OZONEWS

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1- Sticker Measures UV Accumulated Dose

A company at the Technion-Isreal Institute of Technology has developed a device called the Sticker in an effort to increase awareness of sun exposure. The Sticker is a quarter-sized patch that can be worn on either the skin or on clothing. The Sticker changes color when the wearer has had too much sun. As air pollution has increased over the years, the Earth's protective ozone layer has thinned, causing increased over-exposure to ultraviolet (UV) radiation from the sun.
"The sun's ultraviolet radiation is the cause of premature aging, wrinkling, benign and precancerous growths and at least 90 percent of all skin cancers," said Skin Cancer Foundation founder and president Perry Robins.
"We welcome new developments such as the Sticker that could help alert people to the importance of protecting themselves from the damaging rays of the sun."
The device measures the total accumulated dosage of UV rays absorbed by the body, said Sticker developer Ori Faran. This device is intended to measure the accumulated dose, not just the intensity of the UV, which is what causes the damage.
The Sticker is available in two versions -- for use with or without sun screen. It is also available for six skin types from very light to very dark and is adjusted to the UV dose that causes burns for that type.
Source: (Technion-Israel Release: 25/5/2000), Quoted from Ozone Depletion Today, 2 June 2000

2- COCA-COLA Brings Global Warming to Sydney Olympics

SYDNEY, Australia, June 2, 2000 (ENS) - The international environmental group Greenpeace is taking on soft drink giant Coca-Cola for its use of hydrofluorocarbons (HFCs), a greenhouse gas used in refrigeration systems. HFCs are used as a substitute for chlorofluorocarbons (CFCs), which are known to deplete atmospheric ozone. HFCs will cool more than 10 million Coca-Cola drinks during the Sydney Olympics, billed as the world's first "Green Games." Greenpeace has launched a global Internet campaign challenging Coca-Cola, an Olympic sponsor, for undermining the Environmental Guidelines of the Sydney 2000 Games. The campaign features polar bears, one of the icons Coca-Cola uses to its soft drinks. Scientific studies show that Arctic polar bears are under threat of starvation due to climate change brought on by greenhouse gasses.

The CokeSpotlight website (www.cokespotlight.org <http://www.cokespotlight.org>), produced in conjunction with the Canadian based internet activist organization Adbusters, enables people around the world to campaign with Greenpeace to change Coca-Cola's policy on HFC refrigeration. The site provides a campaign kit including downloadable stickers, posters, postcards and email images to lobby Coca-Cola directly. "Coca-Cola has had seven years to take the initiative and place environmentally friendly refrigeration at the Olympic site in line with the Environmental Guidelines," said Greenpeace Olympics campaigner, **Corin Millais**. "Instead Coca-Cola will continue its polluting practice of using HFC and undermining the Green Games. Coca-Cola's global refrigerant policy is intensifying the global climate crisis." At the Olympic site in Sydney, Coca-Cola will have 1,700 refrigerators that cool the drinks with HFCs and only 100 Greenfreeze coolers that comply with Sydney's Environmental Guidelines.

Source: ENS Service http://ens.lycos.com/ens/jun2000/2000L-06-02-09.html

3- Smugglers of Ozone Depleting CFCS Fined $1 M

LONG BEACH, California, June 2, 2000 (ENS) - A refrigeration company will pay a $1 million fine after admitting to smuggling ozone depleting chlorofluorocarbons (CFCs) into the United States. Allied Refrigeration Inc. of Long Beach pleaded guilty May 24 to violating the Clean Air Act and to illegally smuggling CFCs. As part of the plea, Allied will pay a $1 million fine, $100,000 of which will be directed to the Santa Monica National Recreational Area for use on environmental protection and preservation projects.

Allied participated in a scheme to smuggle 18,000 30-pound cylinders of CFCs into the U.S. between 1993 and 1995. The $1 million fine represents the profits Allied made from reselling the smuggled CFCs. The principal smugglers in this scheme, **Cowas Gustad** Patel of San Dimas, California and **Bruce Burrell** of Miami, Florida, have already been convicted and sentenced. The importation of CFCs into the U.S. is strictly regulated because the release of these ozone depleting substances into the atmosphere can increase human exposure to ultraviolet radiation, which is a cause of skin cancer and cataracts. The EPA seeks stiff sentences for CFC smugglers. Last month, **Kenneth McManus** of Denver, Colorado, was sentenced to nine months in prison and three years of supervised release for violating the Clean Air Act by importing more than one ton of R-12 refrigerant, a CFC gas.

Source: ENS Service http://ens.lycos.com/ens/jun2000/2000L-06-02-09.html

4- TOVS satellite images from the US NCEP/NWS/NOAA Climate Prediction Center and EP/TOMS images from the US NASA/GSFC show the formation of the ozone hole during August and September and its rapid filling in early December. The argins of the hole briefly crossed the southernmost tip of South America and the Falkland Islands over November 21 to 22. A remnant area over central Antarctica, with ozone values below 270 DU, persisted from late December into early February. The normal broad collar with ozone values generally above 300 DU now surrounds Antarctica, but contains small areas with values below 250 DU in south temperate latitudes. NOAA analyses show that the 50 hPa temperature was a little below the normal during most of the 1999/2000 season. Conditions are now suitable for Type I PSC formation.

An interesting low ozone event in the Northern Hemisphere occurred around November 30th. Nacreous clouds were widely seen over Scotland and very low ozone values measured over the North Sea. These events were associated with unusually low stratospheric temperatures, with chemical depletion playing a minor part in the low ozone values. A further display of nacreous clouds was seen over the UK on January 29. NOAA analyses show that the Arctic 50 hPa temperature was below the normal from early December, reaching an extreme of -75 deg C in early January. Locally, conditions were suitable for Type I PSC formation from mid-December until mid-March.

At higher levels the temperature is close to the normal. Results from the THESEO 2000/SOLVE campaign show that local ozone losses of over 60% occurred near 18km in March, with total column depletions of 15 - 30%.

Further information is available on the BAS ozone web page, which contains earlier bulletins, data, graphs and general ozone information. The url is: http://www.nbs.ac.uk/public/icd/jds/ozone

Source: BAS Ozone Bulletin 12/99 (99/00 Summary)

5- EPA Notice Expands SNAP List of Acceptable ODS Substitutes

The list of acceptable substitutes for ozone-depleting substances in the refrigeration and foam sectors under the U.S. Environmental Protection Agency's (EPA) Significant New Alternatives Policy program was expanded by an April 11 notice of acceptability (65 FR 19327).

According to the notice, Furan (C_4F_8O) is acceptable as a substitute for chlorofluorocarbon (CFC)-114 in retrofits of existing uranium isotope separation processing equipment. EPA believes that other alternatives exist or may be developed for use in new equipment designs in this end use. Moreover, the agency may decide to list Furan as unacceptable if other alternatives become available, the notice states.

Furan, a perfluorocarbon (PFC), does not contribute to stratospheric ozone depletion, but the compound has an "extremely high global warming potential (GWP) and a long atmospheric lifetime," the notice warns. Despite these concerns, PFCs remain the only viable alternatives to CFC-114 that have been identified in this end use, according to EPA. In fact, several PFCs already have been listed as acceptable replacements for CFC-114 in uranium isotope separation processing.

Generally, PFCs offer high dielectric resistance, noncorrosivity, thermal stability, materials compatibility, chemical inertness, low toxicity and nonflammability, the notice states. Furan, however, may offer distinct advantages over other PFCs currently listed as acceptable substitutes for CFC-114 in retrofits of existing uranium isotope separation processing equipment, according to EPA. The notice explains that Furan's vapor pressure is lower than that exhibited by other PFCs, thereby reducing leak rates as well as the chance that new leaks will be created in the system. In addition, Furan has a low molecular weight compared to other alternatives, making it easy to separate the compound from the process stream.

EPA also determined that saturated light hydrocarbons C3-C6 are acceptable as a substitute for hydrochlorofluorocarbon (HCFC)-141b in all foam end uses, except as HCFC replacements in spray foam applications. Spray foam applications are part of the rigid polyurethane spray and commercial refrigeration and sandwich panels end use.

The agency notes that this action does not affect previous decisions to list specific hydrocarbon blowing agents as acceptable in spray foam applications. The acceptability of hydrocarbons as HCFC-141b replacements in spray foam applications will be determined on a product-by-product basis until standard

industry practices are established, the notice states. EPA may list other hydrocarbon blowing agents as acceptable for spray foam applications if companies establish safety training programs. Interested parties should contact EPA.

Hydrocarbon blowing agents have no ozone depletion potential, low GWP and are low in toxicity, the notice states. However, these agents are flammable and should be handled with proper precautions, according to EPA. Flammability is of particular concern in spray foam applications where a controlled factory environment is not possible. EPA believes that a comprehensive training program can adequately control risks associated with the use of potentially flammable hydrocarbon-blown spray foam systems.
source:Ozone Depleter Compliance Guide, May 2000
http://www.thompson.com/tpg/enviro/ozon/ozonmay.html

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