



## 60% reduction in CO2 emissions UNIQLO's new environment conscious shopping bag

UNIQLO CO., LTD.

**UNIQLO CO., LTD. will introduce its environment conscious shopping bag, containing a nano hybrid capsule2 (NHC2) additive, from end December 2007.**

**The new bag will reduce the emission of greenhouse gas, carbon dioxide, by 60% compared to UNIQLO's current shopping bags.**

### Reducing CO2 greenhouse gas emissions by 60%

UNIQLO CO., LTD. (Head Office: Yamaguchi City, Yamaguchi Prefecture, President & CEO: Tadashi Yanai) has decided to switch the bags provided to customers to carry their purchases in to a more environment conscious shopping bag. The bag will be introduced from December this year until has been introduced into all of our UNIQLO stores.



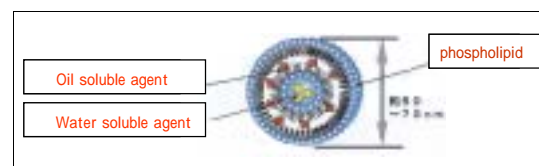
[Nano hybrid capsule2 (NHC2)]

We can achieve two key things by adding 3% of the environment conscious solvent and sophisticated additive, nano hybrid capsule2 (NHC2), when producing the shopping bag.

Improved strength means less polyethylene an approx. 20% reduction in CO2 emission

Contain the fusion of combustible elements and oxygen during burning an approx. 40% reduction in CO2 emission.

Taken together, these two features can help us reduce our CO2 emission by roughly 60% compared to current shopping bags.



### What is a nano hybrid capsule2 (NHC2)?

The nano capsule has received much attention as a nano technology and an environment conscious solvent. The nano capsule was developed using a new technique that harnesses the attributes of supercritical carbon dioxide fluid in a resin-based additive. The technology was researched and developed by Professor Masahiko Abe at the Science and Engineering Department of the Tokyo University of Science, and is manufactured and sold by e-basic corporation (Head office: Shinjuku-ku, Tokyo, President: Takayasu Aoki)

1 nanometer = 1 billionth of a meter

#### Why is the bag's strength improved?

The nano hybrid capsule2 (NHC2) disperses the "nucleus" (that forms the heart of the crystal and makes it grow) into nano-size pieces. That in turn maximizes the crystallization process, and thus increases the strength of the film. When the nano hybrid capsule2 (NHC2) is added, the crystallization process increases 10% ~ 20% compared to control, leading to the improved strength. That added strength enables us to make the bags thinner, and reduce the petroleum-derived polyethylene used.

### How can we reduce CO2 emissions during burning?

Polyethylene is transformed into a combustible gas when thermally decomposed during burning. This mixes with the surrounding oxygen in the air and burns, creating carbon dioxide and water. When nano hybrid capsule 2(NHC2) is added, the creation of carbon dioxide can be contained. This is achieved by neutralizing the surrounding oxygen with an oxygen absorbent before the combustible liquid can mix with the oxygen.

### **Positive effect of introducing environmentally friendly shopping bag**

Compared to figures for the year to August 2007, UNIQLO Japan has estimated that it can alleviate the environmental impact through these two major effects, namely improved strength leading to reduced polyethylene usage, and reduced CO2 emissions.

< Reduced polyethylene usage >

Possible 882t/yr reduction in petroleum-derived polyethylene (or roughly 20%)



We estimate that polyethylene usage for the entire FAST RETAILING group in Japan could be cut by an impressive 937t from 3,450t/yr to 2,513t/yr.

< Lower CO2 emissions >

Possible reduction of 5,576t/yr in CO2 emissions (or roughly 60%)

More lightweight product 20% + Reduced CO2 emissions 40% = total 60% ( when burned )



We estimate that CO2 emissions for the entire FAST RETAILING group in Japan could be reduced by a total of 6,012t from 10,695t/yr to 4,674t/yr.

### **Schedule for introducing the new bag**

We plan to introduce the environment conscious shopping bag from December 21, 2007 starting with our Eastern Japan stores and gradually expanding the bag's usages across all of our stores. We expect to have fully introduced the bag into all of our stores by June 2008.

Furthermore, other FAST RETAILING group companies will then begin introducing the bag starting with G.U. CO., LTD. from June 2008.

UNIQLO is the first company in the world to set about mass producing and introducing this environment conscious shopping bag in such a comprehensive fashion. With the cooperation of Professor Masahiko Abe of the Science and Engineering Department, Tokyo University of Science, and e-basic corporation, we organized and examined the entire process from tests, experiments, numerical validation, distribution scheme through quality management. We hope that our environment conscious activity may become standard around the globe and may go even a little way towards reducing the burden on the environment.

UNIQLO is committed to fulfilling its social responsibility through various initiatives.