

Non-Agricultural Pesticide Sales 2016

Introduction

The Minnesota Department of Agriculture (MDA) is responsible for monitoring urban (non-agricultural) and rural (agricultural) pesticide use in Minnesota. Pesticide registrants provide the MDA the total pounds of non-agricultural active ingredients (a.i.) sold in Minnesota each year. Over 500 a.i.s are reported through product sales and each product sold is assigned to one of 13 pesticide product type categories. These categories group pesticides according to their primary use as listed on the pesticide label. This fact sheet details the non-agricultural pesticide products sold in 2016. Accordingly, crop chemicals and formulating pesticides are not included in this report. The remaining 11 categories are shown in the following table.

NON-AGRICULTURAL PESTICIDE PRODUCT TYPE	DEFINITION
Animal Care	Products used for the care of livestock and household pets.
Disinfectants and Sanitizers	All professional and homeowner use of disinfectant and sanitizer products.
Garden and Lawn	Products generally used by homeowners on lawns and gardens.
Home	Products used in the home by homeowner: includes mosquito repellents.
Industrial, Right-of-Way, and Forestry	Products used along highways and power lines rights-of-way, in industrial areas and forest management products.
Miscellaneous	Products that don't fit into any other category. Examples include certain antimicrobial products used in industrial settings, aquatic use products, professional mosquito control products, and anti-fouling paints applied to boats. Examples of antimicrobial uses include water treatment in sewage and wastewater systems, pulp and paper mill systems, and commercial and industrial water cooling systems.
Pool, Spa, and Hot Tub	Products used in swimming pools, spas, and hot tubs (except disinfectants and sanitizers).
Structural	Products include 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 avicides, rodenticides, piscicides and animal repellents
Wood Preservatives	Products that protect wood from decay by fungus and insects.

Additional detailed information can be found in a searchable database at: www.mda.state.mn.us/pesticide-fertilizer/pesticide-use-sales-data.

For Additional Information: Denton Bruening

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2016 Reported Sales

The following table details the total pounds of a.i. sold in each non-agricultural pesticide category. This data is accurate as of $2/28/2019^{iv}$.

NON-AGRICULTURAL PESTICIDE PRODUCT TYPE	TOTAL POUNDS SOLD IN 2016
Animal Care	26,132
Disinfectants and Sanitizers	32,367,159
Garden and Lawn	282,118
Home	58,981
Industrial, Right-of-Way, and Forestry	432,478
Miscellaneous	2,035,501
Pool, Spa, and Hot Tub	639,287
Structural	36,940
Turf and Ornamental	687,756
Vertebrate Control	10,788
Wood Preservatives	4,139,136
Total Non-Agricultural Pounds Sold	40,716,276

The following table details the total pounds of a.i. sold of the top 50 pesticide a.i. sold in 2016.

NON-AGRICULTURAL PESTICIDE ACTIVE INGREDIENT (a.i.)	TOTAL POUNDS SOLD IN 2016
CHLORINE	19,009,664.47
SODIUM HYPOCHLORITE	8,480,997.66
ZINC BORATE	2,505,069.00
PENTACHLOROPHENOL	1,096,085.48
TRICHLORO-S-TRIAZINETRIONE	767,493.83
HYDROGEN PEROXIDE	758,069.46
CALCIUM HYPOCHLORITE	711,994.84
2,4-D	516,860.56
ISOPROPYL ALCOHOL	480,203.55
SODIUM BROMIDE	297,350
SODIUM DICHLORO-S-TRIAZINETRIONE	260,002
COPPER OXIDE (OUS)	257,635

NON-AGRICULTURAL PESTICIDE ACTIVE INGREDIENT (a.i.)	TOTAL POUNDS SOLD IN 2016
PEROXYACETIC ACID	237,877
ETHYL ALCOHOL	229,458
GLYPHOSATE	229,043
HYDROGEN CHLORIDE	209,368
ALKYL (50%C14, 40%C12, 10%C16) DIMETHYLBENZYL AMMONIUM CHLORIDE	207,042
AMMONIUM BROMIDE	206,443
COPPER CARBONATE, BASIC	198,184
1-BROMO-3-CHLORO-5,5-DIMETHYL HYDANTOIN	192,840
AMMONIUM SULFATE	191,442
ETHYLENE OXIDE	158,739
SODIUM DICHLORO-S-TRIAZINETRIONE DIHYDRATE	158,435
PHOSPHORIC ACID	151,450
GLUTARALDEHYDE	131,925
UREA	106,774
CHLOROTHALONIL	102,721
SODIUM CHLORITE	95,955
DAZOMET	91,843
OCTYL DECYL DIMETHYL AMMONIUM CHLORIDE	89,840
TRICLOPYR	87,123
DIDECYL DIMETHYL AMMONIUM CHLORIDE	86,235
POTASSIUM DIMETHYL DITHIO CARBAMATE	81,715
MCPP-P	78,161
ENDOTHALL	77,870
FORMALDEHYDE	74,946
CHROMIC ACID	72,618
BORIC ACID	71,441
МСРА	70,874
ALKYL (60%C14, 30%C16, 5%C12, 5%C18) DIMETHYLBENZYL AMMONIUM CHLORIDE	66,963
NONANOIC ACID	65,138

NON-AGRICULTURAL PESTICIDE ACTIVE INGREDIENT (a.i.)	TOTAL POUNDS SOLD IN 2016
ALKYL (67%C12, 25%C14, 7%C16, 1%C8,C10,C18) DIMETHYLBENZYL AMMONIUM CHLORIDE	63,654
DIDECYL DIMETHYL AMMONIUM BICARBONATE	59,319
COPPER SULFATE	55,690
DISODIUM OCTABORATE TETRAHYDRATE	51,412
MINERAL OIL	50,946
ARSENIC PENTOXIDE	49,704
BACILLUS THURINGIENSIS, SUBSP. ISRAELENSIS, STRAIN AM 65-52	49,562
BROMOCHLORO-5,5-DIMETHYLHYDANTOIN	49,276
DIOCTYL DIMETHYL AMMONIUM CHLORIDE	44,960

In 2016 MDA received reports of 118,530,123 total pounds of a.i. sold (agricultural and non-agricultural combined) and non-agricultural pesticide a.i. accounted for 34% of the total.

- Trends of non-agricultural pesticide sales over time can be developed by data from the searchable database listed above.
- Charts and graphs detailing pesticide sales by percent of product within each category can also be developed by using data from the seachable database.
- Additional questions or comments can be directed to the Minnesota Department of Agriculture, Denton Bruening 651-201-6399.

¹ 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.

ⁱⁱ Registrants reporting sales may include products that are distributed or offered for sale in Minnesota as well as actually sold in 2016. Registrants may not know exactly how much of their product was accurately sold at the retail level compared to being available for sale.

iii Formulating chemicals are chemicals that are used in Minnesota in the manufacturing or formulating of end-use products.

iv Data is subject to change based on corrections made to the data or additions from non-reported products.