

Double Nickel® 55

Reg. No. L10053, Act No. 36 of 1947

GROUP **BM02** FUNGICIDE

READ THE LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN & ANIMALS

Double Nickel® 55 is a preventative biofungicide for the suppression of fungal plant diseases on crops as specified.



HAZARD SYMBOL	GHS HAZARD STATEMENTS	GHS PRECAUTIONARY STATEMENTS
	CAUSES SERIOUS EYE IRRITATION	<ul style="list-style-type: none"> Wear protective gloves/protective clothing/eye protection. In case of inadequate ventilation, wear respiratory protection. Avoid breathing dust, mist or spray. Wash hands and face thoroughly after handling. Do not touch eyes.

Active Ingredient: *Bacillus amyloliquefaciens* subsp. *plantarum* D747 (5×10¹⁰ CFU per gram).

Double Nickel® 55 is a Registered Trademark of Certis USA, L.L.C.

Andermatt
Madumbi

BIO DISEASE MANAGEMENT

Distributed in South Africa by:
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Suite 175, 9145 Guilford Rd.
Columbia MD 21046



Country of Origin: USA

- Do not leave the product or mixture standing in the sun.
- Prevent contamination of food, foodstuffs, drinking water and eating utensils.
- Clean applicator before and after use. Do not contaminate other crops, grazing, treatment with water used to wash the equipment.
- Store in original container in a dry area, away from food and feed stuffs.
- Store in a cool, dry place.
- Use before expiry date indicated on label.
- Triple rinse empty container: Shake all the fungicide formulation out of the container into the spray or mixing tank. Hold container over the spray or mixing tank and rinse the container with running water for thirty seconds. Pour the rinse water into the mixing tank. Repeat the rinsing twice. Puncture the triple-rinsed container and dispose via an Approved Collector or Recycler. Do not bury, burn or donate the container to any other parties who may use it as a receptacle for foodstuffs.

RELEVANT SUBSTANCES

Ingredient	CAS Number	%
<i>Bacillus amyloliquefaciens</i> subsp. <i>plantarum</i> D747	68038-60-8	25 (> 5×10 ¹² CFU/100 g)
Solid formulants	Confidential	75

NOTE: The other ingredients not included above, do not cause or contribute towards the correct GHS classification of Double Nickel® 55 and is therefore, in terms of the South African Regulations for Hazardous Chemical Agents - 2021; Regulation 14(b), not listed.

FIRST AID

Eye contact: Most important acute symptoms/effects: eye irritation, redness, and excessive tears.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists, get medical help.

Skin contact: Most important acute symptoms/effects: skin irritation, redness may occur.

IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical help.

Inhalation: Most important acute symptoms/effects: irritation of the upper airway, coughing may occur.

IF INHALED: Remove person to fresh air and keep comfortable. Get medical help if the person feels unwell.

Ingestion: Most important acute symptoms/effects: no symptoms or effects are known.

IF SWALLOWED: Rinse mouth out with water for several minutes. Get medical help if the person feels unwell.

Most important delayed symptoms/effects after exposure: Microorganisms may have the potential to provoke sensitising reactions, especially if there is prolonged or frequently repeated skin contact.

RESISTANCE WARNING STATEMENT

Double Nickel® 55 is a Group Code BM02 Fungicide.

Currently there is no known resistance to Double Nickel® 55 or the biological active. Due to the nature of the mode of action, resistance is not expected to be likely. It is still advisable to use good agricultural practices of resistance management.

To delay fungicide resistance:

- Avoid exclusive repeated use of fungicides from the same Fungicide Group Code.
- Alternate or tank mix with products from different Fungicide Group Codes.
- Refer to individual product labels when alternating products, or when using tank mixtures with products in Fungicide Group Codes 7, 27, 28, 29, 30 and M.
- Integrate other control methods (chemical, cultural, biological) into disease control programmes.

Disclaimer:

Although this remedy has been extensively tested under a large variety of conditions the registration holder does not warrant that it will be efficacious under all conditions because the action and effect thereof may be affected by factors such as abnormal soil, climatic and storage conditions, quality of dilution water, compatibility with other substances not indicated on the label as well as by the methods, time and accuracy of application. The registration holder, furthermore, does not accept responsibility for damage to crops vegetation, the environment or harm to man or animals, the lack of performance of the remedy concerned due to failure of the user to follow the label instructions or to the occurrence of conditions which could not have been foreseen in terms of registration. Please consult the supplier in the event of any uncertainty.

MODE OF ACTION

Double Nickel® 55 produces a number of antimicrobial metabolites such as Iturin and Surfactin which inhibit growth of fungi and bacteria.

Double Nickel® 55 colonizes plant surfaces, occupying space and using up nutrient sources at potential infection sites thus making it difficult for pathogens to become established.

Induced Systematic Resistance (ISR) is a state of enhanced immunity to infection demonstrated by plants following an injury or presence of inducer organisms like *B. amyloliquefaciens*.

Double Nickel® 55 can help activate a plant's natural defence mechanisms through ISR.

USE RESTRICTIONS

Double Nickel® 55 does not impose any risk of residues on harvested crops.

DIRECTIONS FOR USE - Use only as directed

- Fill spray tank with half the required water volume and check neutral pH.
- Use an appropriate buffering agent if necessary.
- Start agitator mechanism. Maintain agitation during application.
- Add the correct amount of product to the water in the tank at the recommended dose rate.
- Top up spray tank and do a final check on the pH.
- If other products are to be added to the tank mix, always add them first.
- Mixed volumes must be applied as soon as possible and not left overnight or standing in the sun.

REGISTERED USAGES

Crop/Disease	Dosage Rates	Recommendations
Cucurbits Powdery mildew (<i>Podosphaera fusca</i>)	1 - 2 kg/ha (Water volumes 200 - 1000 L)	<ul style="list-style-type: none"> Apply full cover spray but not to runoff. Start application at first sign of disease or during periods favourable to disease outbreak. Repeat at 7-day intervals until disease is under control. At least 3 applications are recommended.
Grapes (table and wine) Downy mildew (<i>Plasmopara viticola</i>) Powdery mildew (<i>Erysiphe necator</i>) Botrytis (<i>Botrytis cinerea</i>)	1 - 2 kg/ha (Water volumes 200 - 1000 L)	<ul style="list-style-type: none"> Apply full cover spray but not to runoff. Start preventative applications with onset of flowering. Repeat every 7 - 10 days until harvest.

See pack for details

Batch No:
Date of Manufacture:
Expiry Date: 24 months from date of manufacture.
UN No.: Not relevant
Pack Size:



WARNINGS

GHS Hazard Statement: Causes serious eye irritation.

PRECAUTIONS

GHS Precautionary Statements

Wear protective gloves/protective clothing/eye protection.	IF IN THE EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical help.
In case of inadequate ventilation, wear respiratory protection.	IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical help. Take off contaminated clothing and wash it before reuse.
Do not eat, drink, or smoke when using this product.	Contaminated work clothing should not be allowed out of the workplace.
Wash hands and face thoroughly after handling. Do not touch eyes.	Dispose of the product in a responsible manner.
Avoid breathing dust, mist or spray.	