Hazard Communication
Aligned with GHS
Please put phones on silent mode

Thank you
HAZCOM’s FOUR PARTS

- Training
- Label
- SDSs
- Written Program
WHAT IS A CHEMICAL?

WHAT IS A HAZARDOUS CHEMICAL?
WHAT WOULD YOU DO?

Practice ✓

☐ ☐ ☐
EMERGENCY EXPOSURES
STATES OF MATTER

SOLID  LIQUID  GAS
“The dose makes the poison”

Paracelsus
 ROUTES OF ENTRY

Information about chemicals and target organs.
How HazCom Works
ARE ALL CHEMICALS COVERED?
DISCUSSION
WAREHOUSES
RETAIL STORES
LABS
GHS
ADVANTAGES

- Labels
- Safety Data Sheets
- Training
- Written Hazard Communication Program
CLASSIFY AND CATEGORIZE THIS

AND GET THIS

LABEL, SDS, AND TRAINING ON SAFE USE
WHO IS RESPONSIBLE TO CLASSIFY & CATEGORIZE

Answer: A
HOW IT WORKS

CLASSIFY

AND

CATEGORIZE
Appendix A & B

The Health Hazard Pictograms

The Physical Hazard Pictograms
CLASSIFY & CATEGORIZE Oatey PVC Glue

<table>
<thead>
<tr>
<th>CLASS</th>
<th>CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute Toxicity Dermal</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute Toxicity Inhalation</td>
<td>Category 4</td>
</tr>
<tr>
<td>Eye Damage/Irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 2</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity Single Exposure</td>
<td>Category 3</td>
</tr>
<tr>
<td>Flammable Liquids</td>
<td>Category 2</td>
</tr>
</tbody>
</table>
DONE!

Label

SDS

Training
Appendix A: Categorize a Health Effect

Acute toxicity (any route of exposure)
Skin corrosion/irritation

**Serious eye damage or eye irritation**
Respiratory or skin sensitization
Germ cell mutagenicity
Carcinogenicity
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Aspiration toxicity
Appendix B: Categorize a Physical Effect

Explosive

Flammable (includes aerosols, gases, liquids, and solids)

Oxidizers (includes gases, liquids, and solids)

Gases under pressure

Self-reactive substances

Pyrophoric (includes liquids and solids)

Self-heating substances

Substances that emit flammable gases in contact with water

Organic peroxides

Corrosive to metals
PICTOGRAM PARTS

BORDER
- BLACK
- RED
- GREEN

BACKGROUND
- YELLOW
- BLUE
- WHITE

SYMBOL
- ORANGE
- BRIGHT GREEN
- BLACK
PICTOGRAMS
LABELS

SAMPLE LABEL

CODE
Product Name

Company Name
Street Address
City, State
Postal Code, Country
Emergency Phone Number

Product Identifier

Hazard Pictograms

Supplier Identification

Signal Word
Danger

Precautionary Statements

Hazard Statements

Supplemental Information

Directions for Use

Fill weight: Lot Number:

Gross weight: Fill Date:

Expiration Date:

Keep container tightly closed. Store in a cool, well-ventilated place that is locked.
Keep away from heat/sparks/open flame. No smoking.
Only use non-sparking tools.
Use explosion-proof electrical equipment.
Take precautionary measures against static discharge.
Ground and bond container and receiving equipment.
Do not breathe vapors.
Wear protective gloves.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Dispose of in accordance with local, regional, national, international regulations as specified.

In Case of Fire: use dry chemical (BC) or Carbon Dioxide (CO2) fire extinguisher to extinguish.

First Aid
If exposed call Poison Center.
If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.
PICTOGRAMS
## Pictogram Game

<table>
<thead>
<tr>
<th>Category</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammables</td>
<td><img src="A" alt="Flammables" /></td>
</tr>
<tr>
<td>Narcotic effects</td>
<td><img src="B" alt="Narcotic" /></td>
</tr>
<tr>
<td>Oxidizers</td>
<td><img src="C" alt="Oxidizers" /></td>
</tr>
<tr>
<td>Self-reactives</td>
<td><img src="D" alt="Self-reactives" /></td>
</tr>
<tr>
<td>Self-heating</td>
<td><img src="E" alt="Self-heating" /></td>
</tr>
<tr>
<td>Irritant</td>
<td><img src="F" alt="Irritant" /></td>
</tr>
<tr>
<td>Organic peroxides</td>
<td><img src="G" alt="Organic peroxides" /></td>
</tr>
<tr>
<td>Explosives</td>
<td><img src="H" alt="Explosives" /></td>
</tr>
<tr>
<td>Gases under pressure</td>
<td><img src="I" alt="Gases under pressure" /></td>
</tr>
<tr>
<td>Carcinogen</td>
<td><img src="J" alt="Carcinogen" /></td>
</tr>
<tr>
<td>Dermal sensitizer</td>
<td><img src="K" alt="Dermal sensitizer" /></td>
</tr>
<tr>
<td>Acute toxicity (harmful)</td>
<td><img src="L" alt="Acute toxicity (harmful)" /></td>
</tr>
<tr>
<td>Respiratory tract irritation</td>
<td><img src="M" alt="Respiratory tract irritation" /></td>
</tr>
<tr>
<td>Self Reactives</td>
<td><img src="N" alt="Self Reactives" /></td>
</tr>
<tr>
<td>Corrosives</td>
<td><img src="O" alt="Corrosives" /></td>
</tr>
<tr>
<td>Respiratory sensitizer</td>
<td><img src="P" alt="Respiratory sensitizer" /></td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td><img src="Q" alt="Reproductive toxicity" /></td>
</tr>
<tr>
<td>Target organ toxicity</td>
<td><img src="R" alt="Target organ toxicity" /></td>
</tr>
<tr>
<td>Mutagen</td>
<td><img src="S" alt="Mutagen" /></td>
</tr>
</tbody>
</table>
LABELS

Primary
Secondary
Stationary
Portable
Pipes
NFPA 704

HMIS

FLAMMABILITY

HEALTH

INSTABILITY

SPECIAL

SUBSTANCE IDENTITY

HEALTH

FLAMMABILITY

REACTIVITY

PERSONAL PROTECTION

HEALTH HAZARDS
SAFETY DATA SHEETS

KEY PARTS

EMERGENCY TOOL

ROUTES OF ENTRY

PHYSICAL AND HEALTH EFFECTS

PERSONAL PROTECTIVE EQUIPMENT

PICTOGRAM(S) AND SIGNAL WORD
SDS REVIEW
THE 16 ELEMENTS
PESTICIDES
SECTION 15

GHS

EPA
WRITTEN PROGRAM

CHEMICALS LIST

LABELING

SAFETY DATA SHEETS

TRAINING

HAZARDOUS NON-ROUTINE TASKS

CHEMICALS IN PIPES

CONTRACTORS
# CHEMICALS LIST

<table>
<thead>
<tr>
<th>PRODUCT IDENTIFIER</th>
<th>SIGNAL WORD</th>
<th>LOCATION OF USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chevron Regular Gasoline</td>
<td>Danger</td>
<td>Shop and Trucks</td>
</tr>
<tr>
<td>Oatey PVC Glue</td>
<td>Danger</td>
<td>Pipe Installation</td>
</tr>
<tr>
<td>Bestine Solvent &amp; Thinner</td>
<td>Danger</td>
<td>Shop</td>
</tr>
<tr>
<td>Armstrong Floor Polish</td>
<td>Warning</td>
<td>Gymnasium</td>
</tr>
</tbody>
</table>
WRITTEN PROGRAM

CHEMICALS LIST

LABELING

SAFETY DATA SHEETS

TRAINING

HAZARDOUS NON-ROUTINE TASKS

CHEMICALS IN PIPES

CONTRACTORS
WRITTEN PROGRAM LINKS

WORD DOCUMENTS

Hazard Communication Plan in either English or Spanish

HazCom training form in either English or Spanish

Employee training record in either English or Spanish
TRAINING –
What needs to be explained?
TRAINING PRACTICE

• HEALTH AND PHYSICAL HAZARDS
• CONTROLS AND PPE
• EMERGENCY PROCEDURES
### Phase-in Dates

<table>
<thead>
<tr>
<th>Completion Date</th>
<th>Requirement(s</th>
<th>Who</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 1, 2013</td>
<td>Train employees on the new label elements and safety data sheet (SDS) format.</td>
<td>Employers</td>
</tr>
<tr>
<td>June 1, 2015</td>
<td>Compliance with all modified provisions of this final rule, except:</td>
<td>Chemical manufacturers, importers, distributors and employers</td>
</tr>
<tr>
<td>December 1, 2015</td>
<td>The Distributor shall not ship containers labeled by the chemical manufacturer or importer unless it is a GHS label.</td>
<td></td>
</tr>
<tr>
<td>June 1, 2016</td>
<td>Update alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards.</td>
<td>Employers</td>
</tr>
<tr>
<td>Transition period to the effective completion dates noted above</td>
<td>May comply with either the revised Hazard Communication Standard 29 CFR 1910.1200 (the final standard), or the current standard, or both.</td>
<td>Chemical manufacturers, importers, distributors, and employers</td>
</tr>
</tbody>
</table>
DECEMBER 1, 2015

IF EMPLOYERS PURCHASE NON GHS-ALIGNED PRODUCTS BEFORE DECEMBER 1, 2015, THERE IS NO TIME LIMIT FOR THE EMPLOYER TO USE IT UP.  (Keep the receipt.)
APPENDICES

- FEDERAL OSHA DECEMBER 1, 2013 TRAINING REQUIREMENTS FACT SHEET
- FEDERAL OSHA GHS QUICK CARDS
- NFPA QUICK CARD
- PICTOGRAM QUIZ
- SAFETY DATA SHEET – OATEY PVC REGULAR CLEAR – LO-VOC FORMULA
HELP? QUESTIONS?

OR-OSHA
TECHNICAL SECTION

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(503) 378-3272

Kathleen Kincade
Dave McLaughlin
Tom Bozicevic
Jeff Wilson
Bryon Snapp

Web Site: www.orosha.org
Workplace Safety & Health Conferences

Oregon GOSH Conference (biennial) • Portland
Cascade Conference (biennial) • Eugene
Blue Mountain Conference • Pendleton
Central Oregon Conference • Redmond
Southern Oregon Conference • Medford
Mid-Oregon Construction Safety Summit • Redmond
Western Pulp & Paper Workers Conference • Portland
Region X VPPPA Conference • Moves annually between Oregon, Washington, Idaho, and Alaska

Find conference information at orosha.org/conferences