

MIROGLIO S.P.A. Greenpeace Detox Commitment

DATE: 22 September 2014

In line with MIROGLIO S.P.A.'s long-term sustainability program MIROGLIO S.P.A. recognizes the urgent need for eliminating industrial releases of all hazardous chemicals (1). According to its approach based on prevention (2) and the Precautionary Principle (3) MIROGLIO S.P.A. is committed to zero discharges (4) of all hazardous chemicals from the whole lifecycle and all production procedures that are associated with the making and using of all products MIROGLIO S.P.A. produces and / or sells (5) by no later than 01 January 2020.

We recognise that to achieve this goal, mechanisms for disclosure and transparency about the hazardous chemicals used in our global supply chains are important and necessary, in line with the 'Right to Know principle' (6). In line with this principle we will deliver full public availability and transparency of our restricted substance list and audit process and will set up full public disclosure of discharges of hazardous chemicals in our supply chain.

MIROGLIO S.P.A. also commits to fully and publicly support systemic (i.e. wider societal and policy) change to achieve zero discharge of hazardous chemicals (associated with supply chains and the lifecycles of products) within one generation (7) or less. This commitment includes sustained investment in moving industry, government, science and technology to deliver on systemic change and to affect system change across the industry towards this goal.

MIROGLIO S.P.A. agrees to publicly support Greenpeace's efforts to eliminate all global hazardous chemical use, and to fully integrate the precautionary principle and the public's right-to-know regarding all environmental aspects across our operations.

MIROGLIO S.P.A. acknowledges our individual corporate responsibility to always operate with a strong system of environmental oversight of our suppliers and our operations.

MIROGLIO S.P.A.'s following Detox commitment, as well as a individual action plan - with the dates indicate, and the links to the complete detailed evidence supporting the delivery for all aspects of this commitment no later than the delivery schedule dates indicated within this commitment - will always be available to the global public via our main public webpage.

MIROGLIO S.P.A. understands the scope of the commitment to be a long term vision – with ongoing ambitious practices to be defined by the following individual action plan:

Individual action plan

1. Supply-chain disclosure

In line with MIROGLIO S.P.A.'s commitment to the public's 'right to know' the chemical substances used within its global supply-chain and the products it sells, MIROGLIO S.P.A. will be taking the following actions:

1. publish its updated Combined 'Restricted Substances List' (included below) including detection limits(4) on the same date as the publication of this commitment document , and annually thereafter update this combined M-RSL to reflect our full implementation of the precautionary principle and always applying the best current technology – i.e. the lowest reporting limits technology can achieve.

2. begin full detailed public disclosure of discharges of hazardous chemicals (beginning with, at least, the 11 priority chemical groups as per endnote 8) and detection limits (as per our combined M-RSL below) and always applying the best current technology as per endnote 4) in its supply chain via full facility transparency (i.e. detailed location and individual data of each facility) of individual facility level disclosure of chemical-by-chemical use and discharges data, to be achieved via an incremental process, beginning with the following actions:

- i) With the publication of this commitment, we will also publish the full testing evidence of at least 50 % of all our global wet process suppliers' facilities or affiliates where hazardous chemicals are used, and will disclose their discharge data (as per full scope and content of our combined M-RSL below) by using an online platform via the Institute for Public and Environmental Affairs – Detox – platform.
- ii) by no later than 6 months after the publication of this commitment, we will also publish the full testing evidence of at least 80 % of our global wet process facilities or affiliates where hazardous chemicals are used (- in addition to the facilities in i), prioritising additional suppliers in the "global south") disclose their discharge data (as per full scope and content of our combined M-RSL below) by using the IPE Detox platform and the data collection template agreed with Greenpeace
- iii) By no later than 31 December 2015, 80% of our wet process facilities or affiliates where hazardous chemicals are used (as per i) and ii) above), will be publicly associated to our company *or, we will ensure that we supply full public evidence that at least 80 % of all of our global wet process suppliers are fully disclosing via IPE or are Detox committed companies.*
- iv) MIROGLIO S.P.A. will publicise the link to all data as per above timelines via the IPE Detox platform .
- v) MIROGLIO S.P.A. agrees to always ensure the discharge data disclosure is fully credible and reflects our combined M-RSL below and that we will always disclose via the IPE Detox platform.

2. 11 priority hazardous chemical groups elimination policy

Fully aligned with our implementation of the precautionary principle across all of our operations environment-related operations, we recognise the intrinsic, or potential intrinsic hazardousness of all 11 priority hazardous chemical groups (8), and therefore acknowledge it is our priority to eliminate their use across our global supply chain and our operations. There are multiple supply-chain pathways for potential contamination (including chemical formulations) and we will enhance both training and auditing of our supply-chain and our operations, as well as ensure our suppliers have the latest information on the 11 priority hazardous chemical groups , highlighting where there is a risk that any of these chemicals may enter into the undocumented contamination of chemical supplier formulations.

In addition to these actions, MIROGLIO S.P.A. will enforce its ban on the 8 of the 11 priority hazardous chemical groups (Phthalates, Brominated and chlorinated flame retardants, Azo dyes, Organotin compounds, Chlorobenzenes , Chlorinated solvents, Chlorophenols, and Short chain chlorinated paraffins) with the following actions:

- i. publish the results of an investigation into the current compliance to this requirement, reporting the findings to the public and simultaneously strengthening our supplier contract language to ensure only chemical formulations free of at least these 8 priority hazardous chemical groups are utilized and also publish the full testing evidence supporting our delivery of this commitment of full elimination of any use of at least these 8 priority hazardous chemical groups
- ii. work with our supply chain and other global industry leaders, to ensure the most current technological limits of detection are reflected via the lowest detectable limits within our testing regimes.
- iii. publicly document how at least each of these 8 priority hazardous chemical groups have been substituted by safer alternatives and publish these case studies via the online Subspport.org platform within 6 months of the publication of this commitment.

3. PFCs - Perfluorocarbon / Polyfluorinated Compounds(9) elimination policy

Consistent with the precautionary principle and the potential intrinsic hazardousness of all PFCs, MIROGLIO S.P.A. commits to eliminate any PFCs used in any of the products MIROGLIO S.P.A. produces and/or sells. The elimination of all PFCs used by any of the products we produce or sell will be supported by:

- i. Across our global supply-chain, eliminate all PFC use by no later than 01 July 2016;
- ii. document how PFCs have been substituted by safer alternatives and publish these case studies via the online Subspport.org platform by no later than 01 July 2016;
- iii. a rigorous system of control to ensure that no traces of PFCs find their way into our supply chain in line with the above;
- iv. work in partnership with our supply chain and other global industry leaders to accelerate the move to non-PFC technologies.

4. APEOs elimination policy

Consistent with our full implementation of the precautionary principle across all our operations related to any effect on the environment, and the potential intrinsic hazardousness of all APEOs, MIROGLIO S.P.A. therefore acknowledges it is a priority to eliminate any APEOs use across our global supply chain and our operations. There are multiple supply-chain pathways for potential APEOs contamination (including chemical formulations) and will enhance both training and auditing of our supply-chain and our operations, as well as ensure all of our suppliers have the latest information on APEOs, highlighting where there is a risk that APEOs may enter into the undocumented contamination of chemical supplier formulations.

In addition to these actions, MIROGLIO S.P.A. will enforce its APEOs ban on any products we produce and/or sell with the following actions:

- i. Initiate an investigation into the current compliance to this requirement, reporting the findings to the public by the end of 1 July 2015;
- ii. Strengthening our supplier contract language to ensure only APEOs-free chemical formulations are utilized by the end of 1 July 2015; and
- iii. Work with our supply chain and other global industry leaders, to ensure the most current technological limits of detection are reflected via the lowest detectable limits within our testing regimes.
- iv. Publicly document how APEOs have been substituted by safer alternatives and publish these case studies via the online Subsport.org platform by no later than 01 July 2015.

5. Targets for Other Hazardous Chemicals

As an important part of our implementation of the precautionary principle across all our operations, MIROGLIO S.P.A. commits to regularly review the list of chemicals used in our operations and our global supply-chain. MIROGLIO S.P.A. apply the latest scientific findings to periodically update our chemical policy, at least annually, to further restrict or ban chemicals, as new evidence on their impact becomes available.

In this context we will also set clear intermediate progress targets on the elimination of hazardous chemicals (beyond these 11 priority hazardous chemical groups). We will therefore provide a public detailed hazardous chemical-by-chemical schedule (aligned with our full implementation of the precautionary principle across any of our operations affecting the environment) for elimination (beyond the 11 priority hazardous chemical groups identified within this document) to be substituted with non-hazardous chemistry by no later than 01 September 2015 on the road to elimination of all hazardous chemical use by no later than 01 January 2020. This public detailed hazardous chemical-by-chemical schedule will be updated annually.

MIROGLIO S.P.A. commits to support and reinforce a credible sectoral chemical inventory and hazardous substance green list, aiming to establish this inventory, and the green list, based on a credible (10) intrinsically hazardous screening methodology, by no later than 01 July 2015.

The individual actions covered above will be reassessed by MIROGLIO S.P.A. at regular intervals – at least annually.

6. Self reporting on the Detox Commitment

The core responsibility principles for delivering on our commitment:

1. MIROGLIO S.P.A. is responsible for our global operations, all inputs we use and practices we employ, and the environmental outcomes created.
2. MIROGLIO S.P.A. must always proactively provide the public precise schedules for all our detailed and credible evidence (e.g. all hazardous chemical testing via the use of our combined M-RSL below) supporting the delivery of all aspects of our Detox commitment.
3. MIROGLIO S.P.A. is responsible to proactively, publicly and transparently provide full details as to any deviations from the delivery of any aspect of our Detox commitment, and to effectively resolve within no more than 30 days.

Within 6 months of this agreement, MIROGLIO S.P.A. will publish:

- Case studies of past hazardous chemical substitutions, and the steps we will take to develop a further number of substitution case studies (e.g. where we are currently substituting any of the 11 groups of hazardous chemicals as per below (8), with more non-hazardous chemicals) via the online Subsport.org platform.
- The steps outlining how we will take forward and lead on the development of the intrinsic hazards screening methodology (10).

(1) All hazardous chemicals means all those that show intrinsically hazardous properties: persistent, bioaccumulative and toxic (PBT); very persistent and very bioaccumulative (vPvB); carcinogenic, mutagenic and toxic for reproduction (CMR); endocrine disruptors (ED), or other properties of equivalent concern, (not just those that have been regulated or restricted in other regions). This will require establishing – ideally with other industry actors – a corresponding list of the hazardous chemicals concerned that will be regularly reviewed.

(2) This means solutions are focused on elimination of use at source, not on end-of-pipe or risk management. This requires either substitution with non-hazardous chemicals or where necessary finding non-chemical alternative solutions, such as re-evaluating product design or the functional need for chemicals.

(3) This means taking preventive action before waiting for conclusive scientific proof regarding cause and effect between the substance (or activity) and the damage. It is based on the assumption that some hazardous substances cannot be rendered harmless by the receiving environment (i.e. there are no 'environmentally acceptable'/'safe' use or discharge levels) and that prevention of potentially serious or irreversible damage is required, even in the absence of full scientific certainty. The process of applying the Precautionary Principle must involve an examination of the full range of alternatives, including, where necessary, substitution through the development of sustainable alternatives where they do not already exist.

(4) Zero discharge means elimination of all releases, via all pathways of release, i.e. discharges, emissions and losses, from our supply chain and our products. "Elimination" or "zero" means 'not detectable, to the limits of the best current technology', and only naturally occurring background levels are acceptable.

(5) This means the commitment applies to the environmental practices of the entire company (group, and all entities it directs or licences) and for all products produced or sold by MIROGLIO S.P.A. or any of its subsidiaries. This includes all its suppliers or facilities horizontally across all owned brands and licensed companies as well as vertically down its supply chain.

(6) Right to Know is defined as practices that allow members of the public access to environmental information – in this case specifically about the uses and discharges of chemicals based on reported quantities of releases of hazardous chemicals to the environment, chemical-by-chemical, facility-by-facility, at least year-by-year.

(7) One generation is generally regarded as 20-25 years.

(8) the 11 priority hazardous chemical groups are : 1. Alkylphenols 2. Phthalates 3. Brominated and chlorinated flame retardants 4. Azo dyes 5. Organotin compounds 6. Perfluorinated chemicals 7. Chlorobenzenes 8. Chlorinated solvents 9. Chlorophenols 10. Short chain chlorinated paraffins 11. Heavy metals such as cadmium, lead, mercury and chromium (VI).

(9) Polyfluorinated compounds, such as fluorotelomers, can serve as precursors that degrade to form perfluorinated carboxylic acids, e.g. PFOA

(10) Any screening methodology that would meet the following necessary requirements is considered to be credible:

1. The full criteria and methods applied and full data behind results must be open to public scrutiny

2. The screening methodology approach must take account of the hazards of accessory chemical and/ or breakdown products) which are generated through the use or release of any one particular chemical ingredient.

3. The screening methodology must recognise the importance of physical form e.g. nanomaterials, polymers and whole products where applicable.

4. Where there are legitimate reasons for concern regarding the intrinsic hazards of a chemical, even if information is insufficient to verify those hazards, action must be taken to obtain sufficient information to enable adequate assessment of the chemical. When there is no information on the chemical the 'hazardous until proven non-hazardous' assumption should apply.
