

The background is a light blue gradient with several realistic water droplets of various sizes scattered across the surface. The droplets have highlights and shadows, giving them a three-dimensional appearance.

# PESTICIDE LABELS

A REVIEW (OR EYE OPENING EXPERIENCE)


# WHAT IS A “LABEL”

## ACCORDING TO THE EPA

- THE TERM “LABEL” IS DEFINED AS “THE WRITTEN, PRINTED, OR GRAPHIC MATTER ON, OR ATTACHED TO, THE PESTICIDE OR DEVICE OR ANY OF ITS CONTAINERS OR WRAPPERS.”

## WHAT IS A “LABEL”

- PESTICIDE PRODUCT LABELS PROVIDE CRITICAL INFORMATION ABOUT HOW TO SAFELY AND LEGALLY HANDLE AND USE PESTICIDE PRODUCTS. UNLIKE MOST OTHER TYPES OF PRODUCT LABELS, PESTICIDE LABELS ARE LEGALLY ENFORCEABLE, AND ALL OF THEM CARRY THE STATEMENT: “IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.” IN OTHER WORDS, THE LABEL IS THE LAW.



**THE PESTICIDE PRODUCT LABEL IS THE MAIN  
METHOD OF COMMUNICATION BETWEEN A  
PESTICIDE MANUFACTURER AND PESTICIDE  
USERS.**



CAN I DEVIATE FROM THE LABEL?


***YOU ARE REQUIRED TO COMPLY WITH ALL THE INSTRUCTIONS AND USE DIRECTIONS FOUND ON THE PESTICIDE PRODUCT LABEL.***





## LABEL VERSES LABELING

LABELING MAY INCLUDE BROCHURES,  
LEAFLETS, AND OTHER INFORMATION THAT  
ACCOMPANIES THE PESTICIDE PRODUCT.





# DOES THE EPA MAKE LABELS

- **IN A WORD, NO**
  - **THE EPA APPROVES THE LABEL**
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## EPA SETS STRICT GUIDELINES


NO PESTICIDE MAY BE SOLD IN THE UNITED STATES UNTIL THE FEDERAL ENVIRONMENTAL PROTECTION AGENCY (EPA) HAS REVIEWED THE MANUFACTURER'S APPLICATION FOR REGISTRATION AND DETERMINED THAT THE USE OF THE PRODUCT DOES NOT PRESENT AN UNREASONABLE RISK TO HUMANS WILDLIFE, OR THE ENVIRONMENT.





# EPA SETS STRICT GUIDELINES

THE EPA REVIEWS THE LABELING TO MAKE SURE IT CONTAINS ALL THE INFORMATION NEEDED FOR SAFE AND EFFECTIVE USE OF THE PESTICIDE PRODUCT AND THAT THE INFORMATION IS BACKED UP BY DATA BY THE MANUFACTURER. THE EPA MAY REQUIRE THE MANUFACTURER TO CHANGE THE LABELING IF THE INFORMATION IS INCOMPLETE OR INCORRECT.



# PESTICIDE LABEL

- A LEGAL DOCUMENT
- FAILURE TO FOLLOW LABEL DIRECTIONS CAN RESULT IN LEGAL ACTION (CIVIL, CRIMINAL, REGULATORY)

# WHAT DOES IT TAKE TO GET A LABEL

- YEARS OF RESEARCH
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- PROBABLE 6 YEARS
- MANY FAILURES
- TOXICOLOGICAL STUDIES
- DOES IT WORK?
- DIFFERENT MARKETS- MAXIMIZE THE PROFIT

# CONSIDERATIONS

- RESIDUES
- TOLERANCES
- UNINTENDED CONSEQUENCES- NON TARGET ORGANISMS

# TYPES OF REGISTRATION

- YOUR PESTICIDE PASSES ALL THE ABOVE CONSIDERATIONS, YOU ARE GRANTED A

## SECTION 3 REGISTRATION

THIS CAN BE A GENERAL USE, OR RESTRICTED USE PRODUCT

# LABEL

- EACH PESTICIDE REGISTERED BY THE EPA HAS A UNIQUE EPA REGISTRATION NUMBER
- SOME PESTICIDES ARE KNOWN AS 25(B) EXEMPT FROM REGISTRATION, AND DON'T HAVE AN EPA REG. NUMBER.
- TITLE 40- CFR (31 ITEMS) SPICES, FOODS ECT.

# A LITTLE DETOUR...

- FOR ARIZONA WE REQUIRE ANY PESTICIDE APPLIED TO BE REGISTERED BY THE ARIZONA DEPARTMENT OF AGRICULTURE.
- 25(B) PRODUCTS MUST ALSO BE REGISTERED BY THE DEPARTMENT.
- BE CAREFUL WHEN YOU BUY ONLINE

## DOES THE EPA APPROVE PESTICIDES?

- ABSOLUTELY NO. THE PRODUCTS MEET A MINIMUM REQUIREMENT (INCLUDING THE LABEL)
- FURTHERMORE, THEY DON'T ENDORSE ANY PRODUCT.



# BACK TO BASICS

- READ THE LABEL-
- WHEN YOU CONSIDER **PURCHASE-**
- CAN I APPLY IT? (SOME AGRICULTURAL LABELS RESTRICT FOR COUNTIES)
- WILL IT WORK FOR MY INTENDED PURPOSE?
- WILL IT CONTROL THE PEST?
- IS THE SITE ON THE LABEL?
- IS IT LEGAL IN ARIZONA?

# BACK TO BASICS

- DO I HAVE THE PROPER APPLICATION EQUIPMENT?
- ARE THERE ANY SPECIAL PRECAUTIONS? (ENDANGERED SPECIES, NON TARGET)
- DOES MY APPLICATION HAVE ANY POTENTIAL FOR ADVERSE EFFECTS?
- WEATHER PROHIBITIONS?
- APPLICATION TIMING?
- DOES IT MAKE ECONOMIC SENSE TO USE THE PRODUCT?
- DO I HAVE THE PPE REQUIRED TO MAKE THE APPLICATION?

# BASICS

- MIXING
- APPLICATION
- RATE
- STORAGE
- DISPOSAL
- UNTENDED REACTIONS- COMPATIBILITY

# PARTS OF THE LABEL

- ACTIVE INGREDIENTS- THE KILLING AGENT
- INERT INGREDIENTS- THE UNKNOWN MYSTERY
- EXPRESSED AS A PERCENTAGE
- TRADE NAME (ROUNDUP)
- COMMON NAME (GLYPHOSATE)
- CHEMICAL NAME (*N*-(PHOSPHONOMETHYL)GLYCINE)

# TYPES OF PESTICIDES

- INSECTICIDE
- HERBICIDE
- FUNGICIDE
- RODENTICIDE
- ALGAECIDE
- BACTERICIDE

# ON THE LABEL


- TYPE OF PESTICIDE
- NET CONTENTS
- NAME AND ADDRESS OF MANUFACTURER
- EMERGENCY TELEPHONE NUMBER
- EPA REG. NUMBER
- EPA ESTABLISHMENT NUMBER
- SIGNAL WORD/ PHRASE “KEEP OUT OF REACH OF CHILDREN”

# ON THE LABEL

- PRECAUTIONARY STATEMENTS- DO NOT CONTAMINATE FOOD OR FEED, REMOVE AND WASH CONTAMINATED CLOTHING, WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING OR SMOKING, DO NOT ALLOW CHILDREN OR DOMESTIC ANIMALS INTO THE TREATED AREA.....
- ROUTES OF ENTRY
- PPE MINIMUM REQUIREMENTS
- ENVIRONMENTAL HAZARDS
- SPECIAL TOXICITY STATEMENTS- “HIGHLY TOXIC TO BEES”



# GENERAL STATEMENTS

- DO NOT APPLY WHEN RUNOFF IS LIKELY TO OCCUR
  - DO NOT APPLY WHEN WEATHER CONDITIONS FAVOR DRIFT
  - DO NOT APPLY DIRECTLY TO WATER
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# EXAMPLE OF AN ENVIRONMENTAL STATEMENT

**THIS PRODUCT IS TOXIC TO AQUATIC INVERTEBRATES. DRIFT AND RUNOFF MAY BE HAZARDOUS TO AQUATIC ORGANISMS IN NEIGHBORING AREAS. UNDER SOME CONDITIONS, THIS CHEMICAL MAY ALSO HAVE A HIGH POTENTIAL FOR RUNOFF INTO SURFACE WATER FOR SEVERAL WEEKS OR MONTHS AFTER APPLICATION. DO NOT CULTIVATE WITHIN 10 FEET OF AQUATIC AREAS SO AS TO ALLOW GROWTH OF VEGETATIVE FILTER STRIP. DRIFT FROM APPLICATIONS OF THIS PESTICIDE IS LIKELY TO RESULT IN DAMAGE TO SENSITIVE AQUATIC INVERTEBRATES IN WATER BODIES ADJACENT TO TREATMENT AREA. FOR TERRESTRIAL USES, DO NOT APPLY DIRECTLY TO WATER OR TO AREAS WHERE SURFACE WATER IS PRESENT OR TO INTERTIDAL AREAS BELOW THE MEAN HIGH-WATER MARK, EXCEPT UNDER FOREST CANOPY WHEN AERIALY APPLIED TO CONTROL FOREST PESTS. DO NOT CONTAMINATE WATER WHEN DISPOSING OF EQUIPMENT WASH WATERS AND RINSATE. DO NOT APPLY WHEN WEATHER CONDITIONS FAVOR DRIFT OR RUNOFF FROM AREAS TREATED.**

# AGRICULTURAL USE REQUIREMENTS

- WORKER PROTECTION STANDARD
- ONLY APPLIES TO WORKERS AND HANDLERS ON FARMS, FORESTS, NURSERIES AND GREENHOUSES
- CAN INCLUDE REI (RESTRICTED ENTRY INTERVALS)

# STORAGE AND DISPOSAL

- TEMPERATURES
- CONTAINER DISPOSAL

# DIRECTIONS FOR USE

- PESTS CONTROLLED
- SITE
- MIXING
- RATE
- PREHARVEST INTERVAL
- PHYTOTOXCITY
- WHERE AND WHEN APPLICATIONS CAN OCCUR

# VIOLATIONS

- HIGHER/ LOWER RATE THAN PERMITTED ON THE LABEL
- SITE NOT ON LABEL

# COMMON OFFENDERS

- PESTICIDE IN AREA NOT PERMITTED- VERIFIED BY SAMPLING
- MIX RATE WRONG
- PPE NOT CORRECT
- LICENSURE STATUS

# CONSIDERATIONS

- PROPER IDENTIFICATION
- IS THIS PESTICIDE SOMETHING THAT WILL CONTROL THE PEST?
- WILL IT PRESENT AN UNACCEPTABLE RISK?- WHO AND WHAT SURROUND MY APPLICATION
- PEOPLE, PETS AND THINGS (BEES)
- ARE THERE ANY ALTERNATIVES?- PENDEMETHALIN VERSIONS
- WEATHER CONDITIONS (2,4D)
- INTEGRATED PEST MANAGEMENT?

# CONSIDERATIONS

- TRY TO CHOOSE THE LOWEST IMPACT PRODUCT
- LABOR (TANK MIX)
- ADJUVANTS, SPREADERS, STICKERS, BUFFERS
- SPRAY WANDS, BOOMS, TIPS,



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