

Hazard Communication and MSDS Usage

Steve Roth, Ohio BWC

Objectives:

- Understand the purpose of the Hazard Communication Standard (HazCom) or (HCS), and some of its requirements
- Gain an understanding of container labels and their meanings
- Practice reading and understanding a material safety data sheet (MSDS)

Chemicals In The Workplace

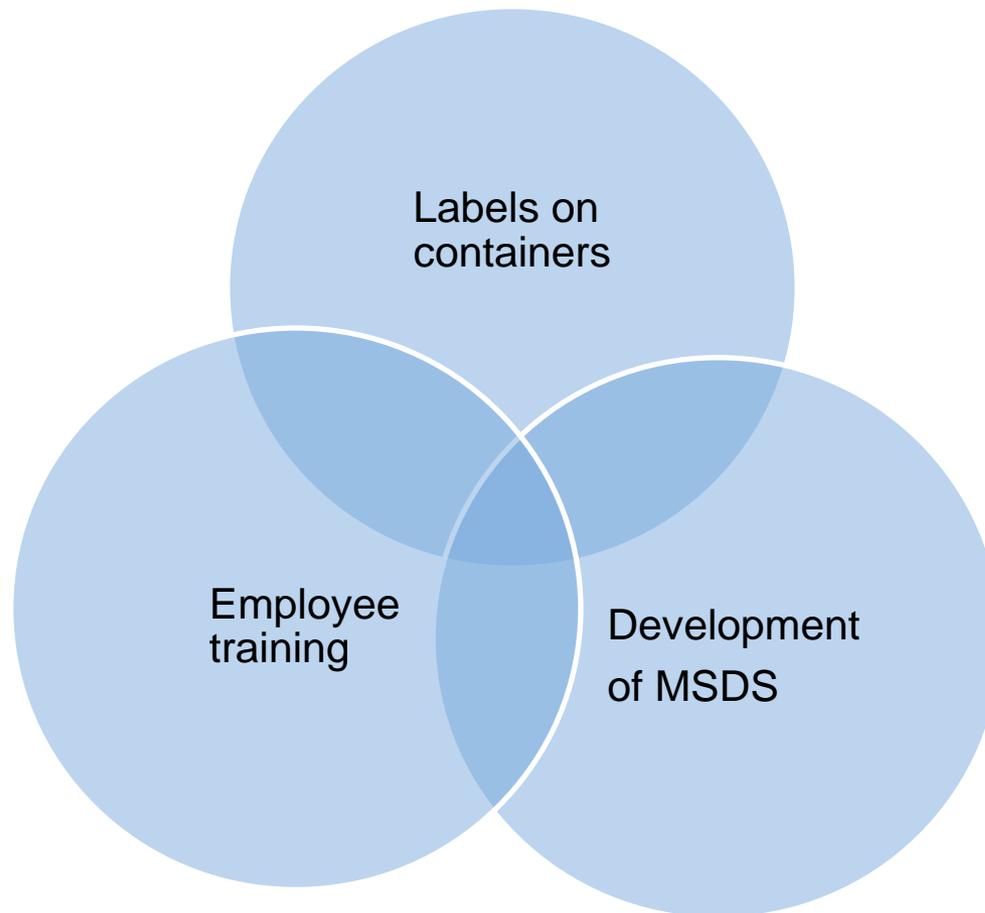
- OSHA estimates there are 650,000 hazardous chemical products in use
- Hundreds more introduced each year
- Over 32 million workers are potentially exposed to these chemicals
- Understanding the chemicals in use in your workplace is the key to safe use and minimizing exposure

Hazard Communication Standard

29 CFR 1910.1200

The purpose of HazCom is to “...ensure that the hazards of all chemicals produced or imported are evaluated, and that information concerning their hazards is transmitted to employers and employees.”

HazCom: A Three Pronged Approach



Chemicals Excluded

- Pesticides, TSCA substances, foods, food additives, cosmetics, distilled beverages, certain consumer products, and agricultural products which are otherwise subject to other labeling requirements
- Hazardous wastes
- Tobacco and tobacco products
- Wood or wood products
- Drugs
- Basically, if it's covered elsewhere it's excluded

Everyday Living®

Ammonia

GENERAL: Use one-half cup AMMONIA to 1 gallon hot water for refrigerators and other porcelain appliances, sinks, bathtubs, glassware, stove tops, pots and pans, garbage pails, linoleum, ceramic tile floors, venetian blinds, ovens and broilers.

HEAVY DUTY CLEANING: Use more AMMONIA or at full strength as desired for outdoor grills, grates, heavily soiled ovens, etc. Leave soapy dish of ammonia in oven for several hours before cleaning if encrusted.

REMOVING OLD WAX: Add one cup AMMONIA to 1 gallon warm water. Apply solution evenly with mop or sponge. Allow to stand 2 or 3 minutes. Rinse thoroughly with clean water. For heavily waxed areas repeat application if necessary.

TIPS: Vacuum first. Use 2 cups AMMONIA to 1 gallon warm water. Dampen sponge and work suds into surface. Wipe with soft towel.

CAUTION: Try out on small inconspicuous area first to make sure color is not affected.

IMPORTANT: Do not soak aluminum utensils in ammonia.

CAUTIONS: AVOID CONTACT WITH EYES, AND PROLONGED CONTACT WITH SKIN. CAUSES BURNS. DO NOT SWALLOW. USE IN WELL VENTILATED AREA. DO NOT MIX WITH CHLORINE TYPE BLEACHES OR OTHER HOUSEHOLD CHEMICALS.

KEEP OUT OF REACH OF CHILDREN.

FIRST AID INTERNAL: GIVE WATER OR MILK (UP TO 1 PINT OR 8 OUNCES) IMMEDIATELY. DO NOT INDUCE VOMITING. CALL PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

EXTERNAL: FLOOD WITH WATER. EYES: WASH THOROUGHLY WITH WATER, PREFERABLY WARM, FOR 15 MINUTES. CALL FOR PROMPT MEDICAL ATTENTION.

INGREDIENTS: AMMONIUM HYDROXIDE, SURFACTANTS, FRAGRANCE AND COLORANT.

CONTAINS NO PHOSPHORUS

Quality Guaranteed

If you are not completely satisfied with this product, return for a refund or replacement.

Comments or questions?

800-697-2448

www.interamericanproducts.com

Distributed by
Inter-American Products,
Cincinnati, OH 45202



Labels and Other Forms of Warning

- Chemical manufacturers shall ensure that each container with a hazardous chemical has a label with:
 - Chemical identity;
 - Appropriate hazard warnings;
 - Physical and health, including target organs;
 - Manufacturer's name and address.

Secondary Containers

- Employers shall label, tag, or mark each container with:
 - Identity of the chemical;
 - Hazard warnings, symbols, pictures, etc., that at least gives general hazard information – signs can be used in instead;
 - In English, and other languages if needed;
- Need not label containers used immediately in work place, i.e. single shift, one employee.



FORMULA
409
Carpet
ALL YOU NEED FOR:
PET STAINS
RED WINE
TRACKED-IN DIRT
22 FL. OZ.
1.1 PT & 6 FL. OZ. (651 ml)
KEEP OUT OF REACH OF CHILDREN
CAUTION: EYE IRRITANT. READ BACK PANEL CAREFULLY.

FORMULA
409
Carpet SPOT CLEANER**CLEANS A VARIETY OF TOUGH STAINS!**

FORMULA 409® CARPET CLEANER is a powerful carpet-safe cleaner that effectively cleans a variety of tough stains such as tracked-in dirt, mud, and food spills. It even cleans the worst messes like pet stains, spaghetti sauce, red wine, grape/berry juice and greasy foot traffic. **409® CARPET CLEANER** has StainBlock® protection ingredients to repel dirt and stains so next time it's easier to clean.

Fabric Safety: For use on wool, nylon and other synthetic carpets. Safe for use on stain resistant carpets.

Before Cleaning: Test for colorfastness on a hidden section of carpet. Remove loose dirt from the area to be cleaned. For wet spills, blot area with a clean, absorbent cloth. Follow the directions below.

Directions: Spray soiled area with **409® CARPET CLEANER** and allow to penetrate for 3 minutes. Gently blot area with a clean, absorbent cloth or colorfast sponge. Repeat as needed. Allow to dry completely and then vacuum. For best results, use promptly after the spot occurs and do not over-wet carpet. Some stains will cause permanent discoloration even after cleaning.

For Larger Areas: **409® CARPET LARGE AREA FOAM CLEANER** lifts out a variety of tough stains and deep cleans the entire carpet.

CAUTION: EYE IRRITANT. Avoid eye contact and prolonged skin contact.

FIRST AID: EYES - Wash eyes with water for 15 minutes.

IF SWALLOWED - Drink a glassful of water. Call a physician.

SKIN - Rinse skin with water.

KEEP OUT OF REACH OF CHILDREN.

CONTAINS: Polymers to reduce re-soiling, fragrance, and biodegradable surfactants. Contains no phosphorus.

DISPOSAL: Offer empty container for recycling. If recycling is not available, discard container in trash.

Questions or comments? Call 1-800-227-1860

Mfd. for & ©1999 The Clorox Company, Oakland, CA 94612



62454 110JJ

Hazardous Material Information System (HMIS) III

- Created by National Paint and Coatings Association
- Designed to aid employers and their employees in day-to-day compliance with the HazCom
- Uses a numerical number system-Lower is less hazardous

HMIS [®]	
HEALTH	<input type="text"/>
FLAMMABILITY	<input type="text"/>
PHYSICAL HAZARD	<input type="text"/>
PERSONAL PROTECTION	
HMIS [®] ©2001 NPCA • Printed by JJKK • Neenah, WI • 1-800-327-6868	

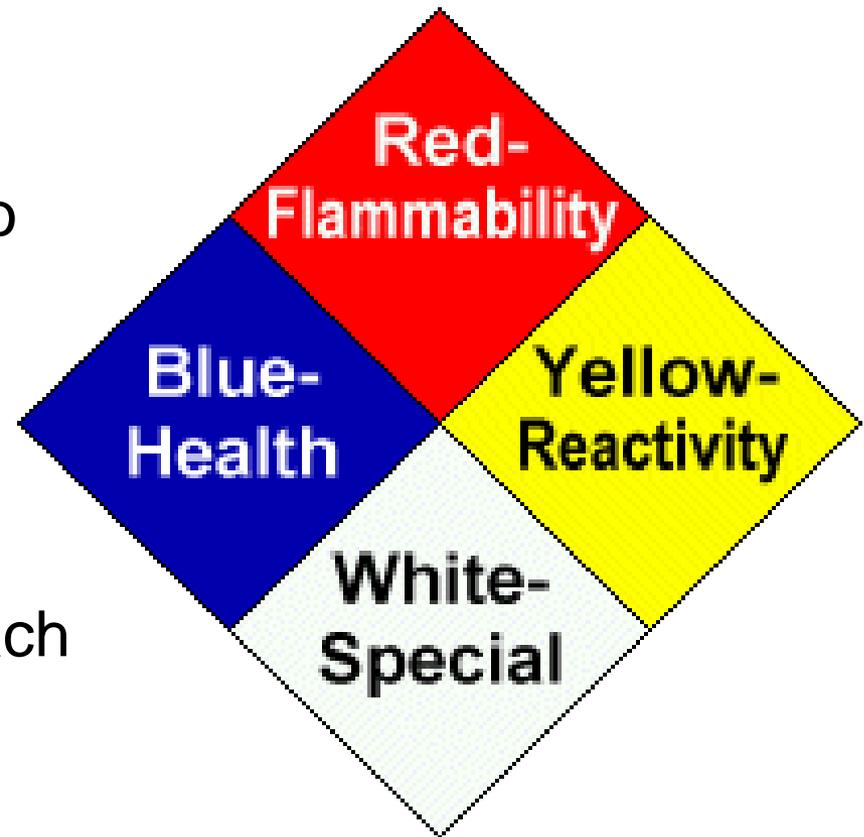
HMIS Hazard Ratings

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM			
HAZARD INDEX		PERSONAL PROTECTION INDEX	
4 = SEVERE HAZARD	An asterisk (*) or other designation corresponds to additional information on a data sheet or separate chronic effects notification Additional information	A	
3 = SERIOUS HAZARD		B	
2 = MODERATE HAZARD		C	
1 = SLIGHT HAZARD		D	
0 = MINIMAL HAZARD		E	
PERSONAL PROTECTION EQUIPMENT		F	
A Safety Glasses	n Splash Goggles	G	
o Face Shield & Eye Protection	p Gloves	H	
q Boots	r Synthetic Apron	I	
s Full Suit	t Respirator	J	
u Hazard Bag only	w Chem. & Vapor Respirator	K	
y Full Face Respirator	z Airline Hood or Mask	X	Consult your supervisor or S.O.P. for "SPECIAL" handling directions

HEALTH	*	2
FLAMMABILITY		3
REACTIVITY		0
PERSONAL PROTECTION		H

NFPA Diamond System

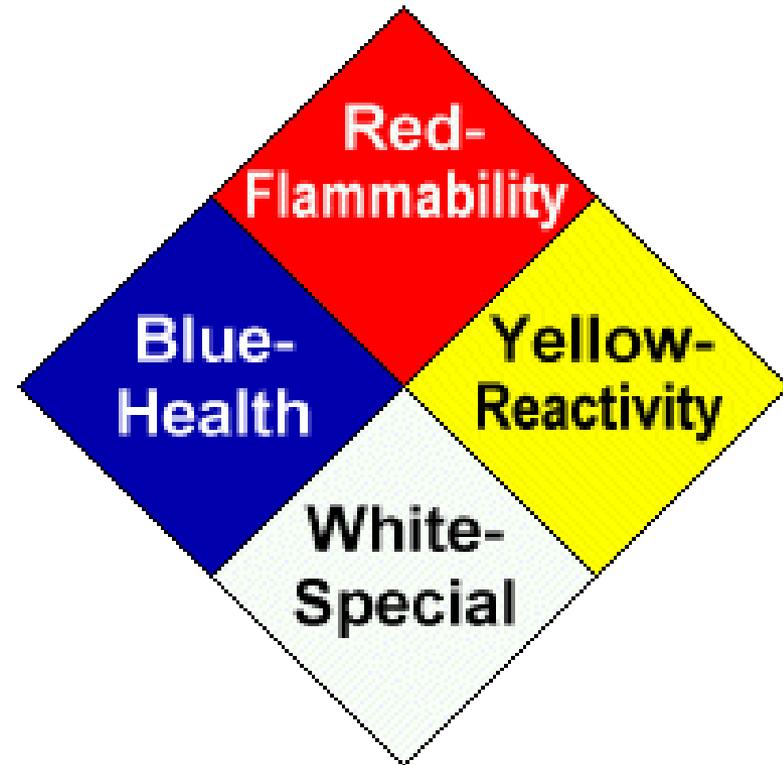
- Developed by the National Fire Protection Association
- Fire protection hazard warning system designed to provide rapid, clear information on materials under conditions of fire, chemical spill, or other emergency situations
- The lower the number in each diamond, the safer the chemical



NFPA Diamond System

○ Hazard Ratings

- 4 Extreme
- 3 High
- 2 Moderate
- 1 Slight
- 0 Insignificant
- ~~W~~ or "No water"
- OX or "Oxidizer"





HMIS	
CAS	78-93-3
HEALTH	2
FLAMMABILITY	3
REACTIVITY	0
TARGET ORGAN EFFECT	0
PERSONAL PROTECTION	B

 **5191**
 LOT# 9059009U
 USE BY (MM/YY): 07/10
 Mfg by:
 Image USA
 KENNESAW, GEORGIA 30144
 (770) 421-7700
IN CASE OF EMERGENCY
 CALL 1-800-424-9300
WARNING:
 For Industrial Use Only
FLAMMABLE LIQUID. HARMFUL IF SWALLOWED. EYE AND SKIN IRRITANT. KEEP OUT OF REACH OF CHILDREN. Flammable liquid. Use only in a well ventilated area. Do not use near heat, sparks, open flame or other sources of ignition. Do not smoke in use area. Harmful if swallowed. Do not take internally. If swallowed, do not induce vomiting. Call a physician immediately. Eye and skin irritant. Avoid contact with eyes, mucous membranes and prolonged contact with skin. If eye contact occurs, flush with water for 15 minutes. If irritation persists, consult a physician. If skin contact occurs, flush with plenty of water. If irritation persists, consult a physician. **CONSULT MSDS PRIOR TO USE.**
 The manufacturer (unless otherwise stated) shall warrant that the product shall conform to the manufacturer's specifications as to the above mentioned uses. This warranty does not extend to other uses, other than those specifically intended by the manufacturer. Do not use for purposes not intended by the manufacturer. Under no circumstances shall the manufacturer be liable for any other damage.



Employee Information and Training

- Should happen at time of initial assignment, and anytime new chemicals or hazards are introduced into the work area
- Information relayed needs to include:
 - Requirements of the HazCom standard;
 - Locations of hazardous chemicals in the workplace;
 - Location and availability of the written program, list of chemicals, and MSDSs.

Employee Information and Training

- Training shall include at least:
 - Methods and observation to identify a chemical release in the workplace;
 - Physical and health hazards of the chemicals in the workplace;
 - Measures for protection, such as appropriate work practices, emergency procedures, and PPE;
 - Details of the HazCom program, including labeling system and MSDSs, and how to obtain and use hazard information.



Material Safety Data Sheets

- MSDSs are reference documents
- A one-stop shopping source
- Useful to EHS professionals in deciding what controls to use, the first aid or medical treatment to provide, and the precautionary measures to follow
- Much of the information present on the MSDS is not primarily written for workers but for other audiences

Material Safety Data Sheets

- Chemical manufacturers shall develop an MSDS for each hazardous chemical they produce or import.
- Employers shall have an MSDS in the workplace for each hazardous chemical they use.
- MSDS's must be updated by manufacturer/importer, the revised MSDS gets sent with the next shipment.
- Companies may exclude exact chemical identity if trade secret but must disclose it to medical personnel for treatment during an emergency.

MSDS Required Information

- Chemical identity
- Physical and chemical characteristics
- Physical hazards
- Health hazards
- Routes of entry
- Exposure limits
- Carcinogen, if applicable
- Precautionary measures
- Control measures
- Emergency and first aid procedures
- Preparation date
- Name, address, and phone number of manufacturer/importer

Questions?

- **Labels**
- **MSDS**
- **Employee training**