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Allowable Herbicides for Schools & Day Care Centers

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Under NYS Law Chapter 85, Laws of 2010 (Child Safe Playing Fields Act), all schools and day care centers must comply with restrictions on pesticide use. The law restricts use of pesticides to products containing active ingredients listed as exempt under 25(b) of the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA). The pesticides must also include inert ingredients that are eligible under 4a of the 25(b) FIFRA exemption. Pesticides containing any active or inert ingredients not listed under the exemption and eligibility criteria of 25(b) FIFRA must receive one-time emergency application approval from appropriate channels.

The post-emergence herbicides that qualify under the EPA exemption of 25(b) FIFRA work primarily as defoliant that knock down the leaf and stem tissues of plants in contact with the herbicide. For perennials, roots and rhizomes are generally able to regrow in several weeks, requiring two to three applications in a season.

The only pre-emergent herbicide with EPA exemption status is corn gluten meal (CGM). CGM must be applied in early spring before weed seeds emerge. In the spring, CGM should be applied when the crocus flowers are in bloom and before forsythia shrub blossoms emerge. Many annual weed seeds germinate when soil temperatures reach 53-55 degrees F—the same temperature that triggers flowering of forsythia shrubs. Be aware that adding the recommended rate of 20 lbs/1,000 sq ft of CGM will result in a substantial nitrogen addition of 2 lbs/1,000 sq ft. CGM is 10% nitrogen by weight.

Allowable herbicides (Do not need emergency application approval)

Table 1: EPA 25(b) FIFRA exempt herbicides that <u>do not</u> require “emergency application” approval		
Product Name	Active Ingredient(s)	Parent company
Ecosmart Weed & Grass Killer	2-Phenethyl Propionate, eugenol	EcoSMART
Burnout II Weed & Grass Killer	Citric acid & clove oil	St. Gabriel Organics
Weed Zap	Cinnamon oil, clove oil	JH Biotech Inc.
C-cide	Citric acid	Biological Solutions
Brush, Weeds, and Grass Herbicide	Citric acid	Greenenergy
Matratec	Clove oil	Brandt
Matran EC	Clove oil	EcoSmart Technologies
Phydura	Citric acid, malic acid, clove oil	Soil Technologies Corporation
Several brands available	Corn gluten meal	Several vendors
ADIOS	Sodium chloride	Herbanature

Note: All NYS schools and daycare centers require a licensed pesticide applicator to apply pesticides, including 25(b) pesticides.

Ecosmart Weed & Grass Killer

Company: EcoSMART

Target: Non-selective

Active Ingredient(s): 2-Phenethyl Propionate, eugenol

EPA reg number: 25b, EPA exempt

MSDS or label: www.biconet.com/lawn/infosheets/eWeedGrassKillerMSDS.pdf

BURNOUT II Weed & Grass Killer

Company: St. Gabriel Organics

Target: Non-selective

Active Ingredient(s): Citric acid & clove oil

EPA reg number: 25b, EPA exempt

MSDS or label:

www.dirtworks.net/Images/St%20Gabriel%20pic/StGabrieldownloads/BurnOut_II_Conc_msds.pdf

Weed Zap

Company: JH Biotech Inc.

Target: Non-selective

Active Ingredient(s): Cinnamon oil, clove oil

EPA reg number: 25b, EPA exempt

MSDS or label: <http://www.jhbiotech.com/MSDS%20PDF/Weed%20Zap.pdf>

<http://jhbiotech.com/docs/Label-Weed-Zap-0239-D-A-3.pdf>

C-cide

Company: Biological Solutions

Target: Non-selective

Active Ingredient(s): Citric acid

EPA reg number: 25b, EPA exempt

MSDS or label: http://www.biologicalsolutions.org/Pages/MoldBug_Folder/C-Cide.html

Brush, Weeds, and Grass Herbicide

Company: Greenergy

Target: Non-selective

Active Ingredient(s): Citric acid

EPA reg number: 25b, EPA exempt

MSDS or label: http://www.greenergyinc.com/products/2011/bwg_msds_11.htm

http://www.greenergyinc.com/images/products/labels/bwg_backl.jpg

Matratec

Company: Brandt

Target: Non-selective

Active Ingredient(s): Clove oil (50%)

EPA reg number: 25b, EPA exempt

MSDS or label: <http://cdn.arbico-organics.com/downloads/matratec-label.pdf>
<http://cdn.arbico-organics.com/downloads/matratec-label.pdf>

Matran EC

Company: EcoSmart Technologies

Target: Non-selective

Active Ingredient(s): Clove oil (50%)

EPA reg number: 25b, EPA exempt

MSDS or label: www.co.marin.ca.us/depts/AG/Main/IPM/Data%20Files/Product_Labels/Matran_EC-Ecosmart_Tech_label.pdf

Phydura

Company: Soil Tech Corporation

Target: Non-selective

Active Ingredient(s): Citric acid (20%), Clove oil (15%), Malic acid (10%)

EPA reg number: 25b, EPA exempt

Label: <http://natseed.com/pdf/Phydura%20Label%202010.pdf>>

Corn gluten meal

Company: Several, such as Bradfield Organics, Espoma Organic, and Soil Tech Corp (Dynaweed)

Target: Non-selective, pre-emergent

Active Ingredient(s): Corn gluten meal

EPA reg number: 25b, EPA exempt

Notes: also provides N fertilization; must be applied at rate of 20 lbs/1,000 sq ft in early spring before weed seeds emerge

A.D.I.O.S.

Company: Herbanature

Label: http://herbanatur.biz/uploads/3/0/3/7/3037939/adios_rtu_36oz_-_1.14_gal_label_usa_april_2014.pdf

MSDS: http://herbanatur.biz/uploads/3/0/3/7/3037939/msds_2014_a.d.i.o.s._rtu.pdf

Target: Non-selective

EPA reg number: 25b, EPA exempt

Notes: All 'other' ingredients are listed under the 25b EPA exempt 4a inert list

What is an EPA 25(b) FIFRA exempt pesticide?

Pesticides containing active and inert ingredients that are considered exempted from 25(b) FIFRA are not subject to federal registration requirements because their ingredients are considered by the EPA to be demonstrably safe for the intended use. To qualify for use under the NYS Chapter 85, Laws of 2010, a pesticide must contain active ingredients listed as exempt under 25(b) FIFRA and inert ingredients listed as eligible under 4a "Inert Ingredients of Minimal Concern." All inerts listed under the pesticide label must be eligible under the exemption. See the EPA list of eligible 4a inerts at the following url site:

http://www.epa.gov/opprd001/inerts/section25b_inerts.pdf

Castor oil (U.S.P. or equivalent)*	Linseed oil
Cedar oil	Malic acid
Cinnamon and cinnamon oil*	Mint and mint oil
Citric acid*	Peppermint and peppermint oil*
Citronella and Citronella oil	2-Phenethyl propionate (2-phenylethyl propionate)
Cloves and clove oil*	Potassium sorbate*
Corn gluten meal*	Putrescent whole egg solids
Corn oil*	Rosemary and rosemary oil*
Cottonseed oil*	Sesame (includes ground sesame plant) and sesame oil*
Dried Blood	Sodium chloride (common salt) *
Eugenol	Sodium lauryl sulfate
Garlic and garlic oil*	Soybean oil
Geraniol*	Thyme and thyme oil*
Geranium oil	White pepper
Lauryl sulfate	Zinc metal strips (consisting solely of zinc metal and impurities)
Lemongrass oil	

Disclaimer: Please read pesticide labels prior to use. The information contained here is not a substitute for a pesticide label. Trade names used herein are for convenience only; no endorsement of products is intended, nor is criticism of unnamed products implied. Laws and labels change. It is your responsibility to use pesticides legally.

Compliance under the Child Safe Playing Fields Act: Why are some organic herbicides and all reduced risk herbicides prohibited?

Organic herbicides, including those registered under the Organic Materials Review Institute (OMRI), are intended for use in certified organic production, handling, and processing, while reduced risk herbicides are conventional herbicides that were determined by the EPA to pose less risk to human health and the environment than existing conventional alternatives. Many organic herbicides and all reduced risk herbicides are prohibited under the NYS Child Safe Playing Fields Act because at least one active ingredient or inert ingredient is not listed as exempt under FIFRA 25(b). Refer back to page four of this document for more details on which pesticides are prohibited under the law and require emergency application approval.

The following list of organic or reduced risk herbicides require "emergency application approval" from the school board, county or state Department of Health, or NYS Department of Environmental Conservation. Details of the approval process can be found at the DEC website <<http://www.dec.ny.gov/chemical/41822.html>>.

Approval of a one-time emergency application of a pesticide not determined as EPA exempt under 25(b) FIFRA is determined by the following: 1) All public schools seek approval from their local school board; 2) All private schools and day care centers receive approval from the county health department (DOH), State DOH district office, or the state DOH's Bureau of Toxic Substance Assessment; 3) Non-public schools and day care centers on environment-related determinations are approved by the DEC <<http://www.dec.ny.gov/chemical/41822.html>>.

Most of the organic and reduced risk herbicides listed below are non-selective, and will defoliate all vegetation in contact with the product. However, herbicides containing the active ingredient iron HEDTA are selective against broadleaf weeds.

Table 2: Organic or reduced risk herbicides that require "emergency application" approval		
Product Name	Active Ingredient(s)	Parent company
Weed Pharm	Acetic acid (20%)	Pharm Solutions, Inc.
Ground Force Organic Herbicide	Citric acid	Quality Blending Inc.
Avenger Weed Killer	Citrus oil (d-limonene)	Cutting Edge Formulations
Lilly Miller® Worry Free® Weed & Grass Killer	Citrus oil (d-limonene)	
Ortho Elementals Lawn Weed Killer	Iron HEDTA	The Ortho Group
Fiesta Turf Weed Killer	Iron HEDTA	Neudorff
Scythe	Pelargonic acid, nonanoic	Dow AgroSciences
Safer® Brand Fast Acting Weed & Grass Killer	Potassium salts of fatty acids	Woodstream Corporation

Note: All NYS schools and daycare centers require a licensed pesticide applicator to apply pesticides, including 25(b) pesticides.

Weed Pharm

Company: Pharm Solutions, Inc.

Target: Non-selective

Active Ingredient(s): Acetic acid (20%)

EPA reg number: 81936-1-81935

MSDS or label: http://www.pharmsolutions.com/dealerAssets/MSDS/MSDS_Weed_Pharm_07.pdf
<http://www.pharmsolutions.com/pdf/Weed-Pharm-Food-Use-Label-Comm-1gal.pdf>

Ground Force Organic Herbicide

Company: Quality Blending Inc.

Target: Non-selective

Active Ingredient(s): Citric acid

EPA reg number: N/A

MSDS or label: http://www.qualityblending.com/PDFs/ground_force_organic_herbicide.pdf

Avenger Weed Killer

Company: Cutting Edge Formulations

Target: Non-selective

Active Ingredient(s): Citrus oil (d-limonene)

EPA reg number: 82052-2

MSDS or label: <http://www.greenadvantageorganics.com/pdf/MSDS%20Avenger%20Conc82052-1%20102709.pdf>

Lilly Miller® Worry Free® Weed & Grass Killer

Company: Lilly Miller Brands

Target: Non-selective

Active Ingredient(s): Citrus oil (d-limonene)

EPA reg number: 82052-2

MSDS or label:

http://www.lillymiller.com/msds/worryfree/MSDS_Worry_Free_Weed_&_Grass_Killer_RTU_82052-3-33116.pdf

Ortho Elementals Lawn Weed Killer

Company: The Ortho Group

Target: Selective (targets broadleaf weeds)

Active Ingredient(s): Iron HEDTA

EPA reg number: 67702-27-239

MSDS or label: <http://132.236.168.120/ppds/524531.pdf>

Fiesta Turf Weed Killer

Company: Neudorff

Target: Selective (targets broadleaf weeds)

Active Ingredient(s): Iron HEDTA

Note: All NYS schools and daycare centers require a licensed pesticide applicator to apply pesticides, including 25(b) pesticides.

EPA reg number: 67702-26-87865

MSDS or label: <http://132.236.168.120/ppds/526037.pdf>

Scythe

Company: Dow AgroSciences

Target: Non-selective

Active Ingredient(s): Pelargonic acid, nonanoic

EPA reg number: 62719-529

MSDS or label: < <http://132.236.168.120/ppds/517139.pdf>> < <http://www.cdms.net/LDat/mp772004.pdf>>

Safer® Brand Fast Acting Weed & Grass Killer

Company: Woodstream Corporation

Target: Non-selective

Active Ingredient(s): Potassium Salts of Fatty Acids

EPA reg number: N/A

MSDS or label: http://c.shld.net/assets/misc/spin_prod_194521101.pdf

<http://www.planetnatural.com/planetnatural/images/fast-acting-label.pdf>