



The tests shown here and described on the back are examples of animal tests that are typically done on cosmetic products and their ingredients. The doses in animal tests are chosen to specifically elicit a toxic effect, so they are almost always 100 to over 1000 times higher than

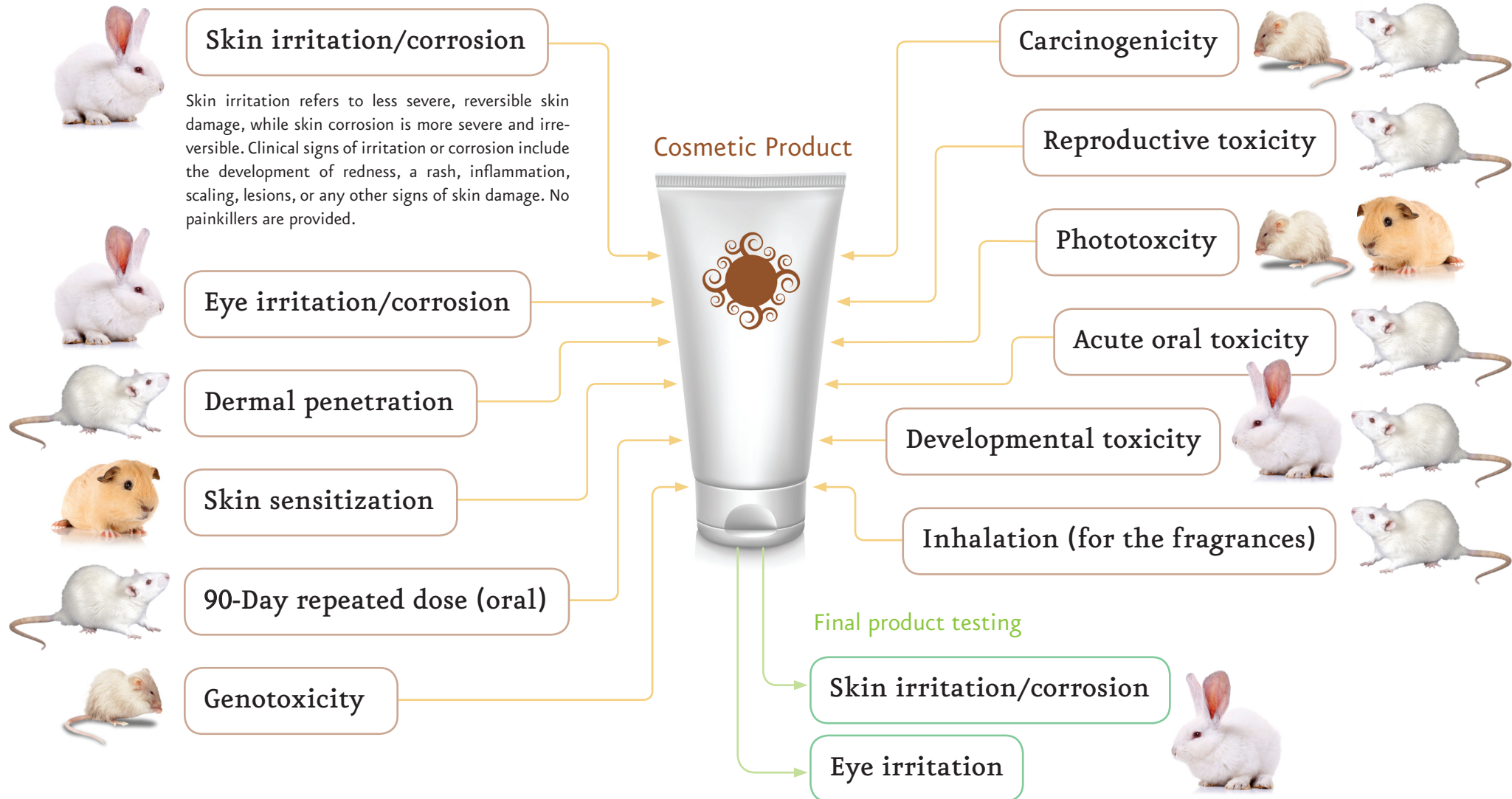
the dose to which humans will ever be exposed. Not only is this cruel, scientifically such large doses often overwhelm the animals' systems, making effects seen in the studies not necessarily applicable to human exposure situations.

The animals used in these procedures are always killed and examined at the end of the tests.

Animals used

Type of test

Ingredient testing



Skin irritation / skin corrosion: Skin irritation refers to less severe, reversible skin damage, while skin corrosion is more severe and irreversible. Clinical signs of irritation or corrosion include the development of redness, a rash, inflammation, scaling, lesions, or any other signs of skin damage. No painkillers are provided. Rabbits are the most common test species.

Eye irritation / eye corrosion: Eye irritation refers to less severe, reversible eye damage, while eye corrosion is more severe and irreversible. Clinical signs of irritation or corrosion include redness, bleeding, ulcers, and blindness. Painkillers may or may not be provided. Rabbits are the most common species used.

Dermal penetration: Dermal penetration determines the rate a chemical goes through the skin. Typically a substance is put on the rats shaved backs for up to 24 hours. After the substance is washed off, the animal is killed to evaluate the rate of absorption through their skin and into the blood, tissues, and excrement. No painkillers are provided. Rats are the most common species used.

Skin sensitization: Skin sensitization tests assess whether an allergic reaction occurs based on exposure to a substance. When guinea pigs are used the substance is applied on the surface of, or injected under, their skin. When mice are used the substance is applied to the surface of their ears. Clinical symptoms include redness, scaling, ulcers, inflammation, and itchiness. No painkillers are provided. Guinea pigs or mice are the most common species used.

90-day repeated dose (oral): The 3-month oral repeated dose toxicity tests looks for abnormalities in cells or organs after exposure to a substance. Chemicals are administered daily by gavage (a feeding tube which goes into the animals stomach) to the animal. The liver, heart, nervous system, kidneys, and other organs and systems are all dissected and evaluated at the end of the experiment. No painkillers are provided. Rats are the most common species used.

Genotoxicity: Genotoxicity refers to a substance's ability to mutate the body's genetic material. Chemicals are administered daily to the animal by gavage (a feeding tube which goes into the animals stomach). Bone marrow and/or blood samples are taken regularly to see any genetic changes. No painkillers are provided. Mice are the most common species used.

Carcinogenicity: Cancer or an increased rate of cancer development characterizes a carcinogen. Animals are exposed to substances through their noses (inhaled), on the skin, in the diet or drinking water, or by oral gavage (a feeding tube which goes into the animals stomach). These tests take two years and then the animals are killed to examine their tissues and organs for evidence of cancer. Rodents are more prone than humans to developing cancer. No painkillers are provided. Mice or rats are the most common species used.

Reproductive toxicity: Fertility and reproductive organs are analyzed based on chemical exposure in reproductive toxicity tests. Sexual behavior, sperm and egg production/fertilization, development in the uterus and after birth, hormonal activity, and organ growth are all measured while the animal is alive and after they are killed. No painkillers are provided. Rats are the most common species used.

Phototoxicity: Also called photoirritation, phototoxicity, refers to the skin's reaction precipitated by exposure to a substance and sunlight or ultraviolet radiation (artificial sunlight). Clinical signs of phototoxicity include inflammation, rash, or swelling. No painkillers are provided. Guinea pigs or mice are the most common species used.

Acute oral toxicity: The goal of the acute oral toxicity test is to assess a substance's ability to cause death to half of the animals that consume the substance within two weeks after exposure to the chemical. Chemicals are administered to the animals by gavage (a feeding tube which goes into the animals stomach). Clinical signs of toxicity include, diarrhea, bleeding from mouth, convulsions, seizures, paralysis, and death. No painkillers are provided. Rats are the most common species used.

Developmental toxicity: Developmental toxicity measures the effect a substance has on developing offspring during critical periods of growth. Pregnant animals are repeatedly fed a substance. After the babies are born, if they survive the pregnancy, they are analyzed for birth defects including developmental abnormalities or physical deformities. No painkillers are provided. Rabbits or rats are the most common species used.

Inhalation: Inhalation tests assess whether a substance can cause harm within a two-week period after a single high-dose exposure through the nose. Animals are placed into tubes where they inhale the chemical. Clinical signs of toxicity include bleeding from the nose, convulsions, seizures, paralysis, and death. No painkillers are provided. Rats are the most common species used. Daily exposures for 28 or 90 days are also conducted.