



## BSEF Responds to the Ecology Center Study on Chemicals in Mobile Phones

**Brussels (24 October 2012)** – [The Bromine Science and Environmental Forum \(BSEF\)](#) issues the following statement in response to assumptions of a study published online by the *Ecology Center (Michigan)*<sup>1</sup> on chemicals contained in mobiles phones.

- The [study](#) has researched chemicals in phones grouping bromine amongst other substances with diverse chemical properties, claiming that brominated flame retardants are toxic. This statement is not based on solid scientific evidence. BSEF believes that each substance should be assessed on its own scientific merits. Therefore, it is important to look at the scientific assessment of each substance before making general statements. In fact, all chemicals substances on the European market are regulated under REACH meaning that their potential environmental and human risks have been thoroughly assessed by scientists and regulators. Bromine and brominated products are safe for use as they have been subject to evaluation under legislation and some of them have gone through the EU Risk Assessment process<sup>2 3</sup>.
- The study claims that emissions during disposal and recycling of phones as electronic waste are problematic. However, it has been demonstrated that recycling of plastics in electrical and electronic equipment and appliances containing brominated flame retardants is possible and delivers satisfactory results, providing superior recyclability, stability and compatibility with different plastics<sup>4</sup>. In addition, after being recovered, flame retardant-treated plastics used in electrical and electronic equipment meet the EU requirements for incineration plants.
- While the study assumes that “consumer demand for more sustainable mobile phones is driving companies to produce better products”, it disregards the requirement that electronics have to meet fire safety standards. The use of brominated flame retardants in electronics play a key role in meeting these regulations by reducing the impact fires have on people, property and the environment<sup>5</sup>.
- The study assesses that phones contain flame retardants along with a large number of “hazardous substances” and “persistent organic pollutants (POPs)”. All commercially available brominated flame retardants produced by BSEF member companies have been assessed as safe for use. None of these commercially available brominated flame retardants used in phones are presently listed as POPs.

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<sup>1</sup> Ecology Center Michigan, Thirty-six phones tested for lead, mercury, hazardous flame retardants and more, October 2012, <http://www.ecocenter.org/press-release/2012/iphone-5-ranks-higher-galaxy-s-iii-new-study-toxic-chemicals-phones>

<sup>2</sup> European Chemicals Bureau, EU Risk Assessment Report, 2006

<sup>3</sup> Institute for Health and Consumer Protection, European Chemicals Bureau, Summary EU Risk Assessment Report, 2008

<sup>4</sup> Boerrigter, H., "Implementation of thermal processes for feedstock recycling of bromine and antimony, with energy recovery, from plastics waste of electrical and electronic Equipment, Phase 1", Netherlands Energy Research Foundation (ECN), July 2000

<sup>5</sup> Greenstreet Berman Ltd., "A statistical report to investigate the effectiveness of the Furniture and Furnishings (Fire) (Safety) Regulations 1988", December 2009. The study was carried out for the UK Department of Business and Innovation skills (BIS) <http://www.bis.gov.uk/files/file54041.pdf>