



Non-Agricultural Pesticide Sales 2023

1/16/2026

For Additional Information

Fertilizer Management Unit

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Introduction

The Minnesota Department of Agriculture (MDA) is responsible for monitoring urban (non-agricultural) and rural (agricultural) pesticide use in Minnesota. A pesticide is any substance or mixture of substances intended for preventing, destroying, repelling or lessening the damage of any pest and may be a chemical substance or a biological agent. Pesticides can be herbicides, insecticides or fungicides.

Pesticide registrants provide the MDA the total pounds of non-agricultural active ingredients (a.i.) by product sold in Minnesota each year. Over 500 a.i. are reported through product sales and each product sold is assigned to one of 13 pesticide product type categories. These product type categories group pesticides according to their primary use as listed on the pesticide label. Since a product can only be assigned to one product type category, and many products can be used across multiple product type categories, the amount of pesticide sold by product type category may not reflect the actual use patterns of pesticides in Minnesota. This report details the non-agricultural pesticide products sold in 2023. Registrants reporting sales may include products that are distributed or offered for sale in Minnesota as well as sold in 2023. Registrants may not know exactly how much of their product was accurately sold at the retail level compared to being available for sale. Accordingly, crop pesticides, labeled for use on crops, and formulating pesticides, pesticides that are used in Minnesota in the manufacturing or formulating of end-use products, are not included in this report. The remaining 11 product type categories are shown in the following table.

2023 Non-Agricultural Pesticide Product Types

Table 1: Non-Agricultural pesticide product types and their corresponding definitions.

| NON-AGRICULTURAL PESTICIDE PRODUCT TYPE | DEFINITION |
|--|---|
| Animal Care | Products used for the care of livestock and household pets. |
| Disinfectants and Sanitizers | Include all professional use and homeowner use disinfectant and sanitizer products. |
| Garden and Lawn | Products generally used by homeowners on lawns and gardens. |
| Home | Products used in the home by the homeowner. Mosquito repellents are included here. |

| NON-AGRICULTURAL PESTICIDE PRODUCT TYPE | DEFINITION |
|---|---|
| Industrial, Rights-of-Way, and Forestry | Products include pesticides used on highway and power line rights of ways, in industrial areas, and forest management products. |
| Miscellaneous | Products include cooling tower microbiocides and slimicides, industrial preservatives and microbiocides, aquatic use products, professional mosquito control products, anti-fouling paints and products that don't fit into any other category. |
| Pool, Spa, and Hot Tub | Products for use in swimming pools, spas, and hot tubs (except disinfectants and sanitizers). |
| Structural | Pesticides used in and around structures by professionals. |
| Turf and Ornamental | Professional use turf and ornamental products, and products used on golf course. |
| Vertebrate Control | Products include rodenticides, avicides, piscicides, and animal repellents. |
| Wood Preservatives | Products that are designed to protect wood from decay by fungus and insects. |

2023 Total Pounds Sold

Table 2 is a breakdown of non-agricultural pesticide by product type and the total pounds of a.i. sold in 2023. The information is accurate as of the date of publication as data may change with corrections and additions from non-reported products. Data is subject to change based on corrections made to the data or additions from non-reported products.

Table 2: Summary of total pounds of a.i. sold in each non-agricultural pesticide type. This data is accurate as of 1/16/2026.

| NON-AGRICULTURAL PESTICIDE PRODUCT TYPE | TOTAL POUNDS SOLD OF A.I. IN 2023 |
|---|-----------------------------------|
| Animal Care | 29,008 |
| Disinfectants and Sanitizers | 40,114,336 |
| Garden and Lawn | 124,449 |

| NON-AGRICULTURAL PESTICIDE PRODUCT TYPE | TOTAL POUNDS SOLD OF A.I. IN 2023 |
|---|-----------------------------------|
| Home | 80,022 |
| Industrial, Rights-of-Way, and Forestry | 684,485 |
| Miscellaneous | 1,279,786 |
| Pool, Spa, and Hot Tub | 353,292 |
| Structural | 477,765 |
| Turf and Ornamental | 635,719 |
| Vertebrate Control | 4,046 |
| Wood Preservatives | 3,205,474 |
| Total Non-Agricultural Pounds Sold | 46,988,382 |

2023 Top 50 Non-Agricultural Pesticide Sales by A.I.

Out of the 13 pesticide product type categories, the remaining 11 product type categories of non-agricultural pesticides are broken down and listed by individual non-agricultural pesticide a.i. The top 50 non-agricultural pesticide a.i. are summarized in Table 3 by pounds of a.i. sold in 2023.

Table 3: Summary of total pounds of a.i. sold of the top 50 pesticide a.i. sold in 2023.

| NON-AGRICULTURAL PESTICIDE ACTIVE INGREDIENT (A.I.) | TOTAL POUNDS SOLD IN 2023 |
|---|---------------------------|
| CHLORINE | 21,143,460 |
| SODIUM HYPOCHLORITE | 12,732,934 |
| ZINC BORATE | 2,429,827 |
| ISOPROPYL ALCOHOL | 1,052,287 |
| HYDROGEN PEROXIDE | 1,041,539 |
| SODIUM DICHLORO-S-TRIAZINETRIONE DIHYDRATE | 709,146 |
| TRICHLORO-S-TRIAZINETRIONE | 644,045 |
| ETHYL ALCOHOL (previously reported as Ethanol) | 567,970 |
| COPPER CARBONATE, BASIC | 534,268 |
| CALCIUM HYPOCHLORITE | 471,357 |
| 2,4-D | 448,911 |
| ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE | 412,544 |
| BORIC ACID | 291,916 |
| ETHYLENE OXIDE | 253,825 |

| NON-AGRICULTURAL PESTICIDE ACTIVE INGREDIENT (A.I.) | TOTAL POUNDS SOLD IN 2023 |
|--|---------------------------|
| 1-BROMO-3-CHLORO-5,5-DIMETHYL HYDANTOIN | 241,377 |
| PEROXYACETIC ACID | 212,236 |
| HYDROGEN CHLORIDE | 206,350 |
| COPPER OXIDE (OUS) | 187,138 |
| SODIUM BROMIDE | 186,217 |
| GLUTARALDEHYDE | 179,976 |
| PHOSPHORIC ACID | 140,336 |
| SODIUM DICHLORO-S-TRIAZINETRIONE | 137,118 |
| AMMONIUM CARBAMATE | 119,278 |
| COPPER SULFATE | 118,501 |
| GLYPHOSATE | 115,535 |
| AMMONIUM BROMIDE | 103,763 |
| FORMALDEHYDE | 94,412 |
| DIDECYL DIMETHYL AMMONIUM CHLORIDE | 93,503 |
| OCTYL DECYL DIMETHYL AMMONIUM CHLORIDE | 92,583 |
| UREA | 92,179 |
| TRICLOPYR | 89,342 |
| AMMONIUM SULFATE | 85,025 |
| CHLOROTHALONIL | 84,897 |
| DIDECYL DIMETHYL AMMONIUM BICARBONATE | 70,508 |
| CHROMIC ACID | 68,598 |
| NONANOIC ACID | 59,594 |
| MCP-P | 51,217 |
| 4,5-DICHLORO-2-N-OCTYL-3(2H)-ISOTHIAZOLONE | 51,000 |
| 1,3-DICHLORO-5,5-DIMETHYLHYDANTOIN | 46,819 |
| DIOCTYL DIMETHYL AMMONIUM CHLORIDE | 46,636 |
| ARSENIC PENTOXIDE | 45,885 |
| LACTIC ACID | 44,327 |
| DODECYLBENZENE SULFONIC ACID | 42,336 |
| SODIUM CHLORATE | 40,931 |
| DICAMBA | 34,669 |
| ALKYL (68%C12, 32%C14) DIMETHYLETHYLBENZYL AMMONIUM CHLORIDE | 34,049 |
| SODIUM CHLORITE | 33,344 |
| MINERAL OIL | 30,454 |
| DEET | 29,836 |
| 2,2-DIBROMO-3-NITRILOPROPIONAMIDE | 29,830 |

In 2023 MDA received reports of 139,533,300 total pounds of a.i. sold in all pesticide products. This includes 34,626,905 pounds of formulating products. Formulating products are excluded from the total because they are used to make other products. Thus, formulating products would be double counted with other product type categories. There were 104,906,395 total pounds of a.i. (agricultural and non-agricultural) sold in 2023. Excluding formulating a.i., non-agricultural pesticide a.i. accounted for 46,988,382 pounds or 45% of the total.

- Trends of non-agricultural pesticide pounds of a.i. over time can be developed by data from the searchable database found on MDA's website at:
https://www2.mda.state.mn.us/webapp/lis/chemsold_default.jsp.
- Charts and graphs detailing pesticide sales by percent of product within each product type category can also be developed by using data from the searchable database.
- Additional questions or comments can be directed to the Minnesota Department of Agriculture, Denton Bruening 651-261-1993.
- Report generated on 1/16/2026