

IDENTIFY AND CLASSIFY

Hazardous Household Products



Grade level
4-12

Related subject areas

Environmental Science, Health,
Family and Consumer Science

Objective

Students will identify
hazardous products and their
hazard categories using key
words and phrases

Time

30 minutes

Equipment needed

Overhead or other projector,
possibly a laminator

Materials

- Product Photos: Answer Key
- Product Photos - one or two sets
- What words did you see...? transparency or class set
- How do you know if a product is hazardous? transparency
- Five Hazard Categories transparencies

Introduction

Hazardous household products have words that identify their specific hazard level and hazard category.

Preparation

- Print out one or two sets of the 41 product photos, depending on the size of your class. Each group of three-four students will need at least six photos to work with.
- Cut out each photo (either around the edges of the product or as a rectangle) and glue onto card stock. For longer wear, laminate.
- Create “What words did you see...?” as either a transparency or other projected slide, or as a set of worksheets for each student/group of students.
- Create “How do you know if a product is hazardous?” as a transparency or other projected slide.
- Create the five Hazard Categories as transparencies or other projected slides.

Directions

1. Divide the class into groups consisting of three or four students.
2. Give at least six different product photos to each group.
3. Ask each group to sort the photos into two piles, one of products they think are harmful and the other of products they think are safer. Ask them to remember what words on the labels make them think the products are harmful or safer.
4. Use “What words did you see...?” either as a projected image for the whole class to fill in together or as a worksheet for individuals to fill in.
5. Show the “How do you know if a product is hazardous?” transparency. Tell students that the words CAUTION, WARNING, DANGER or POISON are required by law to be on household products that are hazardous. The words can be used as a hazard rating system.

6. Ask the groups to re-sort their product photos into three piles. Student results will vary depending on which images they have:

- Highest hazard pile (product must say **DANGER** or **POISON**)
- Moderate hazard pile (product must say **CAUTION** or **WARNING**)
- Safer pile (product does not say **CAUTION**, **WARNING**, **DANGER** or **POISON**)

7. Show the Hazard Categories transparencies and review the terms and ideas.

8. Ask each student to choose a hazardous product (one that says **CAUTION**, **WARNING**, **DANGER** or **POISON**) from their piles and determine which hazard category their hazardous product fits into. Is it flammable, corrosive, reactive, toxic or an irritant? Some products are hazardous in more than one way.

After students know **how** their product is hazardous, this information can be shared with the rest of the class. For example, have students stand at the front of the class, or raise their product image, if their product is toxic. Continue through the rest of the hazard categories.

9. As a check for understanding, have some students read their labels out loud to the rest of the class. Or, you might read labels from “real” products you have in the classroom. Have the rest of the class vote on whether they think the product is hazardous or not, and if it is hazardous, what level of hazard it is.

Produced by



as part of the **Local Hazardous
Waste Management Program
in King County**

Alternative formats available.
Call 206-263-3050 or 711 (TTY).

PRODUCT PHOTOS *Answer Key*

Name of product	Hazard level	Hazard Category *
3 in One Household Oil	D	Toxic
Arm & Hammer Baking Soda ▲	No C-W-D-P	None
Bon Ami	C	Irritant
Brasso Metal Polish	D	Flammable, Irritant, Toxic
Bubbles	No C-W-D-P	None
Cascade Automatic Dishwashing Detergent	C	Irritant, Toxic
Castrol Brake Fluid	D	Toxic
Clorox Bleach	D	Corrosive
Comet Cleanser	C	Not clear from front of label
Crayola Crayons	No C-W-D-P	None
Cutex	W	Flammable
Dow Heavy Duty Oven Cleaner	D	Corrosive, Toxic
Elmer's Glue-All	No C-W-D-P	None
Future Wax	C	Irritant
Gasoline	D	Flammable, Toxic
Heinz Cider Vinegar ▲	No C-W-D-P	None
Holiday Household Insect Fogger	C	Not clear from front of label
Jasco Paint and Epoxy Remover	D	Irritant, Toxic
Johnson Lemon Pledge	C	Flammable
K2r Spot-lifter	D	Flammable, Irritant, Toxic
Krylon Interior/ Exterior Paint	D	Flammable, Irritant, Toxic
Liquid-Plumr	D	Corrosive, Toxic
Mill Creek Castile Soap	No C-W-D-P	None
Para Moth Balls	C	Not clear from front of label

Name of product	Hazard level	Hazard Category *
Parson's Ammonia	C	Irritant, Toxic
Pine-Sol	W	Irritant, Toxic
Prestone Antifreeze	W	Toxic
Red Devil Lye	P	Corrosive, Toxic
Rodda Masstone Enamel	D	Toxic
Ronsonol Lighter Fuel	D	Flammable, Toxic
Rubber Cement	D	Flammable
Soft Scrub Cleanser	C	Irritant
Spray-n-Wash	C	Irritant
Sure Fire Ultimate Roach Trap	No C-W-D-P	None
Tide	C	Irritant, Toxic
Tilex	W	Irritant
Turpentine	D	Flammable, Toxic
Ultra Sheen	No C-W-D-P	None
Ultra-Pure Candle & Lamp Oil	D	Flammable, Toxic
WD-40	D	Flammable, Toxic

* That **can be seen on the front of the product photo**. More information is often available elsewhere on a real product.

▲ These food items can be used to create safer alternatives to hazardous household products. See activities in this series: Toxic-free Bingo and Concentration Game.

Notes:

Always read the front and back label of the actual product you are considering using or buying. These photos are only a practice set.

These photos show only the front label. Actual products could have much more information on the back label, including additional hazard categories. To simplify the learning, we categorized the product photos only by the information available on the front labels.

Companies change their formulas frequently, and thus, the hazard level or category may also change. As these photos become dated, they may not represent the current formulation of a product.

What is “reactive”? There are many different kinds of hazardous reactions. In a home, the most common reactive products are chlorine bleach and ammonia. If these products are accidentally mixed, they produce toxic gases. Products containing chlorine bleach or ammonia are “reactive” and will say on the back label “do not mix with other household products to avoid hazardous gases.” This information is often not stated on the front label and your students will not have access to that information with this photo set.

Product Photos created by:



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Alternative formats available.
Call 206-263-3050 or 711 (TTY).

file name: 0607hhwPHOTOSkey.indd wgab
Publication number: SCH-CUR-PRODUCT-1 (8/06)



PARSONS'



Lemon fresh

FOR ALL WASHABLE SURFACES

AMMONIA

ALL-PURPOSE CLEANER

CAUTION: HARMFUL IF SWALLOWED.
IRRITANT. CAREFULLY READ PRECAUTIONS ON BACK.

NET 28 FL. OZ. (1 PT. 12 OZ.) (.83 liter)



**PATENTED
FORMULA**

Prestone[®]

Antifreeze/Coolant

-84°

+276°

All Weather Protection

WARNING:
HARMFUL OR FATAL IF SWALLOWED OR INHALED
Read cautions on back label

1 GAL. (3.78L)

**A
HOUSE-FULL
OF USES!** See back



Natural
Baking Soda ®

For Baking,
Cleaning & Deodorizing



HEINZ, CAPPA & BATES/MADE SINCE 1900

NET WT. 2 LB. (907 g)



No Chlorine,
phosphates,
Perfume or Dye

**Bon
ami**

SINCE 1890

KITCHEN & BATH
CLEANSER



CAUTION: EYE IRRITANT. SEE BACK PANEL
NET WT 14 OZ (400 GRAMS)







Holiday

Household Insect
FOGGER

Kills Fleas,* Roaches,

Ants, Ticks, Spiders, Flying Moths, Flies, Mosquitoes, Silverfish, Palmetto Bugs, Wasps, Hornets, Crickets. *Adults and Pre-Adult



TREATS UP TO 5,000 CU. FT.

ACTIVE INGREDIENTS: Cyano (3-phenoxylphenyl) methyl-4-phenyl-1,1-dimethyl-2-methylethyl benzeneacetate 0.5%; Piperonyl Butoxide 1.0%; N-octyl bicycloheptene dicarboximide** 1.0%; **INERT INGREDIENTS:** 97.5% **TOTAL 100%** *Equivalent to 8% of (polycarbonyl) (6-propylpiperonyl) ether and 20% related compounds. ** MGK Synergist 264

KEEP OUT OF REACH OF CHILDREN

CAUTION

READ ADDITIONAL CAUTIONS ON BACK PANEL

NET WT 5 OZ (141g)



**ULTRA-
PURE**

Odorless, Smokeless

**Candle
& Lamp Oil**

**DANGER: HARMFUL OR FATAL
IF SWALLOWED. COMBUSTIBLE
READ BACK PANEL CAREFULLY**

LAMPLIGHT

Net Contents
22 Fluid Ounces - 650 ML

MillCreek
NATURAL

OLD FASHIONED
PURE
CASTILE SOAP
WITH PEPPERMINT OIL

A pure and natural soap
with peppermint oil added
for its soothing and
stimulating properties.

- PURE VEGETABLE OILS •
- CONTAINS NO SYNTHETIC DETERGENTS •
- CONTAINS NO ARTIFICIAL INGREDIENTS •
- CONCENTRATED AND ECONOMICAL •
- 100% BIODEGRADABLE •

8.5 FL. OZ. / 255ml



mild abrasive

**Soft
Scrub**
cleanser

CLOROX

NET WT 26 OZ (1 LB 10 OZ)

CAUTION: EYE IRRITANT
READ BACK PANEL CAREFULLY



Comet

DISINFECTANT
Cleanser
WITH CHLORINOL

Bleaches Out Tough Stains
Disinfects as it Cleans

ACTIVE INGREDIENT: Sodium dichloro-s-triazine-trione dihydrate 8.0%
OTHER INGREDIENTS: 92.0%
(See Side Panel)

KEEP OUT OF REACH OF CHILDREN
CAUTION - SEE BACK PANEL FOR
OTHER PRECAUTIONS

NET WT 14 OZ
(396g)

24

Different
Brilliant
Colors



Crayola®
CRAYONS

24 CRAYONS



Now!

FIGHTS SPOTS BETTER!

**AUTOMATIC
DISHWASHING
DETERGENT**

Cascade

WITH SHEETING ACTION

®P

**For Virtually
Spotless Dishes**

**CAUTION: HARMFUL IF SWALLOWED.
EYE IRRITANT. SEE CAUTION ON SIDE PANEL.**

**NET WT 35 OZ
(2.18 LB) 992g**





H4-24-B-22 136

Woolite

**FABRIC &
UPHOLSTERY**

CLEANER

**REMOVES
STAINS & ODORS**

CAUTION

UNDER PRESSURE
KEEP FROM REACH OF CHILDREN
Do not use near open flame or heat



This bottle is made from
100% RECYCLED PLASTIC*

TOUGH
ACRYLIC
SHINE

FUTURE
FOR NO-WAX AND REGULAR FLOORS®

JOHNSON
WAX

27 FL. OZ. (799 ML.)

CAUTION: EYE IRRITANT
Read back label carefully



0 46500 00182



GASOLINE

DANGER

GASOLINE EXTREMELY FLAMMABLE • VAPORS CAN EXPLODE • HARMFUL OR FATAL IF SWALLOWED

IF SWALLOWED DO NOT INDUCE VOMITING - CALL PHYSICIAN IMMEDIATELY KEEP OUT OF REACH OF CHILDREN - AVOID PROLONGED BREATHING OF VAPORS - STORE AND USE IN WELL VENTILATED AREA - VAPORS CAN BE IGNITED BY A SPARK OR FLAME SOURCE MANY FEET AWAY - KEEP AWAY FROM FLAME, PILOT LIGHT, STOVES, HEATERS, ELECTRIC MOTORS, AND OTHER SOURCES OF IGNITION - KEEP CONTAINER CLOSED.



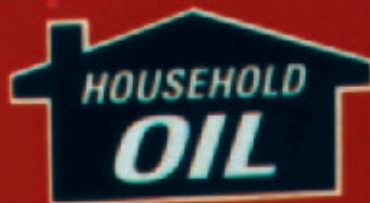


100 YEARS • 100 S OF USES



3-IN-ONE®

*Lubricates, Cleans, Polishes
Prevents Rust & Tarnish*



DANGER: HARMFUL IF SWALLOWED.
KEEP OUT OF REACH OF CHILDREN.

Read your label on each bottle using

3 FL OZ (88.7 mL)



ULTRA

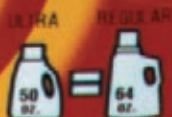
ULTRA



HELPS
KEEP CLOTHES
LOOKING LIKE
NEW!

Tide

CAUTION: EYE IRRITANT. HARMFUL
IF SWALLOWED. See cautions on back label.



SAME USES AS REGULAR 64 OZ.

50 FL OZ (1.56 QT) 1.47 L

BEST FOR ALL
WICK LIGHTERS



RONSONOL

LIGHTER FUEL

MADE BY **RONSON**

NET CONT. 5 fl. oz. (148ml.)

CONTAINS NAPHTHA

DANGER: FLAMMABLE
HARMFUL OR FATAL IF SWALLOWED.
READ CAUTIONARY STATEMENT CAREFULLY.



**CLEAR
TOUGH CLOGS
FAST!**

**LIQUID-
Plumr**

FAST ACTION FORMULA

DANGER: KEEP OUT OF REACH
OF CHILDREN. INJURES EYES,
SKIN, AND MUCOUS MEMBRANES
ON CONTACT. HARMFUL IF
SWALLOWED.

READ BACK PANEL CAREFULLY
102211-1N

DRAIN OPENER
SAFE ON PIPES

CLOROX

1 QT
(946mL)



LEWIS
**RED
DEVIL**



**COMPARE
AND
SAVE!**

LYE

100%
LYE

DRAIN OPENER

POISON

HARMFUL OR FATAL IF SWALLOWED OR MISUSED.
CAUSES SEVERE BURNS TO EYES AND SKIN ON CONTACT.
KEEP OUT OF REACH OF CHILDREN.
READ PRECAUTIONS ON BACK PANELS CAREFULLY.

NET WT 12 OZ (340g)

Original
Scent

Lysol[®]
BRAND DISINFECTANT

Concentrate

**DISINFECTS
CLEANS**

**MAKES 9
GALLONS**

PET Bottle
is made from 100%
post-consumer recycled
plastic

ACTIVE INGREDIENTS:
o-Phenylphenol 2.8%
o-Benzyl-p-Chlorophenol 2.7%
WATER 94.5%

KEEP OUT OF REACH OF CHILDREN

WARNING: SEE BACK LABEL FOR ADDITIONAL
PRECAUTIONS AND FIRST AID

NET 12 FL. OZ. (354 mL)

EPA REG. NO. 777-10
EPA EST. NO. 777-0-1, N.J. 01-MT527-000
(see back)





KEEP OUT OF REACH OF CHILDREN.

WARNING. EYE IRRITANT. USE ONLY
IN WELL VENTILATED AREAS. SEE BACK OF
LABEL FOR ADDITIONAL PRECAUTIONS.

REMOVER

ACTIVE INGREDIENT:
Sodium Hypochlorite 1.00%

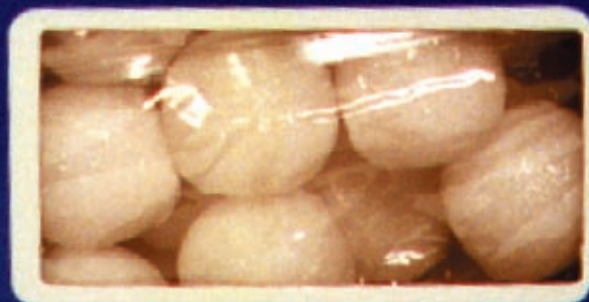
INERT INGREDIENTS 98.99%

*Excludes non-solvent surfactant and fragrance

NET 1 PT (16 FL OZ) 473 mL



PARA
Moth Balls



**NO CLINGING
ODORS**

ACTIVE INGREDIENT:
PARADICHLOROBENZENE 99.6%
INERT INGREDIENTS: 0.4%
TOTAL: 100.0%



**KILLS MOTHS
AND
CARPET BEETLES**

**NET WT.
10 OZ. (283.4g)**

**KEEP OUT OF REACH OF CHILDREN
CAUTION: SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONS.**



SALON
FORMULA

NON-DRYING

CUTEX

NAIL STRENGTHENING
POLISH REMOVER

WITH KNOX® GELATINE

WARNING: EXTREMELY FLAMMABLE • KEEP AWAY FROM FLAME

4 FL. OZ. (118ml)



**Your Best
Buy!**



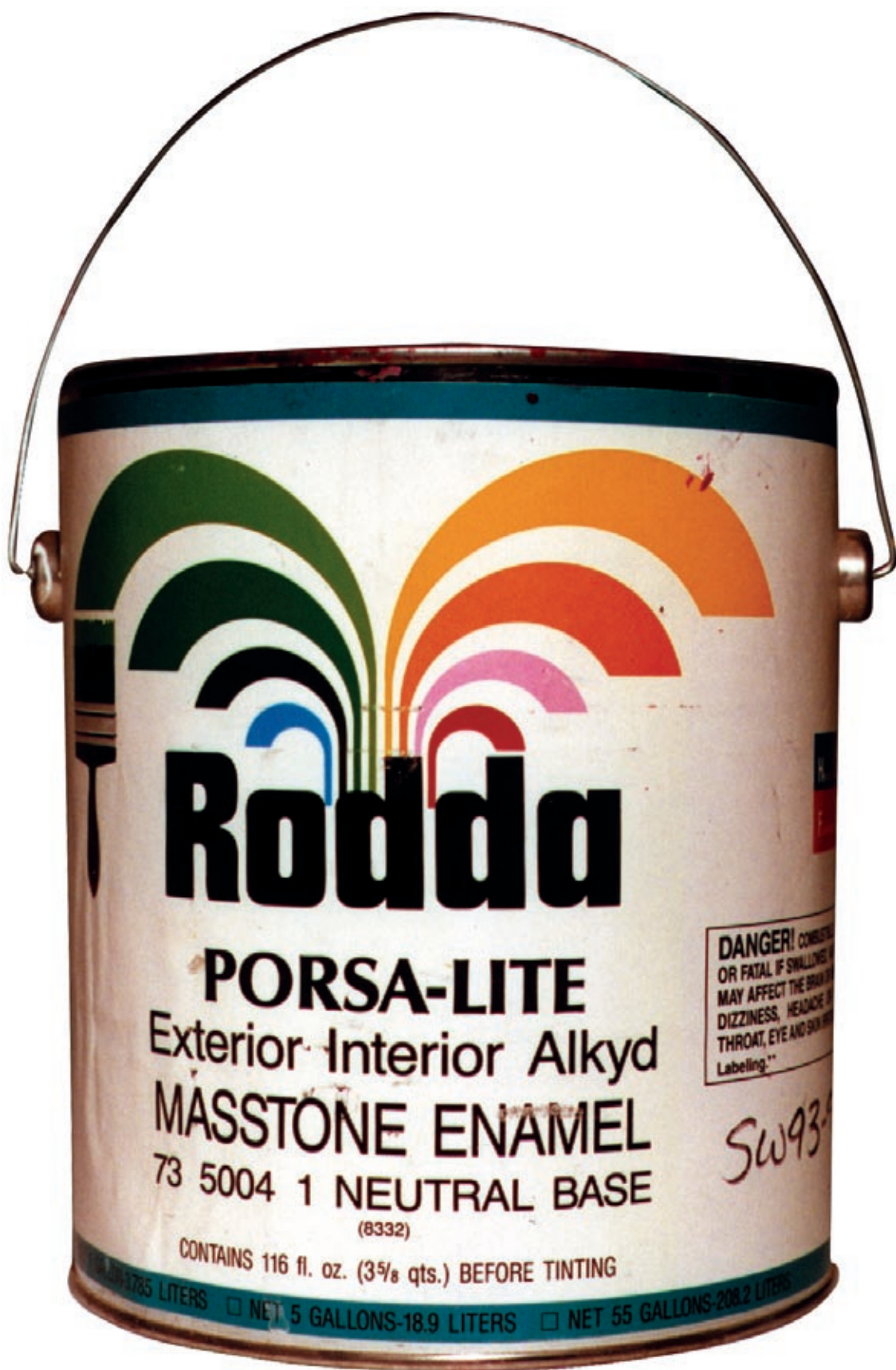
HEAVY DUTY

**oven
cleaner**

LIFTS GREASE & HEAVY SOIL IN MINUTES

**DANGER: CAUSES BURNS TO SKIN AND EYES
ON CONTACT. CONTENTS UNDER PRESSURE
HARMFUL IF SWALLOWED**

NET WT. 16 OZ. (1 LB.) 453g



Rodda

PORSALITE

Exterior-Interior Alkyd

MASSTONE ENAMEL

73 5004 1 NEUTRAL BASE

(8332)

CONTAINS 116 fl. oz. (3 5/8 qts.) BEFORE TINTING

DANGER! COMBUSTIBLE
OR FATAL IF SWALLOWED.
MAY AFFECT THE BRAIN.
DIZZINESS, HEADACHE,
THROAT, EYE AND SKIN IRRITATION.
See "Hazard Labeling."

SW93-1

1.765 LITERS

NET 5 GALLONS-18.9 LITERS

NET 55 GALLONS-208.2 LITERS



JASCO®

PAINT & EPOXY REMOVER

WATER
RINSABLE
0202

PROFESSIONAL • HOME • MARINE
REMOVES ALL PAINTS • LATEX
EPOXY • VARNISH
NON-FLAMMABLE • NO NEUTRALIZING

32 FL. OZ. (1 QT.) .946 LITER

DANGER! MAY BE FATAL OR CAUSE BLINDNESS IF
SWALLOWED. VAPOR HARMFUL. SKIN AND EYE IRRITANT.
Read Other Cautions and HEALTH HAZARD INFORMATION on Back Panel





Johnson's

LEMON

pledge

WITH CLEANSING
CONDITIONERS

Natural Beauty
Every Time You Dust

CAUTION: CONTENTS UNDER PRESSURE FLAMMABLE

NET WT. 7 OZ. (198g)

SUREFIRETM
PRODUCTS

EASY • EFFECTIVE • GUARANTEED

THE ULTIMATE ROACH TRAP

Easy to use.

Kills roaches, waterbugs,
palmetto bugs and crickets.

No toxic chemicals.

Long-lasting!

**2 TRAPS
INSIDE**



Mata Cucarachas • Instrucciones en Español

Unconditionally Guaranteed. Made in USA.
Another biorational product from Consep, Inc.



SANFORD

Rubber Cement

for wrinkle-free
paper pasting

SHATTER
PROOF
BOTTLE

DANGER—EXTREMELY FLAMMABLE MIXTURE
See complete warning statement
on other side of container

NO. 00494
4 fl. oz. (118 mL)



FOR DRY-CLEANABLE
CLOTHING,
CARPETS, UPHOLSTERY

K2r®

Spot-lifter

DANGER! EXTREMELY FLAMMABLE.
HARMFUL OR FATAL IF SWALLOWED. VAPOR
HARMFUL. EYE IRRITANT. CONTENTS UNDER
PRESSURE. Read other cautions on back panel.

NET WT. 5 OZ. (142g)



KRYLON

Interior/Exterior Paint



DANGER! EXTREMELY FLAMMABLE. CONTENTS UNDER PRESSURE. VAPOR HARMFUL. IRRITATES EYES, SKIN AND RESPIRATORY TRACT. Read other cautions on back panel.

Net Wt. 12 oz./340 g





Spray 'n Wash

Tough Stain Remover
for Laundry

Dow

NET 22 FL. OZ.
(1 PT. 6 OZ.) 650 mL

CAUTION: EYE IRRITANT. READ
CAUTIONS ON BACK LABEL CAREFULLY.



- Cleans brushes and tools.
- Quality Assured

Turpentine

Steam Distilled

Pure Spirits.
Thins oil-based
paint and varnish.

DANGER! FLAMMABLE.
HARMFUL OR FATAL IF SWALLOWED. EYE IRRITANT.
Read other cautions on back panel.
32 FL. OZ. (1 QT.) .946 LITER



HEINZ

ESTD 1869

**APPLE
CIDER
VINEGAR**

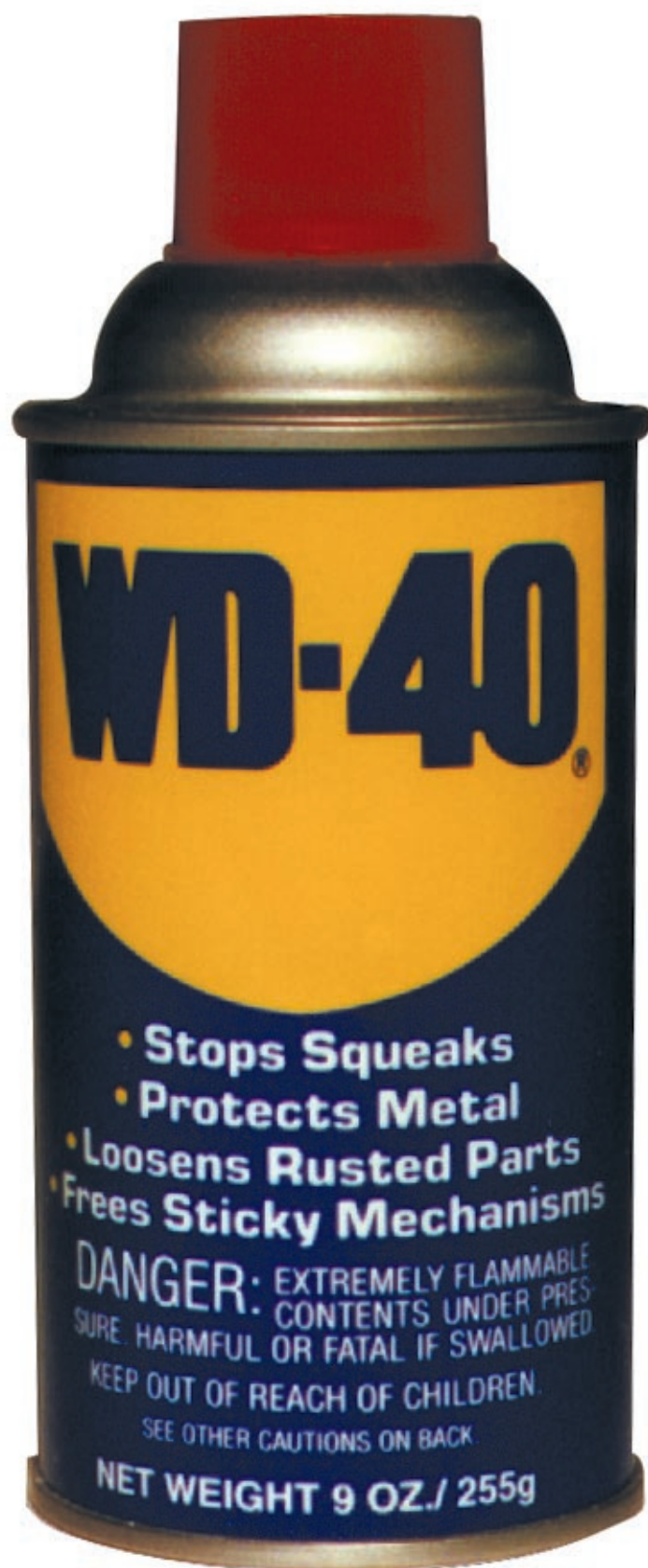
Heinz Vinegar.
A Healthy Change
of Taste!

HEINZ

57 VARIETIES

5% Acidity

16 FL OZ (1 PT)-473 ml



WD-40®

- Stops Squeaks
- Protects Metal
- Loosens Rusted Parts
- Frees Sticky Mechanisms

DANGER: EXTREMELY FLAMMABLE
CONTENTS UNDER PRESSURE
HARMFUL OR FATAL IF SWALLOWED

KEEP OUT OF REACH OF CHILDREN.

SEE OTHER CAUTIONS ON BACK.

NET WEIGHT 9 OZ. / 255g



What words did you see on the household products?

1. C _ _ _ _ _

2. W _ _ _ _ _

3. D _ _ _ _ _

4. P _ _ _ _ _

5. Keep _____

6. Fatal if _____

7. If swallowed, call _____

8. h _ _ _ _ _

9. h _ _ _ _ _

10. fl _ _ _ _ _

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in **King County**

How do you know if a product is hazardous?

Safer

***Does not have
CAUTION, WARNING,
DANGER or POISON
on the label***

***Moderate
Hazard***

CAUTION or WARNING

***Highest
Hazard***

DANGER or POISON

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TOXIC:

Can cause injury or death if swallowed, inhaled, or absorbed through the skin

Phrase to look for: Harmful or fatal if swallowed



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CORROSIVE:

Can wear away materials or burn living tissue by chemical action

Phrases to look for: Causes chemical burns; Injurious to skin and eyes



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FLAMMABLE/COMBUSTIBLE:

Can catch fire at relatively low temperatures

Phrase to look for: Keep from heat or flame



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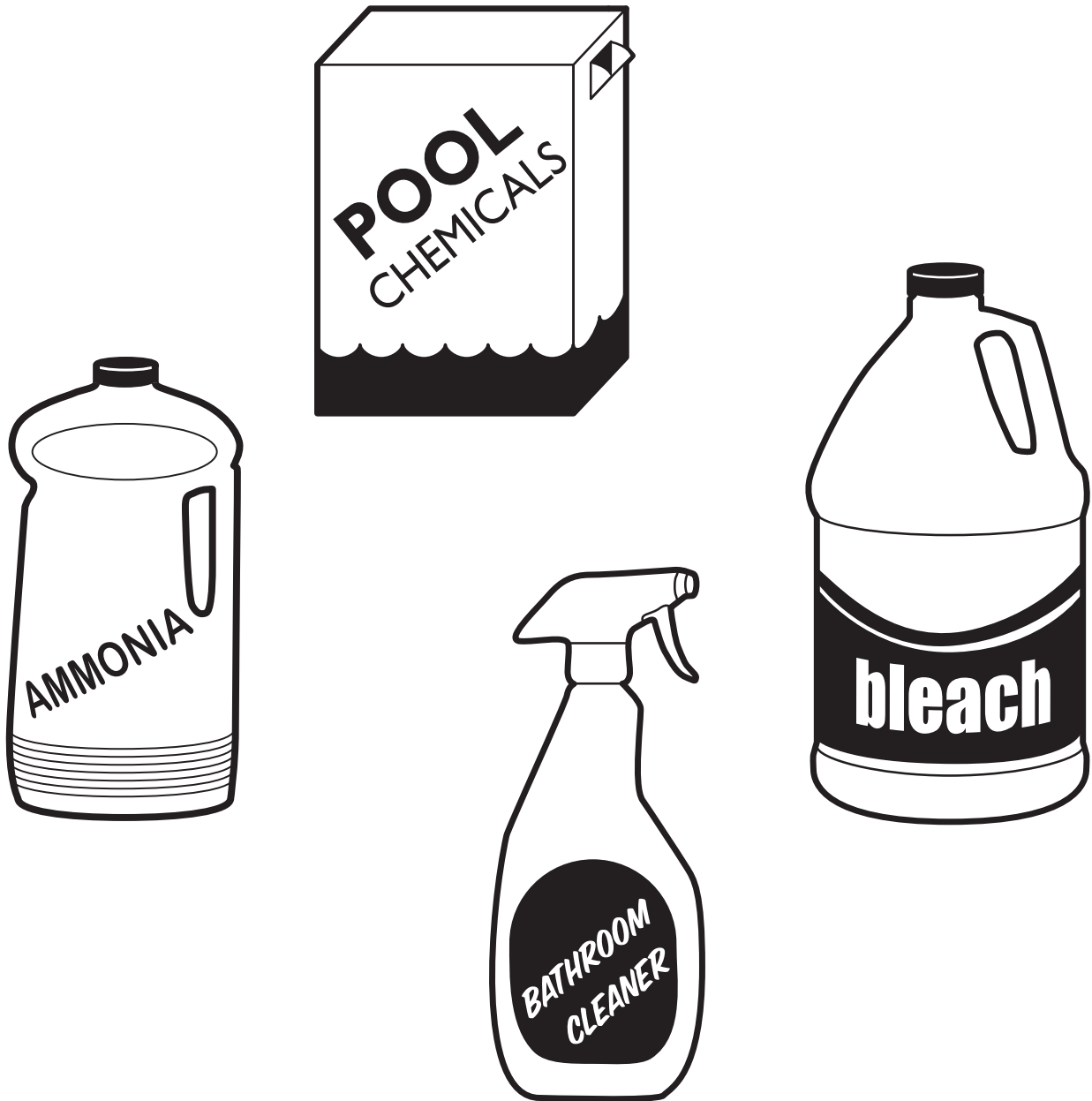


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REACTIVE:

Can create a toxic gas if mixed with other products

Phrase to look for: Do not mix...



Produced by

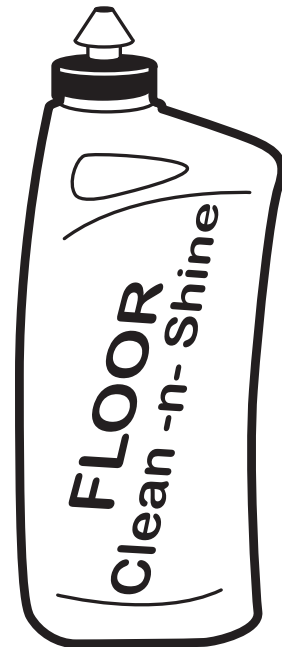


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IRRITANT:

Can cause inflammation of living tissue on contact

Phrase to look for: Eye and skin irritant



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