

# RUBBER ACCELERATORS

\_\_\_\_\_ Name

\_\_\_\_\_ Date

## ***What are these?***

Rubber accelerators and antioxidants are chemicals used in the manufacture of both natural latex and synthetic rubbers. Many of these agents can cause allergic dermatitis. This type allergy is *different from* Latex Allergy, in which potentially dangerous *immediate* swelling occurs on contact with natural rubber made from latex tree sap.

## ***Where might they be found?***

rubber gloves, nitrile gloves  
rubber sandals, slippers, soles  
rubber shoes, insoles, boots  
rubber hip waders, gators  
elastic in clothing, socks, girdle  
support stockings  
non-slip waistband, elastics  
brassiere cups  
rubber undergarments, panties  
slimming suits, sauna suits  
swimwear, swim cap, goggles  
wetsuit, diving gear  
condoms, diaphragms  
rubber vibrator, rubber dropper  
rubber pillow, mattress, sheet  
cosmetic applicator, lash curler  
ear plugs, headphones  
hairbrush handle, hairnet  
toothbrush rubber handle  
dentures, dental dams  
baby bottle nipples, pacifiers  
balloons, rubber balls, toys  
adhesive tape, bunion pad  
hot water bottle, urinal  
medical devices, stethoscopes  
intravenous port, stoppers  
tourniquet, syringe plunger  
blood pressure cuff  
surgical mask, CPAP strapping  
dialysis equipment, catheter  
orthopedic braces, supports  
rubber prosthesis, splint, mask  
rubber bands, i-Pod band  
pen handle, pencil grip, eraser  
mouse pad, wrist support  
glue, envelopes, stamps  
rubber bank note counter

kitchen utensil rubber handles  
rubber mats, carpet backing or underlay pad  
racquet handle, club handle  
hockey pads, soccer shin pad, foam shoulder pad  
rubber in upholstered furniture  
rubber cement for shoe uppers and linings  
rubber hose, rubber tubing, seals, cables  
steering wheel, bicycle handle  
auto hoses, gaskets, fan belts  
shock absorbers, springs, tires, inner tubes  
tool handles, utensil handles  
duct tape, electrical cords  
weather stripping  
safety aprons, goggles, respirators, gas masks  
neoprene and isoprene rubber  
conveyor belts  
fuel tank lining  
synthetic resins in textile/dye industry  
microscope eyepiece

## ***How to avoid them:***

Most rubber products contain rubber accelerators. Avoid direct contact with all rubber. Use protective fabric, leather, or plastic to handle dry rubber. Wear heavy duty vinyl gloves to protect against workplace contact with these chemicals.

## You were patch tested with these accelerators:

- ♦ **Thiurams** (tetramethylthiuram monosulfide, tetramethylthiuram disulfide, tetraethylthiuram disulfide, dipentamethylene thiuram disulfide),
- ♦ **Carbamates** (zinc diethyldithiocarbamate, diphenylguanidine, zinc dibutyldithiocarbamate),
- ♦ **Mixed Dialkyl Thioureas** (diethylthiourea and dibutylthiourea), and
- ♦ **Benzothiazoles** (morpholinyl mercaptobenzo-thiazole, mercaptobenzo-thiazole, N-cyclohexyl-2-benzothiazyl sulfenamide, dibenzothiazyl disulfide). *(continued)*

### **Non-rubber uses:**

These chemicals have other uses that may be important in your exposure. Check the Material Safety Data Sheet (MSDS) at work for them.

**Thiuram** chemicals are used in germicides, pesticides, seed disinfectant, fungicides, insect repellants, animal repellants, wood and paint preservatives, plastics, putty, and as a bacteriostat in soaps, greases, shampoos, and oils.

The medicine disulfuram (*Antabuse*) is a thiuram.

**Carba** chemicals are found in animal repellants, pesticides, herbicides, fungicides, slime retardants, disinfectants, and some shampoos, soaps, cements, sealants, and adhesives.

**Thioureas** are present in diazo copy paper, photography fixative, polyvinyl chloride adhesive tapes, commercial paint and glue remover, acidic detergent, silver polish dip, disinfectants, pesticides, fungicides, phonecard thermocoating, metal anti-corrosion agent, stain remover, and manufacture of resin and Neoprene.

**Benzothiazoles** have uses in greases, cutting fluids, antifreeze, anticorrosives, cements, adhesives, detergents, veterinary products such as tick and flea powders and sprays, fungicides, slimicides, tree spray, photographic film emulsions, pottery molds and releasing fluid, and paints.

### **Replace Rubber Items with these Alternatives:**

Spandex	polyvinyl chloride	wood
silicone	buttons (for elastic)	acrylic
plastic	drawstrings (for elastic)	vinyl
fabric	polyethylene foam	Mylar

NOTE: Any socks or stockings worn with shoes that caused the allergic reaction may have gotten contaminated. Washing may not remove the allergen.

### **These are FREE of Rubber Accelerators:**

#### **Household gloves**

- ◆ Best N-DEX NightHawk Defender (6) 800-241-0323
- ◆ Allerderm Heavy Duty Vinyl 800-365-6868

#### **Exam gloves**

- ◆ Ansell Micro-Touch Elite
- ◆ Synsation
- ◆ Conform NL
- ◆ New Touch
- ◆ Best N-DEX Free 800-241-0323
- ◆ CardinalHealth Esteem Stretchy Synthetic 800-234-8701

#### **Sterile surgical gloves**

- ◆ Ansell DermaPrene Ultra 800-952-9916

#### **Chemical protective gloves**

- ◆ 4H/Silvershield [www.allerderm.com](http://www.allerderm.com) 800-365-6868 or [www.northsafety.com](http://www.northsafety.com) 800-430-4110
- ◆ Barrier Chemical Protective [www.ansellpro.com](http://www.ansellpro.com) 800-800-0444

#### **Condoms**

- ◆ Trojan Naturalamb
- ◆ Durex Avanti polyurethane

#### **Diapers**

- ◆ Luvs
- ◆ Pampers

#### **Underwear**—with no elastic waist, leg bands, straps

- ◆ Jockey
- ◆ Dorlastan
- ◆ Spandex (many brands)

#### **Socks**—with no elastic component

**Shoes**—completely leather with non-rubber sole and insole (e.g. cork, felt)

**Sports equipment free of Neoprene**—Cropper Medical, Ashland, OR; Bauerfiend USA, Wichita, KS; Speedo, Los Angeles, CA; TYR Sport, Huntington, CA; Skyline Northwest, Lake Oswego, OR; Shock Doctor, Plymouth, MN; McKeon Products, Warren, MI; E.A.R. Inc., Boulder, CO; All-Star Sports Equipment, Shirley, MA