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**SOFTWARE SUBSCRIBERS**

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HAZARD ALERT
December 10

TETRAHYDROFURAN

Tetrahydrofuran is an industrial solvent and chemical intermediate widely recognized for its unique combination of useful properties. [1]

Uses For Tetrahydrofuran: [1]

Resin Solvent:
• For uncured polyurethanes and for thermoplastic polyurethanes used in coating media, for example magnetic tapes and synthetic leather.
• PVC Top Coating
• PVC Reactor Cleaning
• PVC Film Casting
• Cellophane Coating
• Printing Inks for Plastics

Reaction Solvent:
• Grignard Reagents
• Alkali Metals, Alkyl- and Arylalkali Metal Compounds
• Alkali Metal Aluminium Hydrides and Borohydrides
• Steroids and High-Molecular-Weight Organic Polymers

Chemical Intermediate:
• Polytetramethylene Ether Glycols
• Natural Gas Odorants

Chromatographic Solvent:
• Gel Permeation Chromatography

Health Effects: [2]

Inhalation:
Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. THF is an anaesthetic agent in high concentrations. Overexposure may cause dizziness, headache, nausea and possible fluid in the lungs. May cause liver, kidney or lung injury.

Ingestion:
Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhoea. May cause sore throat and abdominal pain. May cause liver or kidney injury.

Skin Contact:
Causes irritation to skin. Symptoms include redness, itching, and pain.

Eye Contact:
Causes irritation, redness, and pain. Contact may cause permanent eye damage.

Chronic Exposure:
Repeated or high exposures may cause kidney or liver damage; may affect the lungs. Repeated skin exposure can cause dryness, cracking of skin and rash.

Aggravation of Pre-existing Conditions:
Persons with pre-existing skin disorders or eye problems or impaired liver or kidney function may be more susceptible to the effects of the substance.

Personal Protection: [3]

Protective clothing should be worn to prevent skin contact with tetrahydrofuran. Chemical protective clothing should be selected on the basis of available performance data, manufacturers' recommendations, and evaluation of the clothing under actual conditions of use. The following material has been recommended for use against permeation by tetrahydrofuran and may provide protection for periods greater than 8 hours: Teflon. A material that may withstand permeation for more than 4 but fewer than 8 hours is a mixture of polyethylene/ethylene vinyl alcohol. The following materials are not recommended for periods greater than 1 hour: butyl rubber, natural rubber, neoprene, nitrile rubber, polyethylene, polyvinyl chloride, Viton, or Saranex.

If tetrahydrofuran is dissolved in water or an organic solvent, the permeation properties of both the solvent and the mixture must be considered when selecting personal protective equipment and clothing.

Safety glasses, goggles, or face shields should be worn during operations in which tetrahydrofuran might contact the eyes (e.g., through splashes of solution). Eyewash fountains and emergency showers should be available within the immediate work area whenever the potential exists for eye or skin contact with tetrahydrofuran. Contact lenses should not be worn if the potential exists for tetrahydrofuran exposure.

The reconsideration of approvals of the active constituent atrazine, registrations of products containing atrazine, and their associated labels.

2004-12-10
Australian Pesticides and Veterinary Medicines Authority (APVMA)
Atrazine is a selective systemic herbicide that can be used both pre- and post-emergence for the control of grass and broadleaf weeds. It is mainly absorbed through the roots of plants and then transported to the actively growing tips and leaves, although some foliar absorption occurs. Atrazine kills the plant by inhibiting photosynthesis. The review of atrazine was announced in December 1995 as part of the APVMA's first cycle of review chemicals. The active constituent atrazine, products containing atrazine, and their product labels were placed under review due to concerns over:
• human and animal carcinogen claims;
• moderate potential chronic toxicity risk;
• potential to contaminate ground and surface water;
• absence of maximum residue limits (MRLs) for major commodities; and
• reported breakdown in efficacy.

Environmental Assessment
The environmental assessment considered the potential for atrazine to contaminate water bodies and its effects on the environment. It reviewed data from forestry industry studies on contamination of groundwater and surface water, and monitoring activities in annual cropping areas, and evaluated the environmental significance of atrazine residues in water. The potential effects of atrazine on amphibian development and sexual differentiation were also assessed.
It appears unlikely that atrazine, when used in accordance with the label recommendations, will contaminate waterways to any extent likely to present a hazard to the environment, or to human beings through the consumption of contaminated drinking water. Although levels of atrazine in water that increase during storms events may temporarily exceed the Australian and New Zealand Environment and Conservation Council (ANZECC) guidelines, long-term contamination at levels above the ANZECC guideline is unlikely.

Toxicological Assessment:
The original toxicology assessment was contained in the 1997 interim report and was not re-visited in the April 2002 draft final report. This additional assessment considered whether recent epidemiological and environmental reports on the carcinogenic, amphibian development and endocrine disruption potential of atrazine would change the human health assessment and recommendations of the 1997 interim report.
The 1997 interim report identified that atrazine caused neuroendocrine disruption in Sprague-Dawley (SD) rats, but that it did not bind to the oestrogen receptor or have any oestrogenic activity. Therefore, atrazine is unlikely to be an endocrine disruptor in humans, based on the known mechanism of action in SD rats. The latest assessment has not changed this conclusion.

SA smoking laws begin
2004-12-04
The first phase of the new legislation begins on 6th December 2004 and includes a complete ban on smoking in enclosed workplaces (except in licensed hospitality venues where bans will be phased in over three years). By the end of October 2007 all enclosed public areas and enclosed workplaces (including licensed hospitality venues) will be smoke-free and there will be no exemptions.
The aims of the Bill are:
• Protect workers and members of the public from passive smoking
• Reduce the recruitment of young people to smoking
• To prevent relapse by former smokers
The state's pubs and clubs are subject to phased-in bans, with all venues with two or more bars required to keep at least one of those bars smoke-free. No smoking will be allowed within one-metre from any service areas in single-bar venues.
A complete ban in all pubs and clubs, including the Adelaide casino, will come into effect in October 2007.
A booklet entitled ‘Your smoke-free workplace’ details suggestions on putting up signage, providing outdoor areas for staff who smoke, having designated smoking breaks and communicating with employees about how the laws affect their workplace.
A copy of the booklet can be obtained by calling the Department of Health information line on 1300 363 703 or by going to the tobacco law website:
AMERICAS
National Toxicology Program – Identifying Potential Ocular Irritants (Department of Health and Human Services)

2004-12-03
The Public Health Service National Toxicology Program; National Institute of Environmental Health Sciences (NIEHS); National Institutes of Health (NIH) Notice of Additional Data and Analyses for the Assessment of the Current Validation Status of In Vitro Testing Methods for Identifying Potential Ocular Irritants. The National Toxicology Program (NTP) Interagency Center for the Evaluation of Toxicological Methods (NICEATM) recently published a notice in the Federal Register (Vol. 69, No. 212, pages 64081-2, November 3, 2004) announcing the availability of and requesting comments on Background Review Documents (BRDs) for four in vitro assays proposed for identifying potential ocular corrosives and severe irritants. Notice is hereby given of the availability of additional data and analyses for the Hen’s Egg Test-Chorion Allantoic Membrane (HET-CAM) assay. Copies of the additional analyses and any other updates on information relevant to this meeting can be obtained on the ICCVAM/NICEATM Web site at http://iccvam.niehs.nih.gov or by contacting NICEATM [NIEHS, P.O. Box 12233, MD EC-17, Research Triangle Park, NC, 27709, (phone) (919) 541-3398, (fax) (919) 541-0947, (e-mail) iccvam@niehs.nih.gov].

Certain Polybrominated Diphenylethers; Proposed Significant New Use Rule – EPA

2004-12-06
Proposed rule. Comments, identified by docket identification (ID) number OPPT-2004-0085, must be received on or before February 4, 2005. SUMMARY: EPA is proposing a significant new use rule (SNUR) under section 5(a)(2) of the Toxic Substances Control Act (TSCA) for tetrabromodiphenyl ether (CAS No. 40088-47-9; Benzene, 1,1’-oxybis-, tetrabromo deriv.), pentabromodiphenyl ether (CAS No. 32534-81-9; Benzene, 1,1’-oxybis-, pentabromo deriv.), hexabromodiphenyl ether (CAS No. 36483-60-0; Benzene, 1,1’-oxybis-, hexabromo deriv.), heptabromodiphenyl ether (CAS No. 68928-80-3; Benzene, 1,1’-oxybis-, heptabromo deriv.), octabromodiphenyl ether (CAS No. 32536-52-0; Benzene, 1,1’-oxybis-, octabromo deriv.), or nonabromodiphenyl ether (CAS No. 63936-56-1; Benzene, pentabromo(tetrabromo phenoxy)-); and any combination of these substances resulting from a chemical reaction. This proposed rule would require manufacturers and importers to notify EPA at least 90 days before commencing the manufacture or import of any one or more of these chemical substances on or after January 1, 2005 for any use. EPA believes that this action is necessary because these chemical substances may be hazardous to human health and the environment. The required notice would provide EPA with the opportunity to evaluate an intended new use and associated activities and, if necessary, to prohibit or limit that activity before it occurs.

Methylenedianiline in Construction; Correction – Occupational Safety and Health Administration (OSHA), Labor.

2004-12-06
ACTION: Final rule; correction. SUMMARY: OSHA is revising the regulatory text of the Methylenedianiline (MDA) Standard for Construction to correct a cross reference to OSHA’s standard on emergency action plans and fire prevention plans. DATES: This final rule becomes effective January 5, 2005.

Preliminary Assessment Information Reporting; Addition of Certain Chemicals – EPA

2004-12-07
Final rule effective on January 6, 2005. This final rule, issued pursuant to section 8(a) of the Toxic Substances Control Act (TSCA), will require certain manufacturers (including importers) of 3 chemical substances in the chemical category “Pyridinamines” and 20 chemical substances in the chemical category “Tungsten Compounds” to submit a one-time report on general production/importation volume, end use, and exposure-related information to EPA. The Interagency Testing Committee (ITC), established under section 4(e) of TSCA to recommend chemicals and chemical mixtures to EPA for priority testing consideration, amends the TSCA Section 4(e) Priority Testing List through periodic reports submitted to EPA. The ITC recently added these 2 categories containing 23 chemicals to the Priority Testing List. In addition, EPA is adding as required under the Paperwork Reduction Act (PRA) the Office of Management and Budget (OMB) approved information collection requirements contained in this final rule to EPA’s table of OMB control numbers in the Code of Federal Regulations (CFR).

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Applicability of the Hazardous Materials Regulations to Loading, Unloading, and Storage – Research and Special Programs Administration (RSPA), DOT.

2004-12-08
Final rule; delay of effective date.
On October 30, 2003, RSPA published a final rule (68 FR 61905) to clarify the applicability of the Hazardous Materials Regulations to loading, unloading, and storage operations. RSPA is delaying the effective date of the final rule from January 1, 2005 until June 1, 2005.

"http://a257.g.akamaitech.net/7/257/2422/06jun20041800/edocket.access.gpo.gov/2004/04-26852.htm"

EUROPE

Chemical Safety - Contaminants (Legislation)
2004-12-09
Draft Guidance document for competent authorities for the control of compliance with EU legislation on aflatoxins
"http://europa.eu.int/comm/food/food/chemicalsafety/contaminants/aflatoxin_guidance_en.pdf"

Newly updated dangerous substances regulation to be published – Germany
2004-12-08
Details in German at the following website:
"http://www.bmwa.bund.de/Navigation/Arbeit/arbeitrecht,did=12224.html"

Copenhagen declaration on organic solvents and water based paints
2004-11-29
Details in Danish at the following website:

DK - Passive smoking recognised as industrial injury (Danish)
2004-12-01
Details in Danish at the following website:
http://www.ask.dk/docs/passiv_rygning_kan_give_lungekraeft.asp

UN conference on climate change: EU set to keep momentum in the global fight against climate change
2004-12-03
The EU will step up efforts to combat climate change alongside its international partners at the annual UN climate change conference starting next Monday in Argentina. At the conference, which is taking place against the background of the recent ratification of the Kyoto Protocol by Russia, the EU will present its Emissions Trading System due to be launched on 1 January – a concrete step for the implementation of the EU commitment under the Kyoto protocol in a cost-efficient manner. Environment Commissioner Stavros Dimas will represent the European Commission at the conference, which will bring together ministers and other senior representatives from 189 countries. The ambitious agenda focuses on the successful implementation of Kyoto and its market-based mechanisms. Other important issues on the agenda are the support developing countries need to deal with the effects of climate change as well as a first discussion of future policies.

NOT TOO SERIOUSLY

Top Ten Rules of the Office Xmas party:

1. Set a ‘Party Policy’
   From the employer’s point of view, the Christmas party is classed as a ‘work activity’. It therefore should be treated as such by having guidelines in place. This could be as simple as displaying employees’ responsibilities, such as acceptable standards of behaviour, on a notice board. The employer’s responsibilities, such as meeting health & safety requirements and providing grievance procedures to deal with any resulting problems, should also be outlined.

2. Identify potential hazards
   Just as with any other work-related activity, a risk assessment must be carried out to identify potential hazards. This could involve inspecting the venue to plan for drunken slips and trips, considering the safety of people going home after the event, and even identifying any potential conflict between employees so that table plans can be organised accordingly.

3. Issue behavioural guidelines
   This should be included in the ‘Party Policy’ and should clarify unacceptable behaviour, such as harassment, bullying and fighting. Employees should understand that, as this is technically a work activity, normal disciplinary procedures would be applied.

4. Invite husbands, wives... and life-partners
   If inviting employees’ partners to the event, employers need to tread carefully. This should not be restricted to husbands and wives but also extended to partners of the opposite and same sex, to avoid potential sexual orientation discrimination claims.

5. Avoid ‘tipple tattle’
   Boozing bosses should avoid discussing promotion, career prospects or salary with employees who may use the convivial situation to discuss matters that are more suited to a formal appraisal or private meeting. The employee is likely to expect any career promises to be kept – even if the employer can’t remember the conversation!

6. Limit the spirit
   If the employer supplies the alcohol, or encourages its consumption, they may be legally responsible for the welfare of the employee if they suffer from drink induced disasters - even if they occur outside of the party itself. The best solution is to limit the number of free drinks and be prepared to ask individuals to take it easy if they appear worse for the wine.

7. Don’t poison your staff
   If providing a buffet, the food must be safe to eat. Buffets present a particularly high risk of food poisoning from foods such as cooked meats, eggs, mayonnaise and cooked rice. Food should not be left out at room temperature for more than 90 minutes and should be stored below 5°C.

8. Ditch the mistletoe
   The Christmas party is the perfect environment for a festive fling but this could have repercussions when employees return to work. A brief encounter under the mistletoe can cause embarrassment in the workplace and put strain on working relationships. While many businesses have informal views on office affairs, most do not have a policy on workplace relationships. Employers should make sure all employees are informed of the company’s view on romantic affairs between colleagues and reminded of this ahead of the party.

9. Curb drink driving
   As employers are responsible for employees’ actions after consuming alcohol they have provided, sensible bosses will issue advice before the party about not driving after having an alcoholic drink. It is advisable to hire a minibus for the end of the night, or provide the numbers of local taxi firms to demonstrate that reasonable steps have been taken to minimise this risk.

10. Don’t expect miracles the morning after
    A contract exists between the employee and employer that they will be in a fit state to carry out the work they are being paid to do. Bosses should decide to what extent they will be lenient to staff coming to work with a hangover, arriving late, or even not at all, and inform employees. More important is the safety of employees, who may not be fully sober the next day, especially if they need to drive or operate machinery. Employers should either advise employees beforehand not to drink too much alcohol, or remove the risk to safety by giving them alternative work until they are fit to resume their normal tasks.

HEALTH & HAZARD

Allergies may raise blood cancer risk
2004-11-24

In contrast to some earlier reports, allergic conditions appear to increase, rather than decrease, the risk of leukaemia and lymphoma, according to a Swedish study. Depending on the root cause of allergies, theories predict that allergic conditions may either reduce or raise the risk of cancer, researchers explain in the medical journal BMC Public Health.

While several studies have looked at the allergy-cancer relationship by comparing people who have cancer to those who do not, there have been few studies that looked at a representative segment of the general population. To investigate any connection between allergies and blood cancers, Dr. Karin C. Soderberg, from the Karolinska Institute in Stockholm, and colleagues analysed data from a group of 16,539 Swedish twins who were born between 1886 and 1925. The presence of allergic conditions was assessed with questionnaires administered in 1967. The group was followed from 1969 to 1999, and cases of cancer were identified through the Swedish Cancer Registry.
UK drug firms deny safety doubts

2004-11-24

British drug firms have defended the safety of two products which were deemed unsafe by an American expert. Dr David Graham listed five medicines which he said posed serious health risks during a US Senate hearing. Among them were Crestor, a cholesterol-lowering drug from AstraZeneca, and GlaxoSmithKline’s Serevent, used by asthma patients. Both firms saw their share value fall on the stock market last Friday after Dr Graham’s comments.

Dr Graham is a member of the American Food and Drug administration’s Office of Drug Safety. He made his comments during a hearing into anti-inflammatory drug Vioxx, which was withdrawn after safety trials.

The FDA was quick to back the safety of the five drugs, which are all available in Britain. Each of the firms which manufacturer them staunchly defenced their safety. AstraZeneca said is was baffled by the comments and added: “AstraZeneca is confident in both the safety and efficacy of Crestor.” GlaxoSmithKline said: “GlaxoSmithKline stands firmly behind Serevent which is safe and effective when used appropriately and in accordance with labelling and treatment guidelines.” Responding to the safety fears, the UK Department of Health said it keeps medicines under constant review.

BBC News, 20 November 2004
“http://news.bbc.co.uk/hi/english/health

Chernobyl caused Sweden cancers

2004-11-24

More than 800 people in northern Sweden may have developed cancer as a result of the fallout of the 1986 Chernobyl nuclear accident, a new study says. Swedish scientists said the “Chernobyl effect” was the only likely explanation for 849 cancer cases they came across. But their findings met with scepticism from some other experts who think the radiation fallout in Sweden was not likely to cause such a rise in cases. A radioactive cloud swept across north Europe after the disaster in Ukraine.

The study monitored cancer cases among more than 1.1 million people exposed to radioactive fallout in northern Sweden between 1988 and 1996. Martin Tondel, a researcher at Sweden’s Linkoeping University who headed the study, said that, of 22,400 cancer cases, 849 could be statistically attributed to Chernobyl. He said that, after other factors such as smoking, population density and age had been taken into account, it seemed the only possible explanation. The new findings have been published in this month’s issue of the Journal of Epidemiology and Community Health, published by the British Medical Association.

BBC News, 20 November 2004
“http://news.bbc.co.uk/hi/english/health

Brain Area Found to Be Smaller in Cocaine Addicts

2004-11-24

A part of the brain involved in both drug craving and judgement appears to be smaller in cocaine addicts than in healthy people, researchers have found. Analysing brain scans from 27 people, addicted to cocaine and 27 healthy adults of the same age, the researchers found that in the drug abusers, a brain structure called the amygdala was smaller than normal. Exactly what the finding means is not yet clear, but several pieces of evidence suggest that reduced volume in the amygdala may predispose a person to cocaine addiction, the study’s senior author said.

The amygdala is a collection of nuclei in the brain involved in the processing of emotion. Brain-imaging studies have tied drug craving to activity in the amygdala, and recent research has also suggested that the brain structure aids in sizing up the potential negative outcomes of an action.

It’s such judgement that people with drug addiction typically lack, Dr. Hans C. Breiter of Massachusetts General Hospital in Boston, said. His team’s study, published in the November 18th issue of the journal Neuron, cannot answer the question of whether...
smaller amygdala volume is a contributor to or consequence of cocaine addiction, Breiter said. However, he pointed to evidence that supports a causal role. For example, amygdala volume did not correspond with the level of a person’s drug abuse; cocaine users in the study had abused the drug for anywhere from one to 27 years, yet had similar reductions in amygdala size.

Yahoo News, 19 November 2004
“http://dailynews.yahoo.com/h”

Obesity a major obstacle to good sex life
2004-11-24

New research confirms the worst fears of those who worry about putting on extra pounds: Severely overweight people are much more likely to report poor sex lives. In some areas of their sex lives, the obese report 25 times as many problems as people of weight levels considered healthy. Both men and women suffered from lack of sexual desire and enjoyment along with hampered performance. Many reported avoiding sex entirely.

The study results suggest that many fat people share similar challenges on the sexual level, said study co-author Martin Binks, a clinical psychologist and director of behavioural science at Duke University’s Diet and Fitness Centre. Binks and his colleagues surveyed 1,210 people from the Durham, N.C., area. Most had sought treatment at Duke’s diet centre, and all but 282 were obese, with an average body mass index of 41. The index indicates whether a person’s weight is proportional to his or her height; a 5 foot, 5 inch person weighing 250 pounds would have a BMI of 41. Half of those seeking treatment for obesity said they sometimes, usually or always felt no desire for sex, compared to just 2 percent of those who were not obese. About four out of every 10 treatment-seekers reported physical problems with sex; 41 percent said they avoided sex. In contrast, just 2.5 percent of the non-obese people said they stayed away from sexual activity.

Yahoo News, 19 November 2004
“http://dailynews.yahoo.com/h”

Poor diet linked to bad behaviour
2004-11-24

Children who have a poor diet are more likely to become aggressive and anti-social, US researchers believe. The University of Southern California found a lack of zinc, iron, vitamin B and protein in the first three years caused bad behaviour later on. At eight years old, children fed poorly were more likely to be irritable and pick fights than those fed healthily. Aged 11, they swore, cheated and got into fights, and at 17, they stole, bullied others and took drugs.

The researchers analysed the development of more than 1,000 children on Mauritius, an island in the Indian Ocean off the coast of Africa, over 14 years. They found the more malnourished the children were, the greater the anti-social behaviour later on.

BBC News, 22 November 2004
“http://news.bbc.co.uk/hi/english/health"

Stress quadruples risk of asthma attacks in children - Study
2004-11-24

Children with asthma face quadruple the risk of an attack following stressful events in their lives, according to a study published in the journal Thorax. Researchers from McGill University in Montreal, Canada, studied 60 children between the ages of 6 and 13, who had suffered from asthma for at least three years. The children were asked to keep daily records over 18 months of acute attacks and their breath strength. Researchers regularly interviewed the children and their parents about stressful life events. After the information was analysed, the children were found to be four times as likely to experience a sudden worsening of symptoms with two days of a traumatic experience. The most upsetting events were cited as moving house, births, deaths, separations and changes in family relationships. Researchers found double the risk of symptoms worsening again about six weeks after the event. Past studies have indicated that stress and states of emotional arousal produce increased airway resistance. The study’s authors suggested the increased likelihood of asthma attacks was due to a variety of physiological and immune processes involving the nervous system as well as hormone and brain chemical regulation.

Yahoo News, 23 November 2004
“http://dailynews.yahoo.com/h”

Obesity linked to unhealthy heartbeat in study
2004-11-24

Obesity raises the risk of atrial fibrillation, an abnormal heartbeat that can lead to stroke and early death if not controlled, according to researchers. "What we found is that obesity was associated with an approximately 50 percent increase in the risk of developing atrial fibrillation," said Dr. Thomas Wang of the Framingham Heart Study.

The researchers tracked more than 5,200 middle-aged adults for an average of 14 years, during which 526 developed atrial fibrillation, mostly due to changes in the structure of the heart blamed on patients being overweight. Obesity can cause the heart’s left atrium, an upper chamber that receives oxygenated blood circulated from the lungs, to become dilated and beat abnormally fast, throwing off the heart’s rhythm, according to the study published in the Journal of the American Medical Association. "Once you get atrial fibrillation, it may be very difficult for doctors to get you back into the normal rhythm, and what that means for the patient is that the patient may be stuck with a lifetime of taking medications to protect against stroke and the other complications of atrial fibrillation," Wang said.

Yahoo News, 23 November 2004
“http://dailynews.yahoo.com/h”
Lycopene has been found to have anti-tumour activity in a number of laboratory studies. Also, it has been used in a number of cancer studies in humans (e.g., lung, stomach and prostate cancers) that demonstrated a lower cancer rate in people with a high dietary intake of lycopene. Research has shown an over 20 percent reduced risk for developing prostate cancer in men who ate more cooked tomato products, such as tomato sauce. Additional studies showed that cooking tomatoes and eating them with oil substantially increases the bioavailability of lycopene.

Science Daily, 19 November 2004
“http://www.sciencedaily.com”

Computers help cure AIDS in spare time
2004-11-24

Anyone with a computer can now help scientists find a cure for diseases. And it won’t cost anything, other than sharing a home or business Windows PC when it’s not busy. Last week IBM launched the World Community Grid in a global humanitarian effort to apply unused computer power to help researchers unlock genetic codes that underlie diseases like AIDS, Alzheimer’s and cancer. Each computer requires software that can be downloaded at www.worldcommunitygrid.org and installed like any other program. It quietly runs in the background when you are using your PC but it can also chug away on computational tasks sent in via the Internet.

IBM donated the hardware, software, technical services and expertise to build the infrastructure for World Community Grid, and provides hosting, maintenance and support. Computer grid technology was used to make the process as unobtrusive as possible. Most PC users rarely use their computer’s maximum power. It works by splitting a large project into smaller parts that each computer calculates and sends back. The program can be stopped or removed from a computer.

Wired News, 22 November 2004
“http://www.wired.com/news”

Antioxidant supplementation may reduce incidence of cancer in men
2004-11-24

Low-dose antioxidant supplementation may reduce the risk of cancer among men, but not in woman, according to an article in the November 22 issue of The Archives of Internal Medicine. According to the article, antioxidants including beta carotene, ascorbic acid, vitamin E, selenium, and zinc may prevent some of the harmful effects caused by free radicals - reactive molecules produced by metabolism in the body. It has also been suggested that a low dietary intake of antioxidants increases the incidence of cancer and cardiovascular disease.

Serge Hercberg, M.D., Ph.D., of the Institut National de la Sante et de la Recherche Medicale (INSERM) in Paris, and colleagues
tested the efficacy of dietary supplementation with a combination of antioxidant vitamins and minerals in reducing the incidence of cancer and cardiovascular disease among 13,017 French adults. Participants were randomly assigned to take either a daily capsule containing 120 milligrams of ascorbic acid, 30 milligrams of vitamin E, six milligrams of beta carotene, 100 micrograms of selenium, and 20 milligrams of zinc; or a placebo capsule. Participants were followed-up for a median of 7.5 years. The researchers found no differences between the antioxidant and placebo group in terms of cancer incidence, or in cardiovascular disease incidence or all-cause death. However, when the researchers looked at cancer incidence according to sex, they found a significant protective effect of the antioxidants in men, who were 31 percent less likely to develop cancer than women. A similar trend was seen in men for death rates. “After 7.5 years, low-dose antioxidant supplementation lowered total cancer incidence and all-cause mortality in men but not in women. Supplementation may be effective in men only because of their lower baseline status of certain antioxidants, especially of beta carotene,” the researchers write.
Science Daily, 23 November 2004
“http://www.sciencedaily.com"

GREENLINE
DC water test finds toxic substance
2004-11-24
A more refined test of the water in the Washington Aqueduct has revealed the presence of perchlorate, a toxic chemical typically found in weapons and explosives, federal officials said. The discovery of the chemical in the water supply challenges the prevailing theory of the U.S. Army Corps of Engineers, which has argued that contamination from buried World War I munitions in the Spring Valley neighborhood to the north poses no threat to Dalecarlia Reservoir along MacArthur Avenue NW.
Thomas P. Jacobus, chief of the Washington Aqueduct, said perchlorate in the reservoir measured between 1.2 and 1.8 parts per billion (ppb) and did not pose a health risk. He said he has ordered weekly tests of the water and is recommending that the corps accelerate its search for the source of perchlorate contamination. The corps operates the aqueduct, which supplies drinking water to more than a million people in the District, Arlington County and the city of Falls Church. It is also overseeing a multimillion-dollar cleanup of chemical contamination in Spring Valley. Environmental Protection Agency and District government officials said last night that there was no need for immediate action but agreed that aggressive monitoring of perchlorate was now needed. There is no federal standard for the chemical. The EPA is awaiting a recommendation from a scientific panel to set one. In the meantime, the agency can require the cleanup if contamination levels reach 4 ppb.
Google News, 19 November 2004

Clouds of pollution pictured from space
2004-11-24
Haze and dust from industrial activity blanket low-lying regions of eastern China and northern India, two recent satellite images reveal. The images, showing the extent of pollution, were captured by two NASA satellites - Aqua and Terra - using an instrument called the Moderate Resolution Imaging Spectroradiometer (MODIS). Aqua, which captures images in the afternoon, took the picture of Eastern China on 17 November, when a gray haze hung over the coastal plain around the Yellow River and spilled out over the Yellow Sea. The smog is probably churned out by the country’s coal-fuelled power plants, smoke from fireplaces in individual homes, and vehicle exhaust and pollution from nearby Beijing and Tianjin. “This type of haze event is common in this part of China,” says Jon Ranson, Terra project scientist at NASA’s Goddard Space Flight Centre in Greenbelt, Maryland, US.
Terra, which captures images in the morning, snapped the picture of haze along the foothills of the Himalayan mountains in northern India on 15 November. The haze spreads from the southern Bay of Bengal to the mouth of the Ganges River. But it clears over the Tibetan Plateau to the north of the Himalayas. “The Himalayas are definitely acting as a barrier to keep the smoke and pollution in that particular region,” said Ranson. “The smoke and other pollutants back up against the mountains.”
New Scientist, 18 November 2004
“http://www.newscientist.com/”

Scientists Warn of Toxins in Fish
2004-11-24
Each day at 4 p.m., the trawlers come back, alive with giant bass, mackerel and squirming eels, at the end of a food chain that links family dinner tables to poisons in the sea. Besides mercury which can damage the brains of foetuses and young children and can affect healthy adults, there are PCBs, dioxins and flame retardants with unknown long-term effects. Although rich in omega-3 fatty acids vital to the heart and brain, many fish contain toxins that build up over time in the human body. And as this paradox worsens, scientists express alarm at what they call inadequate government warnings, lax attitudes toward fishing industries, and insufficient data to assess the risks. The problem is that authorities are caught between wanting to inform the public while not damaging consumer confidence in a healthy food source, says Sandrine Blanchemanche, a sociologist with France’s prestigious National Institute for Agronomic Studies.
Newsday, 20 November 2004

Link to Technical Notes