

# **RSLs – What and Why?**

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- Legislation
- Non-Governmental Organization
- Health and Environment



















# What is an RSL? Why?



### **Chemical substances either:**

- Prohibited from use
- Limited in the product
- Restricted in manufacturing

- Legislation
  - NGO
- Consumer / worker protection

The Phylmar Group, Inc.



















## **Chemicals**



- Critical for consumer products
  - Unique properties
    - Unique purpose

Where does the chemical end up?









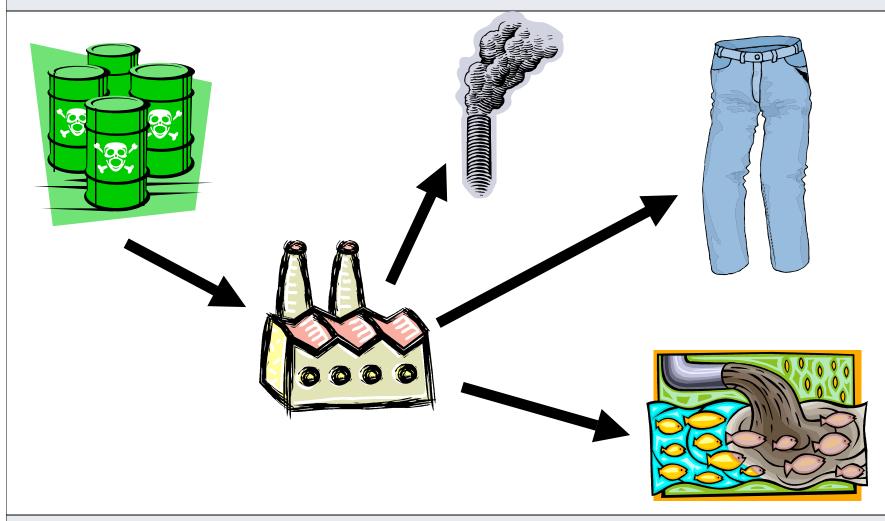








## **End of Life**



























## **Focus on Product**

### **RSL Focus**

- Chemical on product
  - Day
  - Night
  - Direct skin contact

Why?

















# **Important?**



- Product safety
- Responsibility
- Comply with legislation
  - Brand image











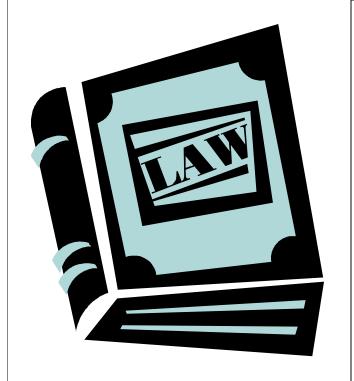








# Legislation



### **Formaldehyde**

China, Japan, Russia,
South Korea, EU Countries

**Limit for product:** 

Indirect: 150 ppm

Direct: 75 ppm

Baby: 20 ppm \*

















# Non-Governmental Organizations



### **Oeko-Tex**

More restrictive on dyes

Azo amines: 2 more than EU

Disperse dyes: 12 more than EU







































## **Oeko-Test**

#### **Poisonous Cord**



Found: 408 ppm benzidine

• Law: 30 ppm

In the blue cord of a child's sweater, the quantities of aromatic amines were so high that it should not be sold.





















## **Consumer Protection**

### Types of consumer reactions:

- Skin irritation
- Sensitization
  - Cancer
- Respiratory irritation

**Dyes, Resins, Solvents** 

















## **Environmental Protection**



### **Chemicals into environment:**

Air

Water

Soil

- APEOs
  - Dyes
- Flame Retardants









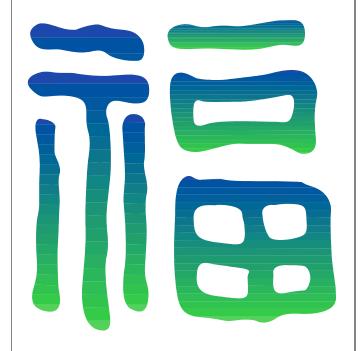








# **Summary**



### RSLs Help To:

- Comply with the law
- Protect the consumer
- Protect the environment
  - Meet NGO concerns
    - Protect business















