA

**DYSTAR TEXTILFARBEN
GMBH & CO.
DEUTSCHLAND KG**
Germany

EC PIGMENTS
England

**EVERLIGHT CHEM.
INDUSTRIAL CORP.**
Taiwan, R.O.C.

EVERLIGHT U.S.A., INC.*
USA

FARBCHÉMIE BRAUN KG
Germany

**FUJIFILM IMAGING
COLORANTS LTD.**
England

HEUBACH GMBH
Germany

**HODOGAYA CHEMICAL CO.
LTD.**
Japan

**HUNTSMAN, MATERIALS &
EFFECTS***
USA

**HUNTSMAN, MATERIALS &
EFFECTS**
Switzerland

**KEMIRA PPC GERMANY
GMBH**
Germany

KEMIRA CHEMICALS, INC.*
USA

**KYUNG-IN SYNTHETIC
CORPORATION**
Korea

M. DOHMEN GMBH
Germany

**MITSUBISHI CHEMICAL
CORPORATION**
Japan

NIPPON KAYAKU CO., LTD.
Japan

OH YOUNG IND. CO. LTD.
Korea

**ORIENTAL GIANT
DYES & CHEMICAL IND.
CORPORATION**
Taiwan, R.O.C.

SANYO COLOR WORKS LTD.
Japan

SENSIENT COLORS INC.*
USA

SETAŞ KİMYA SANAYİ A.S.
Turkey

STAHL INTERNATIONAL BV
Netherlands

SUNCHEMICAL A/S
Denmark

SYNTHESIA, A.S.
Czech Republic

**T&T INDUSTRIES
CORPORATION**
Taiwan R.O.C.

**TENNANTS TEXTILE
COLOURS LTD.**
Northern Ireland

**TFL LEDERTECHNIK
GMBH & CO. KG**
Germany

**THAI AMBICA
CHEMICALS CO., LTD.**
Thailand

TRI-TEX CO INC.*
Canada

TOYO INK MFG. CO., LTD.
Japan

**UNITED COLOR
MANUFACTURING, INC.**
USA

* member company of ETAD
North America

Current list of members under:
www.etad.com

FROM THE PRESIDENT

ETAD was formed as an association in 1974. The changes in the composition of the ETAD membership since then give some indication of the extent of the corresponding transformation of the industry. In 1974 the market leaders, the so-called "Big Six", were all part of large multinational conglomerates: BASF, Bayer, CIBA-Geigy, Hoechst, ICI, Sandoz.

As a result of numerous mergers, takeovers and spin-offs, few of these founding members are now recognizable in the current membership list. Although the Association has been spared the seemingly endless reorganisations undergone by many of its member companies, it has also needed to modernise to meet the demands of the new work environment. ETAD depends on the support and sweat equity provided by the members of the Board and the various technical and specialist committees. The continued downsizing within the member companies has inevitably led to a significant reduction in the support which can be made available to ETAD. This can be compensated to some extent through a more focused approach but there is also a need to spread the workload by encouraging all member companies to bear their share of the workload.

I hope that our current and incoming Asian members will make a valuable contribution by getting involved in shaping ETAD's activities in this important region. Examples of common issues have been addressed in the case of HCBs, food contact materials and REACH amongst others.

The Asian countries, notably China and India, are now the major manufacturers of commodity organic colorants and their intermediates as well as having large and growing textile and leather industries. Due to their rapid growth both countries face a serious challenge to achieve a sustainable balance between economic development and environmental protection. With the formation of the ETAD Chinese Operating Committee (ChOC) in September 2005 and with the Indian Operating Committee (IOC) established in December 1997 ETAD has the foundation for future activities in these key countries. I do not underestimate the difficulties in developing these regional operating committees to be effective advocates for ETAD.

**Dr. Erwin Stark (BASF)
President of ETAD**



Even in Europe, where ETAD focused its early activities, it took a lot of time and effort before an effective network of contacts was established with the relevant associations, regulatory authorities and non-governmental organisations. Credibility is not gained overnight but by establishing a reputation for competent, constructive and responsible advocacy. Once gained, a good reputation is very easily lost! ETAD's shift in attention to the East is driven by the realities of the global market and the need to fulfil its role as an international association. The General Assembly 2007 is being held in Shanghai to underline the importance that ETAD assigns to its future engagement in China.

Introduction

FROM THE PRESIDENT

A high level of regulatory activity concerning the chemical industry has continued unabatedly in Europe throughout 2006. The REACH (Registration, Evaluation and Authorisation of Chemicals) legislation was published on December 18, 2006 as an 849-page document. REACH will come into force in June 2007 and the registration process is phased through to 2018; of the about 30'000 existing substances which have to be re-registered, 5'000 are organic colorants and will directly affect the colorants sector, while new substances still need to be registered before they are placed on the market. Although some important concessions have been made to industry there is no doubt that REACH imposes substantial additional costs on many chemical sectors. On the other hand, if applied properly REACH offers the chances of becoming a new global standard.

ETAD has already initiated some registration trials as part of CEFIC's commitment to explore the workability of the process. Responsible companies strive to be in compliance but the benefits to health and environ-

ment can only be achieved if the regulations are enforced. The high degree of non-compliance revealed in the notification of new substances (NONS) audits in the mid-1990s, initiated by the European Commission with encouragement and cooperation from ETAD, justifies some skepticism that enforcement will again be neglected.

My two-year period as ETAD President ends in May 2007. The turbulent pace of change in the colorants industry will undoubtedly continue for several years to come and it presents many new challenges to the Association and my successor. I thank all Board members, our operating committees and the ETAD staff in Basel for their strong support during my presidency and wish them all success for the future.

Dr. Erwin Stark (BASF)

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P R E F A C E

REACH, published as Regulation (EC) No 1907/2006 of the European Parliament and of the Council, is undoubtedly a significant milestone in the history of EU chemicals regulation. It will certainly accelerate the retreat of several sectors of the chemical industry from Europe. Now the task ahead is compliance and both the EOC and POC are conducting a trial registration procedure for a dye and a pigment to examine the workability of the process. More details are given in the respective committee reports. This initiative should provide useful experience for when the actual REACH requirements are due. This is one example where ETAD provides an ideal framework in which the committee members, from companies which are in competition, can work together in the interests of complying with these new and burdensome requirements in a more cost-effective way.

One of the keys to ETAD's success has been its willingness to take a constructive approach in addressing emerging issues with the regulatory authorities. Often it has been possible to reduce the level of concern by conducting relatively modest projects. Some recent examples of this have been the cooperation with the German Working Group on Textiles (addressing possible risks of cancer and skin sensitisation) and the UK Advisory Committee on Hazardous Substances. In this latter case, the Committee responded positively to the proposals for a categorization of organic pigments with respect to their bioaccumulation potential. This report was produced by a U.K. consultancy company (W.S. Atkins) in collaboration with the UK Environment Agency and ETAD.

Engagement in China certainly presents the major challenge for ETAD in the coming year. The next task for the Chinese Operating Committee is to complete development of a work program which offers benefits for the ETAD membership, present and future. This is new territory for ETAD and is a more formidable task because, unlike the USA, India and Brazil, the major ETAD members have not a long history of manufacture or engagement in China. Nonetheless, for example in the case of dyes, the major German and Swiss dye manufacturers established manufacturing plants in China over the period 1993 – 1997. These plants manufacture high quality products to international standards and with proper environmental management. The Chinese authorities are well aware of the environmental problems arising from the high growth rate of the textile industry and the need to balance economic and environmental interests. These ETAD members provide a good model for the Chinese authorities as they seek to restructure the industry towards sustainable economic growth.

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P R E F A C E

China's entry into the WTO in 2005 represented a significant liberalization of trade which increases the urgency to improve environmental management in both the colorant manufacturing and using industries in China. The stringent environmental requirements and consumer preferences for "green" products in some international markets may limit the advantages of trade liberalization in the short term. In this context the recognition by many leading European retailers that ETAD members are more reliable suppliers of compliant colorants could offer benefits through ChOC's efforts to form useful allies. The other side of the coin is that interest in ETAD membership may increase because of the "good reputation" membership confers. In order to retain the inherent value of ETAD membership there has been a closer scrutiny of applicants in recent years with the aim of ensuring that the membership requirements are met, especially with respect to the ETAD Code of Ethics.

The Board has confirmed its commitment to protect the good reputation that ETAD has earned. This recalls the quote by the comedian Groucho Marx "Please accept my resignation. I don't want to belong to any club that will accept me as a member." ETAD's prospects of an effective involvement in China will be jeopardised if there is any doubt about its willingness to accept Chinese members. It is hoped that the membership list will soon remove any such doubt.

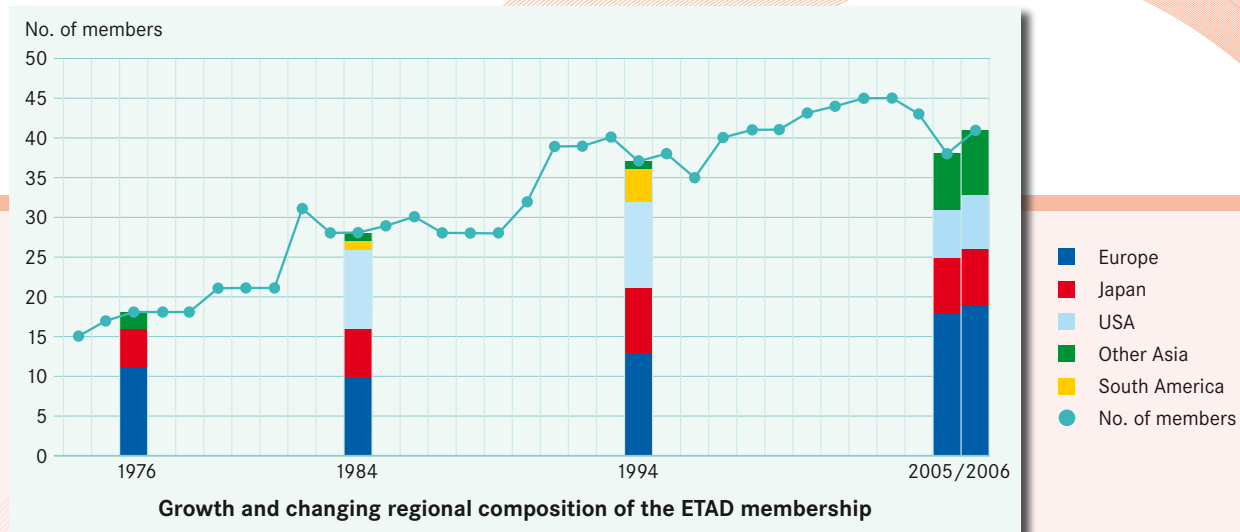
The optimisation of association structures through bundling and inter-association coordination continues in the interest of more efficient representation of the diverse chemical industries' interests.

ETAD benefits, in particular, from its close relationships with CEFIC and SOCMA. These help ETAD to be informed about the major developments so that it can provide an input on these from the perspective of the colorants industry.

It is still important that ETAD retains the independence to make its own position clear to the authorities when specific colorant industry interests are at stake. These are dealt with by the relevant ETAD committee with involvement, as appropriate, with other colorant associations (for example CPMA) and the Eurocolour cluster.

Cooperation with several customer organisations has also been particularly beneficial and has provided a good basis for future cooperation, which will be essential under REACH.

FACTS & FIGURES



Membership

Membership of RIFA has been terminated by January 1, 2006.

Avecia has sold off his dyes business to Fujifilm Imaging Colorants Ltd. and therefore the

membership has also been transferred to them. Huntsman has joined ETAD following its

acquisition of Ciba Specialty Chemicals' textile effects business.

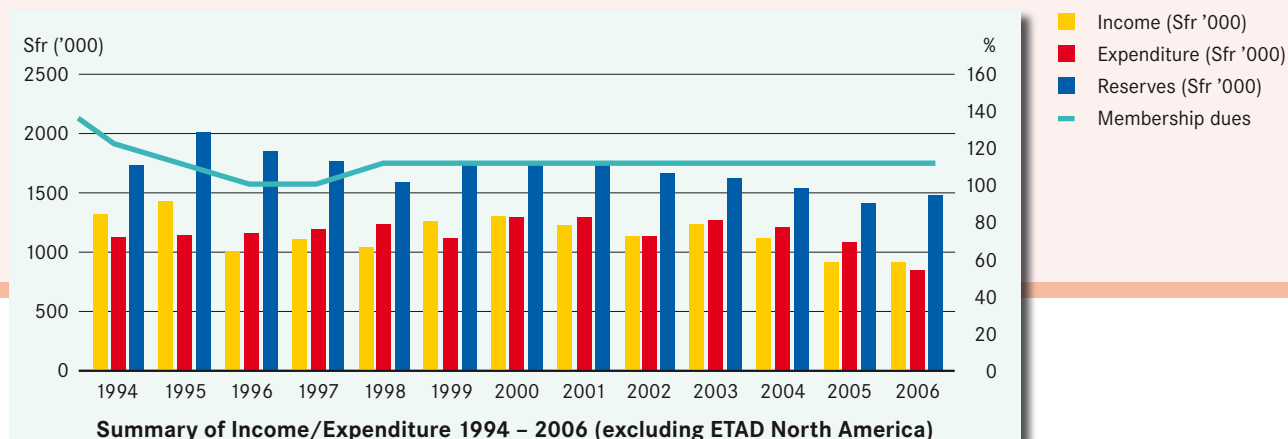
Finance

ETAD is a non-profit association. The ETAD member companies recover the operating expenses mainly by means of payments. In 2006, total income was SFr. 0.92 million compared with total expenditure of SFr. 0.85 million, resulting in a profit of SFr. 71'545.

The accounts of ETAD North America are kept separately from those of the Basel office to mitigate the effects of exchange rate fluctuations on the financing of the operations in North America. During 2006, the total income was \$109,200 and total expenditure \$118,025.

The deficit of \$8,825 results in a closing balance of \$36,884. In spite of the decline in U.S. dyes sales and resulting loss of membership dues income in 2006, the ETAD North America members made a special effort to reduce the scope of their activities and corresponding operating expenses.

This helped to substantially decrease the deficit from what it was at the end of 2005 but still left a negative ending balance.



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32ND GENERAL ASSEMBLY

The 32nd Ordinary General Assembly of ETAD was held in the Grand Hotel Adriatico, Florence on May 19, 2006 commencing at 9.00 hr. The President, Dr. E. Stark, opened the proceedings by welcoming the attendees to this 32nd anniversary meeting.

Out of the current ETAD membership of 41 companies, 33 were present or represented by proxy.

Of the current total vote entitlement of 97 votes, 79 votes were represented at the meeting.

The minutes of the 31st Ordinary General Assembly 2005 and the Annual Report 2005 were approved unanimously. The General Assembly also approved unanimously the report of the Treasurer and chartered accountants (PriceWaterhouse-Coopers AG) and the Budget for 2006, as presented by Mr. S. Foster. Due to the financial situation it was possible to avoid any increase in membership costs for the ninth successive year.

Dr. T. Helmes presented the accounts for ETAD North America and its Budget for 2006.

Dr. Uebersax presented and commented the proposed amendment of ETAD By-Laws concerning the membership eligibility described in paragraph 3.1. The amended By-Laws were approved unanimously. He also presented the amendment to the Code of Ethics regarding the cessation of manufacture and sale of certain hazardous colorants. The amended Code of Ethics was approved unanimously.

The Board proposal for its composition for 2006/2007 was presented. There were no additional nominations and the Board proposal was accepted unanimously.

Before closing the General Assembly meeting, Dr. Stark, commented on the necessity for ETAD to find a balance between the available resources and the remarkable number of issues the association is confronted with. In particular, he highlighted the following relevant aspects:



- the importance of prioritizing issues and focussing on specific activities (presently, e.g. Committees' projects related to the preparation for REACH);
- the possibility of establishing or intensifying collaboration with external organisations;
- the necessity of a strategy to attract new members from the eastern countries, in order for ETAD's membership to reflect more the current status of dyes and organic pigments manufacture worldwide.

The meeting was followed by a Seminar on Colorant Users Activities in Italy at which the following presentations were made:

Mr. M. Croci (Technical and Environmental affairs)
Italian Textile Federation:
REACH and Textile Industry in Italy

Mr. E. Gremmo, Clariant: Food packaging needs in mineral water application

Mr. A. Castellanza, Novamont: Biodegradable plastic for food packaging.



EUROPEAN OPERATING COMMITTEE (EOC)

The ever-increasing restrictions from legislative and consumer-oriented institutions provided many tasks for the EOC during 2006. In response, pragmatic approaches were taken to meet the challenge of REACH and Institutes/Retailer Certification Programs.

In order to achieve even better penetration of ETAD's voice a stronger cooperation with official bodies was initiated. The BfR (Bundesinstitut für Risikobewertung, Federal Institute for Risk Assessment) meeting in Berlin on 8 March 2006 clearly showed the necessity of a closer collaboration between ETAD and IVDK (Informationsverbund Dermatologischer Kliniken, Information Network of Departments of Dermatology).



Contact with Prof. A. Schnuch (IVDK) has been established and a meeting with ETAD and Dr. V. Schröder (VCI) was held on 31 January 2007. A further cooperation was initiated by bringing together the IFOP/VCI and ETAD through a direct contact with Drs. A. Föller and V. Schröder. The intent was to inform each other of current REACH activities in IFOP and ETAD, respectively. ETAD's role will exclusively be to assist its members and provide its data pool during the preparation of their dossiers, with no active involvement. In order to avoid duplicative effort there will be mutual exchange of information by ETAD and IFOP on their further activities.

REACH

An extensive list has been compiled for the two dye classes of disperse and acid dyes which provides the possibility to sort the dyes according to structural similarities. This also facilitates a tiered risk assessment to identify potential PBTs.

Based on this data file it was decided to select C.I. Disperse Orange 30 for a trial registration to get more experience with the practical mechanisms of registration. This effort is being undertaken in collaboration with the RAC, so that all experts of the ETAD members contribute and share their experience.

Institutes/Retailer-Certification-Programs

The retailers have increased the use of their own certification programs for marketing purposes. The documents outlining the requirements often contain e.g. wrong classifications of dyes or limits for substances to be found on the textile below the detection limit. ETAD has contacted PUMA for clarification of their S.A.F.E. standard with regard to the list of „dyes, which may cause allergic reaction“.

The EOC members will report on any new certification program, for which the scientific basis is questionable so that ETAD may approach the retailer for clarification.

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PIGMENTS OPERATING COMMITTEE (POC)

As was highlighted in last year's Annual Report, the amount and diversity of legislation affecting the pigments industry continues to increase. We have continued with our policy of working constructively with the authorities and believe that ETAD POC is accepted by them as a reliable partner and that our input is aimed at ensuring a high degree of protection of human health and the environment while at the same time minimising the cost burden to industry. That is not to say we always get what we would want – but the authorities do listen to our arguments.

PBT/vPvB

The advantages of working with the regulators have been shown over the past few years especially in the area of PBT/vPvB substances. These are of high concern to a number of authorities across the world and especially in the EU under the REACH legislation there exists the potential for such substances to require substitution. We have continued to work

closely with the UK authorities who have the lead on this topic. In 2005 we were able to get the diarylide pigments removed from the list of concern. During this year all member companies have worked hard at providing data to show that other classes of pigments do not meet the criteria for bioaccumulation. This has provided quite some challenges for the analytical chemists as they have had to determine solubilities in the very low ppb range. We have now obtained data for most of the pigment classes (e.g. simple monoazos, quinacridones, azo-condensates, toners etc.); these are being collated and will be discussed within the next few months.

REACH

As with the chemical industry in general, we have followed the development of the REACH legislation with interest. Indeed the activity described in the above section is clearly REACH related. However, the time for observation is over and we need as a committee to understand the practicalities of implementing this legislation.

OBITUARY

The news that Ralph Sørensen passed away on 17th February 2007, was received with great sadness. Ralph, a leading member of the Pigments Operating Committee since 1997, will be greatly missed by his many friends within ETAD. Our sincere condolences are extended to his family at this time of grief.

A sub-committee under the chairmanship of Dr. E. Dietz has been formed. Within this group a trial consortium will be formed and the problems of information exchange, consortium formation etc. will be looked at using a model substance.

Food Contact

In 2005 the Ministry of Health in China announced its intention to re-draft the Chinese Food Hygienic Standard. This standard covers all substances that come into contact with food during production and packaging and hence includes plastics, inks and coatings. Significant resources both from the ETAD staff as well as member companies was devoted to ensuring that colorants were on the draft list for first evaluation by the Chinese authorities. Additionally, we presented overviews of EU food contact legislation to the Chinese delegation when they visited Brussels on their fact-finding visit.

Other Activities in 2006

Analytical Group: The program

of work started last year to review and update the ETAD test procedure for free amines. Based on ETAD Analytical Method No. 212, a new less resource-demanding test method has been developed which makes use of more up-to-date analytical techniques and is now in the round robin test phase.

HCB (Hexachlorobenzene):

With the assistance of our Japanese colleagues on the POC we have monitored the development of this issue in Japan and ensured that member companies are always kept aware of the status of the legislation and so are in a position to respond to any requests.

Rosin: The situation regarding the classification of rosin derivatives remains unclear. Our repeated attempts to obtain clarification from HARRPA (Hydrocarbon and Rosin Resins Producers Association) have been unsuccessful. ETAD testing indicates that pigment preparations are not skin-sensitizing under skin patch test conditions and as yet we see no need to change our position.

REGULATORY AFFAIRS COMMITTEE (RAC)

The Regulatory Affairs Committee (RAC) consists of seven experts who are responsible for regulatory compliance within their companies. The following key remits have been assigned and observed:

- monitoring regulatory development and especially its impact on the colorants industry;
- identifying emerging issues and making recommendations on required actions;
- providing advice on the interpretation of regulatory requirements.



In 2006 the RAC concentrated its work on the impending European REACH (Registration, Evaluation and Authorisation of Chemicals) Regulation. Many suppliers and customers are unaware of the consequences of REACH and underestimate the severity of the regulation.

On Monday 18 December 2006, European Parliament President Joseph Borrell and Finnish Prime Minister Matti van Hanen officially signed the REACH regulation. As a consequence, companies (including those who import chemicals into the EU) should now intensify their preparatory activities so that they will be ready to fulfil their duties in time. The first REACH obligation, pre-registration, will take place from 1 June 2008 to 30 November 2008. It will be followed by the registration of substances depending on the volume band or level of concern of the substance.

The subsequent deadlines are November 2010, June 2013 and June 2018. Information demonstrating the safe use of the substance needs to be submitted in a registration dossier to the new European Chemicals Agency.

Although a company cannot register groups of substances, a risk assessment for registration purposes can be done for a substance group. Work has already started in ETAD on disperse and acid dyes, for which a structural grouping has been carried out. It is hoped that the groups will show predictable data patterns. RAC will also consider options in cross-reading and data waiving for registration. Communication advice to ETAD member companies for downstream users and suppliers are under discussion.

The introduction of the GHS (Globally Harmonized System) will have a significant impact on the chemical industry. This System is now ready for worldwide implementation. It was agreed at the 2002 UN World Summit on Sustainable Development in Johannesburg that the GHS should be put into operation worldwide with a target date of 2008. Implementation has already started with pilot countries introducing the system into their national legislation. RAC has put GHS as its major discussion topic on the meeting agenda for 2007.

RAC has also thoroughly monitored national changes in regulations.

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ETAD NORTH AMERICA

Introduction

In response to a declining dyes market in North America, the members of ETAD North America agreed to limit operations for the remainder of 2006 and foreseeable future to only the core activities of networking, information exchange and tracking industry and regulatory developments in the U.S. and Canada. This action was designed to maintain an ETAD presence in North America while at the same time reducing member company costs to a level more in line with the current economics in the industry.

Regulatory Developments in the United States

The following regulatory developments in 2006 were monitored by ETAD North America for potential impact on the dye manufacturing industry:

- EPA's proposed amendments to the TSCA Inventory Update Rule (IUR) were promulgated in 2006 requiring manufacturers and importers to furnish exposure data, provide site-specific downstream processing and use information, report production and import volumes separately and report inorganics. The reporting cycle is extended from four to five years with the timing of the submission period eventually to be moved from the end of the calendar year to the beginning. A new partial exemption for specific chemicals of low current interest requires a written rationale. Reporting of processing and use information is restricted to domestic activities only.

Some CBI changes (e.g., maintaining company name CBI) require more substantiation.

- New area source standards for individual hazardous air pollutant (HAP) emissions of < 10 tons/year or combined HAP emissions of < 25 tons/year continue to be developed under the Clean Air Act by EPA. The category of "cyclic crudes and intermediates" includes dye manufacturing.
- The California State Cosmetics Act currently under development may eventually require disclosure to the state of any intentionally added cosmetic ingredient that is on the Proposition 65 list. ETAD North America is monitoring the situation through the Cosmetic Toiletry and Fragrance Association.
- Final chemical site security legislation was passed requiring risk-based performance reviews but not mandatory substitution of inherently safer technology. The Department of Homeland Security will have authority to shut down a plant if it is found to be out of compliance.
- The Occupational Safety and Health Administration issued a new standard lowering the permissible levels of chromium (VI) in the workplace.
- ANSI published its new standard Z129.1 for precautionary labelling of hazardous substances. ETAD North America participated in the canvass ballot approving the new standard.

ETAD NORTH AMERICA

Chemical Testing

Public comments were posted on the test plan and robust summaries submitted to EPA by ETAD North America on stilbene brighteners under the voluntary phase of the High Production Volume Challenge. Commenters applauded ETAD's Stilbene Whitening Agents Task Force for using a category approach to satisfy all endpoints and eliminate the need for unnecessary animal testing. No further action is anticipated.

In March, a TSCA Section 4 test rule was published covering 17 HPV orphan chemicals including C.I. Solvent Black 7 (CAS 8005-02-5), the only dye listed. A separately funded coalition, including some ETAD members, was formed to conduct the required testing which is in progress and scheduled to be completed in 2007.

The EU REACH legislation will be relevant to ETAD North America members because of the direct impact on suppliers outside the EU and potential to influence legislation in the U.S. and other countries.

ETAD North America is staying abreast of developments and exploring opportunities for consortium formation as appropriate.

ETAD North America continued to follow developments in various biomonitoring programs even though no dyes appear yet on any of the study priority lists. At issue is how to evaluate the results of biomonitoring and the implications of those results for the chemical industry in general. Industry wants to ensure that validated screening methods and a meaningful list of subject chemicals are used.

The members also followed progress in development of an endocrine disruptors test program. EPA has published an approach to selecting the first group of 50 – 100 chemicals for screening, based on potential for human exposure and multiple pathways, but has not yet defined what tests to use for screening.

Environment

ETAD North America is participating in a voluntary effort to develop a standard under the auspices of ANSI (American National Standards Institute) for the manufacture of sustainable textiles. A draft standard has been circulated to ETAD North America members for review and comment. It is expected that a final draft will be available for public comment during first quarter 2007.

Canada

The Canadian government's categorization and screening of the Domestic Substances List (DSL) based on predicted persistence (P), bioaccumulation (B), or inherent toxicity (iT) was completed in September. In December, the authorities announced the Chemicals Management Plan in which follow-up screening risk assessments will be initiated on the highest priority chemicals resulting from the categorization process. ETAD North America is following the situation closely in order to provide information as needed on existing control measures for dyes.

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BRAZILIAN OPERATING COMMITTEE (BROC)

Textile Industry

The performance of the textile industry was below expectations. The main influencing factors were:

- strong local currency and consequently reduced competitiveness in exports;
- lack of negotiations from the government with potential export markets (USA, EU);
- strong increase of imports of Chinese garments and textiles in general;
- reduced demand for locally produced textiles.

The investments in the textile area have been the lowest for many years and the outlook for 2007 will not be different to 2006. Most of the companies active in textile dyes are suffering from this situation and further investments in this sector cannot be expected. The local production of textile dyes is facing a fierce competition from Asian suppliers, mainly from China.

The most important textile mills in Brazil, especially in São Paulo area, have already been certified ISO 14000 and are very much concerned on environmental requirements. Within Sinditextil (Union of Textile Industry) an environmental inventory for the textile industry is under preparation. There have been no legislative changes in that sector.

Pigments

During 2006 the situation in Brazil for organic pigments remained extremely difficult due to the extremely low prices practised by brokers who commercialize products from India, Korea and mainly from China. In addition, the 12% revaluation of the local currency in relation to the US Dollar made the action of the brokers easier in 2006. The situation becomes more difficult when the local industries, which use organic pigments as raw materials, face the competition with manufactured products mainly from China, like toys or synthetic fibres.

The good news is that at the end of 2006 a legislation which would greatly reduce the use of inorganic pigments based on heavy metals has been proposed to the Brazilian Congress. This would certainly increase the use of organic pigments.

During 2006, two issues affecting the dyes and organic pigment industries were of particular importance for the JOC. They are the implementation of GHS, which required amendments to the Industrial Safety and Hygiene Law, and the designation of HCB (Hexachlorobenzene), an impurity in certain dyes and organic pigments, as a Class 1 specified substance in the “Law concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances”. HCB is one of the substances prohibited under the International POPs (persistent organic pollutants) Convention.

1. GHS

The current classification and labelling system has already been modified in accordance with GHS by amendment of the Industrial Safety and Hygiene Law effective December 2006.

This law covers 99 chemicals for labelling and 640 chemicals for SDS (Safety

Data Sheets), together with corresponding mixtures or preparations containing more than specified limit values for each chemical. Under this law it is not compulsory to label or provide an SDS for other chemicals.

Most of the chemicals had already required both labels and SDS and the revision of the law introduces additional elements defined by the GHS such as pictograms, warning phrases etc. which must be added to the label and/or SDS. The law also specifies the transition periods for implementation of the labelling or SDS requirements.

It is allowed to give labelling elements on the label either based on the overall classification of mixture or on the classification of individual components of the mixture.

The classification, standard labels and SDS for the listed chemicals are given on the responsible authorities' web site for reference and to assist suppliers.

2. HCB impurity

The manufacture or import of hexachlorobenzene (HCB), classified as a Class 1 specified chemical substance, is practically banned by the law. HCB is found as an inadvertent impurity in an intermediate, tetrachlorophthalic anhydride (TCPA), for manufacture of certain organic colorants.

So far a limit value for HCB in substances or preparations has not been set. Discussions to find reasonable limit values in both the intermediate (TCPA) and C.I. Solvent Red 135 have been held by the authorities and the corresponding manufacturers, taking into account available information on the manufacturing processes and the observed HCB contents.

According to the December report of the working group for setting limit values for TCPA and C.I. Solvent Red 135, the maximum concentration of HCB in the products was set at 200 ppm and 10 ppm for TCPA and C.I. Solvent Red 135,

respectively. The BAT (Best Available Technology) concept was applied in setting these limit values. Additional colorants derived from TCPA (e.g. C.I. Pigment Yellow 110 and C.I. Pigment Green 7) are also affected and it is likely that for these a limit of 10 ppm will also be applied.

Although it is not a safety issue, many inquiries are being received from user industries about the trace heavy metal impurities limits in dyes or organic pigments, especially chromium, in the interests of legal compliance, quality assurance or to minimize business risks. Although ETAD has set trace metal limits in dyes and organic pigments these are unfortunately no longer sufficient to satisfy some customers.

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CHINESE OPERATING COMMITTEE (CHOC)

In April 2006 ChOC has attended the Interdye Shanghai on behalf of ETAD. On this occasion, hundreds of Chinese version brochures of ETAD were distributed to the local Chinese dyestuff and organic pigment manufacturers, in order to promote ETAD among them and get them to know ETAD's role and work.

The first Chinese company – Jiangsu Taifeng – has submitted its application for membership. A technical audit was done by Mr. Toshio Tanaka from DIC and Steve Liu from Sun Chemical. With the pre-registration request of REACH from EU, more and more Chinese dyestuff and organic pigment manufacturers are concerned and show their interest in ETAD. ChOC has explained the ETAD concept to most of the pigment manufacturers but only to some dyestuff manufacturers due to limited contacts with them. Efforts will be made in 2007 to improve the contacts with the Chinese dye manufacturers.

Mr. Wang Zhutian of the Chinese Ministry of Health was contacted to give a presentation regarding food contact regulation in China at the General Assembly 2007 in Shanghai, as well as Mr. Shi Xianping from CDIA (former CDIA deputy director) for the presentation on the responsible care activities of the Chinese dyestuff and organic pigment industry.

Chinese dyestuff and organic pigment manufacturers have been invited to attend the seminar in May 2007 during the General Assembly 2007 in Shanghai. A member from ChOC will give a presentation of ETAD's activities at the Interdye 2007 in April in Shanghai.

INDIAN OPERATING COMMITTEE (IOC)

An ETAD delegation (H. Motschi, Executive Director; D. Gronier, Board member; R. Kapoor, IOC Chairman) has met the **ICMA** (Indian Chemical Manufacturers Association) Technical Committee on Health and Environment on February 16 in Mumbai.

In that meeting H. Motschi gave a presentation of ETAD's vision and strategy.

The presentation was very well received and for the future cooperation between IOC and ICMA the following aspects were considered of importance:

- exchange information on regulatory requirements concerning dyes and organic pigments;
- monitor proposed legislation and lobby for harmonised requirements (Manufacture, Storage and Import of Hazardous Chemicals Rules, EU, GHS);
- participate in ICMA exhibition and conferences;
- Responsible Care Program;
- Regulatory Compliance.

Following the initiative of D. Gronier, under the new chairmanship of Ravi Kapoor the IOC has launched a program with the following goals:

- promote ETAD in India by associations and government authorities;
- make ETAD known to the leading manufacturers of dyes and organic pigments in India;
- enable the IOC to organise audits of candidate member companies which can be conducted by established and accredited institutions (e.g. of ICMA).

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ACTIVITIES & INFORMATION

Publications:

Categorisation of organic pigments. Final Report: S. Horrocks, J. Kirton, Dr. C. Cartwright, Atkins Environment, UK. Dr. Steve Robertson and Dr. Nick Farrar, Environment Agency, UK. Dr. Herbert Motschi (ETAD) (June 2006)

REACH, a ground-breaking EU Regulation: Implications for the leather industry. World leather, Dec. 2006, Dr. Alois Püntener (TFL). (December 2006)

Position Papers:

ETAD:
Considerations regarding the Designation of Colorants for the Nomination List of the Chinese Hygienic Standard GB 9685-2003 (in English and Chinese). (January 2006)

ETAD:
Position on the presence of Hexachlorobenzene as an unintentional by-product in certain Colorants. (April 2006)

ETAD North America:
Comments to EPA on Testing of Certain High Production Volume Chemicals; Data Collection and Development on High Production Volume (HPV) Chemicals; Proposed Rule and Notice. (January 17, 2006)

ETAD North America:
Comments to EPA on Export Notification (TSCA Section 12(b)); Proposed Change to Reporting Requirements. (April 10, 2006)

ETAD North America:
Comments to NSF/ANSI on Sustainable Textiles Draft Standard. (June 30, 2006)

ETAD North America: Further Comments to NSF/ANSI on Draft of Safety of Materials Chapter of Sustainable Textiles Draft Standard. (July 25, 2006)

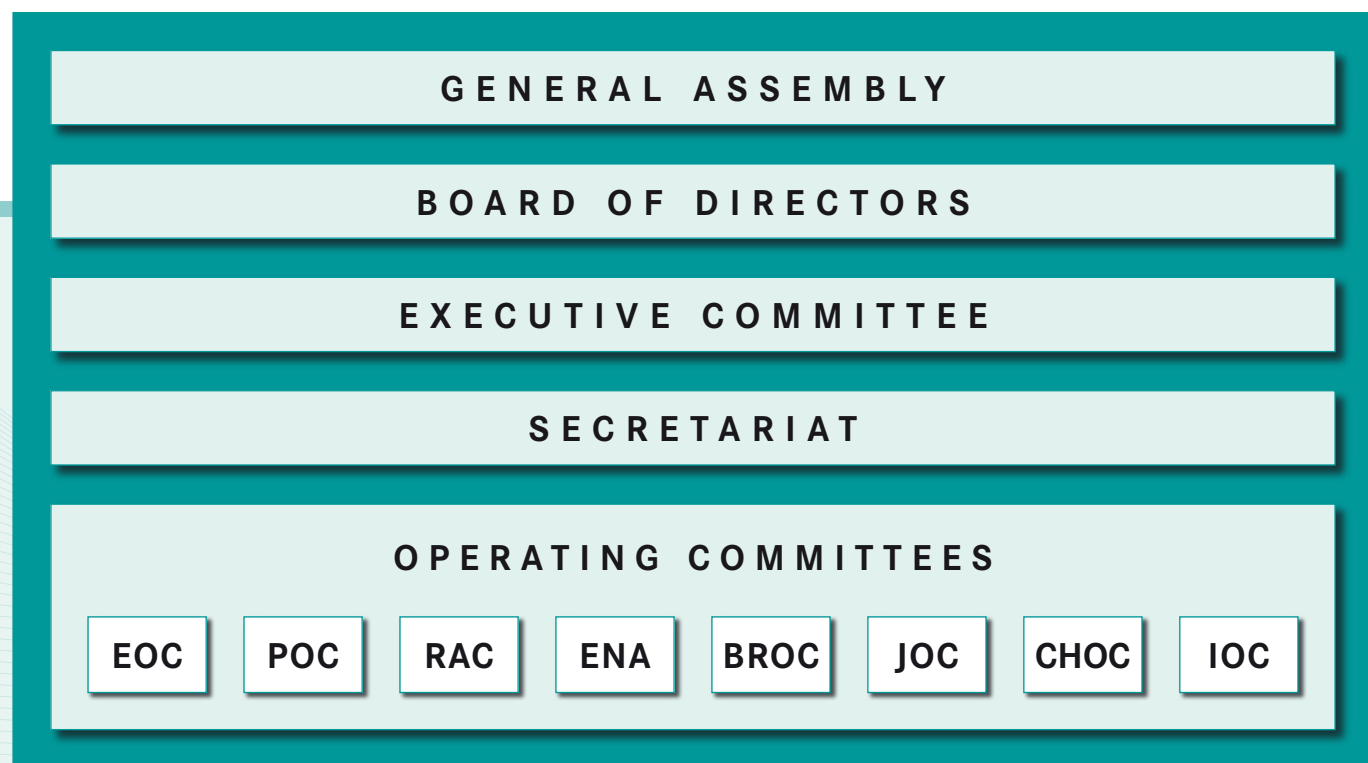
Lectures:

Dr. H. Motschi: ETAD's Vision and Strategy: Presented at the meeting with ICMA (Indian Chemical Manufacturers Association) Technical Committee on Health and Environment on 16th of February 2006 in Mumbai, India.

Drs. W. Hofherr, S. Lawrence, D. Wormsbächer:
Colorants in Food Contact Materials: An Overview. Presented at the workshop for the delegation of the Chinese Ministry of Health (MOH) on 24th of June 2006 in Brussels.

General Information

ORGANISATION AND MEMBERS



Board of Directors 2006/2007¹

President	Dr. Erwin Stark	BASF AG
Vice-President	Dr. Davor Bedekovic	Huntsman Materials & Effects (Schweiz) GmbH
Treasurer	Mr. Stuart D. Foster	Sun Chemical Pigments International
Members of Board	Dr. Ulrich Ott	Clariant International Ltd.
	Dr. John Coy	Ciba Specialty Chemicals Inc.
	Dr. Ilesh Bidd	Fujifilm Imaging Colorants Ltd.
	Mr. Daniel Gronier	Francolor Pigments SA
	Mr. Yoshimi Yamada ^o	Huntsman Materials & Effects KK
	Mr. Michael J. Smith [*]	Clariant Corp.

General Information

ORGANISATION AND MEMBERS

Committee Members²

European Operating Committee

Dr. Bruno Büttler	Huntsman Materials & Effects (Schweiz) GmbH
Mr. Mark Dohmen	M. Dohmen GmbH
Mr. Henri Gardère	Stahl International bv
Dr. Rezzan Karaaslan	Setaş Kimya Sanayi A.S.
Mr. R. Lee	European OGD Ltd. #
Dr. Elena Schramm	BEZEMA AG
Dr. Anette Weber	DyStar Textilfarben GmbH & Co.

Pigments Operating Committee

Dr. Karin Beck	BASF AG
Dr. Karl Brandt	Heubach GmbH
Mr. Michael Cooper	EC Pigments
Dr. Erwin Dietz	Clariant GmbH
Mr. Marc Lanchec	Francolor Pigments SA
Dr. Simon Lawrence	Ciba Specialty Chemicals Inc.
Mr. Jørn Thorsson	SunChemical A/S
Mr. Kikuo Tsuchiya	Dainippon Ink & Chemicals Inc.
Mr. Ladislav Skvrna	Synthesia, A.S.
Mr. Frank Vermoortele	Cappelle pigments n.v.
Mr. Daniel Ymbernon	Daicolorchem EU, S.A.

Regulatory Affairs Committee

Dr. M. Jobelius-Korte	TFL France S.A. #
Mr. George Kaye	Albion Colours Ltd.
Mr. Mark L.H. Meesters	Stahl International bv
Ms. Helen H. O'Shaugnessy	Fujifilm Imaging Colorants Ltd.
Dr. Erich Schultz	DyStar Textilfarben GmbH
Mr. Michael Whitehead	Huntsman Materials & Effects (Schweiz) GmbH
Dr. Detlev Wormsbächer	Clariant GmbH

ORGANISATION AND MEMBERS

ETAD North America

Mr. Raymond J. Carey	Carey Industries, Inc.
Dr. Joseph DaSilva	DyStar L.P.
Mr. Scott Chen	Everlight USA, Inc.
Ms. Carole Dixon	Clariant Corp.
Mr. J. Thomas Dukes	Huntsman Materials & Effects Corp.
Ms. Sue Ann McAvoy	Sensient Technical Colors
Mr. Randy Hinton	Kemira Chemicals, Inc.
Mr. Peter Benn	Tri-Tex Co., Inc.

Brazilian Operating Committee

Mr. Eide Paulo de Oliveira	Clariant S.A.
Mr. Nemesio Nepumoceno	Clariant S.A.
Mr. Wolfgang H. Guderle	DyStar
Mr. Mauro Henke	Dystar
Mr. Adriano Padua Pinhero	BASF S.A.
Mr. Cesar Vieira Pinho	Huntsman Materials & Effects

Japanese Operating Committee

Mr. Osamu Nishizawa	Mitsubishi Chemicals Corporation
Mr. Toshio Hihara	DyStar Japan Ltd.
Mr. Genji Matsubara	Clariant (Japan) K.K.
Mr. Osamu Motegi	Hodogaya Chemical Co. Ltd.
Mr. Yoshimi Yamada	Huntsman Materials & Effects KK
Mr. Satoru Wakai	Nippon Kayaku Co. Ltd.

Chinese Operating Committee

Mr. Steve Liu	Sun Chemical
Ms. Christine Cai	Huntsman Materials & Effects (China) Ltd.
Dr. Xie Gecheng	Ciba Specialty Chemicals (China) Ltd.
Mr. Steven Yu Yunbiao	BASF (China) Co., Ltd.
Mr. Brian Zhang	DyStar China Ltd.

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General Information

ORGANISATION AND MEMBERS

Chinese Operating Committee

Mr. Nelson Pong	Toyo Ink Asia Ltd.
Mr. Zhao Qing Xuan	Clariant (China) Ltd.
Mr. Yang Shujun	Clariant (Tianjin) Ltd.
Mr. Chen Ho-Ming	Everlight International Warehousing Trading (China) Co. Ltd.

Indian Operating Committee

Mr. R. Kapoor	Heubach Colour PVT. Ltd.
Mr. Prakash R. Chaudhari	BASF
Dr. M. U. Rehman	Atul Ltd.
Dr. U. T. Nabar	Clariant Chemicals (India) Limited
Mr. P. Radhakrishnan	Dystar
Dr. Pankaj Desai	Colourtex Industries Pvt. Ltd.
Dr. M. A. Kotnis	Ciba

ETAD Staff

Basel:

Dr. Herbert Motschi	Executive Director
Dr. Walther Hofferr	Deputy Executive Director
Dr. Pierfrancesco Fois	Chemist (Research and Documentation)
Ms. Diana Colombo	Administrative Assistant

Washington:

Dr. C. Tucker Helmes	Executive Director of ETAD North America
Ms. Lynne Jones Batshon	Manager

Legal Counsel

Mr. W. Richard Bidstrup	Legal Counsel of ETAD North America Cleary, Gottlieb, Steen & Hamilton
Dr. Hans-Rudolf Uebersax	ETAD Legal Counsel

[#] to be confirmed at the Board Meeting in 2007

^{*} Representative of U.S. Operating Committee of ETAD

^o Representative of Japanese Operating Committee of ETAD

¹⁾ The Board of Directors 2007/2008 will be elected at the General Assembly Meeting on May 22, 2007

²⁾ These lists give current membership (i.e. January 2007)

CODE OF ETHICS

Preamble

The aim of ETAD is to minimize possible negative effects on health and the environment arising from manufacture and use of synthetic organic colorants and to ensure information on the best practicable protection is provided to the purchasers of these products.

To achieve this goal and to promote the image of a responsible and safety minded manufacturing industry, it is necessary that in all aspects related to human and environmental safety, members be encouraged to adhere worldwide to a high ethical standard.

Therefore, at the proposal of the Board, the General Assembly of ETAD approves this Code of Ethics as a key policy of the Association. All ETAD member companies are obliged to comply with this Code of Ethics.

1. Principles of responsible care

ETAD members are committed to support a continuing effort to improve the industry's responsible management of synthetic organic colorants. Members shall develop, produce and distribute products in a responsible manner which protects human health and the environment from unacceptable risks during manufacture, transport, use and disposal. Specifically, members shall implement a responsible care program in which the member undertakes to manage its business in accordance with the following principles:

- to recognize and respond to any community concerns about synthetic organic colorants and its manufacturing operations;
- to produce only synthetic organic colorants that can be manufactured, transported, used and disposed of safely;
- to make health, safety, employee training, quality assurance and environmental considerations a priority in planning for all products and processes;
- to provide employees, distributors and customers information on the health or environmental effects of synthetic organic colorants and recommend appropriate protective measures to ensure their safe use, transportation and disposal;
- to operate all facilities in a manner that protects the environment and the health and safety of employees and the public;
- to promote research on the health, safety and environmental effects of its products, processes and waste materials;
- to cooperate with public authorities in establishing well-founded environmental, safety and health regulations; and
- to promote these principles of responsible care

to others who produce, handle, use, transport or dispose of synthetic organic colorants.

The responsible care program shall fulfil, but not be limited to, the specific obligations described under paragraphs 2 – 5 below.

2. Product Safety Policy

It is the policy of ETAD members to take all reasonably practicable steps in order to ensure human and environmental safety in the use of the dyestuffs and organic pigments (synthetic organic colorants), manufactured or distributed by them. Members shall comply worldwide with all applicable laws and regulatory requirements dealing with the safety and the environmental impact of synthetic organic colorants.

ETAD recognizes that the legal requirements for hazard communication differ considerably in various regions where organic colorants are marketed. A primary objective of this Code of

General Information

CODE OF ETHICS

Ethics is to ensure that such differences do not deprive customers in countries with less stringent requirements of hazard information which is made available to their counterparts in countries with more comprehensive regulations. To achieve a common high standard of hazard communication ETAD members shall:

- fully inform all customers about all known significant hazards;
- adopt policies to assure an equivalent level of hazard communication worldwide concerning their product.

3. Products Safety Information

3.1 Safety Data Sheets

Member companies shall ensure that for each of the synthetic organic colorants on their selling range, there is a safety data sheet with an appropriate information content and that it is supplied to all customers.

3.2 Labelling

The EU regulations provide an appropriate basis for classification and labelling of organic colorants.

Where the laws of the country the products are sold to, require more stringent or mandate different labelling, the members shall adhere to such required or mandated labelling. In countries with less stringent requirements the labelling shall be in accordance with the EU system or an equivalent consistent with the policy of achieving a uniformly high standard of hazard communication.

3.3 Education and Awareness Programs

ETAD members shall endeavor to inform customers of the safe handling procedures best suited to the products involved.

4. Cessation of manufacture and sale of certain hazardous colorants

The manufacture and sale of certain dyes identified as hazardous by regulation or classification by expert bodies is incompatible with ETAD membership. These dyes are referred to in Annexes A and B.

5. Compliance

Member companies shall comply with the Code of Ethics and shall make every effort to ensure that their subsidiaries do so.

Annex A

Azo dyes or preparations of azo dyes used in consumer applications, which contain, or release by reductive cleavage of azo bonds to any of the specified amines*.

Annex B

Individual Dyestuffs*

* The corresponding amines and dyes are listed with the applicable limit values in "Guidance to ETAD Member Companies on the Implementation of the Code of Ethics" which is regularly updated to the current state of scientific knowledge.

BENEFITS OF ETAD MEMBERSHIP

Recognition

Recognised by regulatory authorities, customers, and the public as the authoritative source of information on health, safety, and environmental issues relating to organic colorants.

Representation

Represents interests of members and customers to government authorities, the media, other industries, public interest groups, organised labour, academia, and research/testing/consulting organisations.

Harmonisation

Advocates, where regulations are necessary, a harmonisation of the requirements, so that compliance costs are reduced.

Code of Ethics

Encourages members to adhere worldwide to a high ethical standard and promotes image of a responsible and safety-minded manufacturing industry.

Guidance

Provides guidance to ETAD member companies on interpretation of new regulatory requirements and recommends specific measures to implement the ETAD Code of Ethics.

Education and training

Develops and publishes education and training materials pertaining to organic colorants, e.g. for safe handling practices, product stewardship, and pollution prevention.

Research and testing

Cost-sharing of research and testing programs aimed at a better understanding of the health and environmental aspects of dyes and organic pigments.

Information

Responds to inquiries about the colorants' industry, provides information on topical issues and disseminates comments and position papers.

Database

Maintains and makes available to members a computerised database of literature pertaining to the health and environmental aspects of dyes.

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