HAND PROTECTION

IDENTIFY

The best tools we have are our hands. We need to protect them on the job.

Manual work exposes our hands to many different hazards, from cuts and chemicals, pinching and crushing, and blisters and burns.

COMMUNICATE AND CONTROL

Leather gloves provide good protection against rough edges, splinters, and heat. Cotton or other materials don't stand up well. You should wear them only for light-duty jobs. For sharp edges or when using knives, workers should use cut-resistant gloves. These gloves are woven with Kevlar™ fibres.

Wearing anti-vibration gloves when using power tools and equipment can help prevent hand-arm vibration syndrome (HAVS).

HAVS causes the following changes in fingers and hands:

- Circulation problems, such as whitening or bluish discoloration, especially after exposure to cold.
- Sensory problems, such as numbness and tingling.
- Musculoskeletal problems, such as difficulty with fine motor movements — for instance, picking up small objects.

Workers who use vibrating tools such as jackhammers, grinders, riveters, and compactors daily may develop HAVS.

Our hands also need protection against chemicals. Check the label to see whether a product must be handled with gloves and what types of gloves are required.

If that information is not on the label, check the Safety Data Sheet (SDS). A SDS must be available on site for any controlled products that are being used.

Using the right gloves for the job is important. For instance, rubber gloves should not be worn when working with solvents and degreasers. The gloves will dissolve on contact.

FACTS AND TIPS

- What are the specific chemicals used on your jobsite and what type of gloves are recommended for each?
- Wear the appropriate glove to prevent damage to your hands.
- Use the SDS for reference or the glove selection chart below.

Glove Selection Chart	
Chemical Name	**Glove Selection**
Acetone	Butyl Rubber
Cellosolve	PVA, PVC, Neoprene
Cellosolve Acetate	PVA, PVC
Cyclohexane	NBR, Viton*
Hexane	Neoprene, NBR, PVA
Methyl Alcohol	Neoprene, Rubber, NBR
Methyl Chloroform	PVA, Viton
Methylene Chloride	PVA, Viton
Methyl Ethyl Ketone	Butyl Rubber
Methyl Isobutyl Ketone	Butyl Rubber, PVA
Mineral Spirits	Neoprene
Naphtha	NBR, PVA
Perchloroethylene	NBR, PVA, Viton
Stoddard Solvent	PVA, NBR, Rubber
Toluene	PVA, Viton
Turpentine	PVA, NBR
Trichloroethylene	PVA, Viton
1, 1, 1 Trichloroethane	PVA, Viton
1, 1, 2 Trichloroethane	PVA, Viton
Xylene	PVA, Viton

PVA - Polyvinyl Alcohol
PVC - Polyvinyl Chloride
NBR- Nitrite Butyl Rubber
Viton*- Dupont tradename product

Old ANSI Cut-Resistant Levels (Grams)	New ANSI Cut-Resistant Levels (Grams)	Applications By Cut Level
1 (200)	A1 Light cut hazards (200)	Material handling, small parts assembly (sharp edges), packaging, warehouse, general purpose, forestry, construction
2 (500)	A2 Light/medium cut hazards (500)	Material handling, small parts assembly (sharp edges), packaging, warehouse, general purpose, forestry, construction, pulp ad paper, automotive assembly
3 (1000)	A3 Light/medium cut hazards (1000	Material handling, small parts assembly (sharp edges), packaging, warehouse, general purpose, forestry, construction, pulp ad paper, automotive assembly
4 (1500)	A4 Medium cut hazards (1500)	Appliance manufacturing, bottle and light glass handling, canning, drywall work, electrical, carpet installation, HVAC, pulp ad paper, automotive assembly, metal fabrication and handling, packaging, warehouse, aerospace industry, food prep/ processing
5 (3500)	A5 Medium/heavy cut hazards (2200)	Appliance manufacturing, bottle and light glass handling, canning, drywall work, electrical, carpet installation, HVAC, pulp ad paper, automotive assembly, metal fabrication and handling, packaging, warehouse, aerospace industry, food prep/ processing
	A6 High cut hazards (3000)	Metal stamping, metal recycling, pulp and paper (changing slitter blades), automotive assembly, metal fabrication, sharp metal stampings, glass manufacturing, window manufacturing, recycling plant/sorting, HVAC, food prep/ processing, meat processing, aerospace industry
	A7 High cut hazards (4000)	Metal stamping, metal recycling, pulp and paper (changing slitter blades), automotive assembly, metal fabrication, sharp metal stampings, glass manufacturing, window manufacturing, recycling plant/sorting, HVAC, food prep/ processing, meat processing, aerospace industry
	A8 High cut hazards (5000)	Metal stamping, metal recycling, pulp and paper (changing slitter blades), automotive assembly, metal fabrication, sharp metal stampings, glass manufacturing, window manufacturing, recycling plant/sorting, HVAC, food prep/ processing, meat processing, aerospace industry
	A9 High cut hazards (6000)	Metal stamping, metal recycling, pulp and paper (changing slitter blades), automotive assembly, metal fabrication, sharp metal stampings, glass manufacturing, window manufacturing, recycling plant/sorting, HVAC, food prep/ processing, meat processing, aerospace industry

THE QUIZ

1. Leather gloves provide good protection against rough edges, splinters, and the heat:
   TRUE_____ FALSE_____

2. What are the best tools we have?
   a) Hammer
   b) Tape measure
   c) Our hands
   d) Drills

3. Cotton or other materials stand up well against hazards:
   TRUE_____ FALSE_____

4. What should you do when selecting proper gloves for use with a chemical? (Circle all that apply.)
   a) Check the label on the glove
   b) Carry on with task regardless
   c) Check the accompanying SDS sheet
   d) Laugh at a coworker who warns you of the hazards

5. HAVS causes circulation problems such as whitening or bluish discoloration, especially after exposure to cold:
   TRUE_____ FALSE_____

6. Using the right gloves for the job is important:
   TRUE_____ FALSE_____

7. Manual work exposes our hands to what types of hazards?
   a) Cuts
   b) Chemicals
   c) Pinching
   d) All of the above

8. Wearing anti-vibration gloves when using power tools and equipment can help prevent hand-arm vibration syndrome (HAVS):
   TRUE_____ FALSE_____

ANSWERS:
1. TRUE; **2.** c; **3.** FALSE; **4.** a, c; **5.** TRUE; **6.** TRUE; **7.** d; **8.** TRUE