







# **AGRICULTURE**

Calumet solvents, base oils, white mineral oils and waxes are used in various agricultural applications. Whether on the farm or at a nursery, our products help protect trees and crops from insects and disease. They are also used as an inert carrier for insecticides, herbicides, and fungicides as well as seed oil extraction and coatings for seed, fertilizers, grain and animal feed.

Find out more about our specific product uses by reaching out to our Product Support team.

# APPLICATIONS

- Inert Ingredients/Carriers
- Extraction Solvents
- Coatings
- Horticultural Spray Oils

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# **INERT INGREDIENTS/CARRIERS**

Inert ingredients play a critical role in pesticide formulations by preventing degradation due to exposure to heat, light or moisture. Calumet manufactures many different products that may be used as pesticide inert ingredients. The usage for these materials is dependent upon CAS number and purity, with limitations for their specific uses listed in the federal regulations.

# PRODUCT RECOMMENDATION

- ALIPHATIC AND ISOPARAFFINIC SOLVENTS
- PARAFFINIC BASE OILS
- PETROLATUMS
- WHITE MINERAL OILS

Please contact our Product Support team for specific crop, technical and/or end-use requirements.

# **EXTRACTION SOLVENTS**

Calumet solvents can be used in oilseed extraction processes by washing the oilseed with a hydrocarbon solvent, which is later separated from the oil by evaporation and distillation.

## PRODUCT RECOMMENDATION

ALIPHATIC SOLVENTS

# **COATINGS**

Calumet's white mineral oils are used for dust suppressants, diluents, binders, and lubricants for use in seed treatments and animal feed. Calumet's white mineral oils meet the Food and Drug Administration Regulation 21 CFR 172.878 to be used safely in food applications such as wheat, corn, soybean, barley, rice, rye, oats and sorghum. Also, our aliphatic solvents and paraffinic base oils can be used to coat fertilizers to control nutrient release.

## PRODUCT RECOMMENDATION

- ALIPHATIC SOLVENTS
- PARAFFINIC BASE OILS
- PARAFFIN WAXES
- WHITE AND TECHNICAL WHITE MINERAL OILS



ORCHEX® Agricultural Spray Oils are a proven and safe weapon in combating a broad range of insects and diseases that impact crop production and profitability. Calumet's Orchex Agricultural Spray Oils are for *Manufacturing-Use Only* and may be used by formulators of an end-use product.

#### ASSURED SAFETY

Extensive toxicology testing shows that ORCHEX Agricultural Spray Oils, when used in approved applications, are inherently low in toxicity and present minimal risk to people, animals, crops and beneficial insects.

#### DEPENDABLE QUALITY

ORCHEX Agricultural Spray Oils are registered with the U.S. EPA and are manufactured under the most rigorous quality control standards.

#### DOES NOT PROMOTE RESISTANCE

When used in approved applications, insects cannot develop resistance to this method of pest control. ORCHEX Agricultural Spray Oils are particularly effective in combating scale insects and mites, eliminating them in various life stages by hypoxia or suffocation.

## OPTIMAL MOLECULAR WEIGHT

Ensures low phytotoxicity to crops while maximizing pesticidal strength. Orchex's high paraffinicity ensures low phytotoxicity to crops while maximizing pesticidal strength and insect hypoxia.

#### LOW SURFACE TENSION

Maximizes spreading coverage, while enhancing attachment of pesticide to insect cuticle and plant surfaces.

## **■ LOW WATER SOLUBILITY**

Provides resistance to rain wash-off, extending pesticide longevity and preventing seepage into soil.

# ■ ORCHEX 796 APPROVED CROP APPLICATIONS

## TREE CROPS, NUT CROPS AND ROW CROPS

Almonds Cherries Oranges - Valencia Lemons Prunes **Ambersweet Mandarins** Cocoa Limes Papaya Strawberries Coffee **Apples** Nectarines **Peaches** Walnuts **Apricots** Cotton Olives Pears **Avocados** Figs Oranges - Hamlin **Pecans** Oranges - Navel **Pistachios** Bananas Grapefruit

## **ROW CROPS - INERT INGREDIENT CLASSIFICATION**

Grapes

Beans Cotton Potatoes Sorghum Sugar Beets Wheat Corn Peanuts Rice Soybeans Sugar Cane

Oranges - Pineapple

#### **VEGETABLES**

Bushberries

Field Corn Sweet Corn Beans Celery Melons **Pumpkins** Cabbage Cucumbers **Peppers** Squash Tobacco Hops Cauliflower Eggplant Lettuce **Potatoes** Sugar Beets **Tomatoes** 

Plums

#### **ORNAMENTAL AND SHADE TREES**

Apple Flowering Cherry Magnolia Pyracantha
Birch Flowering Peach Maple Sycamore
Conifers Hawthorne Oak

Dogwood Holly

## PERFORMANCE BRANDS

# Bel-Ray® and Royal Purple® Specialty Lubricants

To reduce your total cost of ownership:

#### Reduce maintenance and downtime

Extremely high film strength and consistent film thickness minimize metal to metal contact between moving surfaces resulting in less contact, wear and damage.

## Increase production

Expanded drain intervals and usable lubricant life provide optimal Operational Availability and readiness.

## Extend equipment life

Formulations focused on proactively managing moisture, heat and contaminants.

## Improve component reliability

Maximized component Mean Time Between Failures and Planned Maintenance Intervals.

#### Sustainable product options

Leading environmental stewardship utilizing the latest in ecologically responsible lubricant technology while providing enhanced asset protection.

## Training and lubrication support program available

Value added training and services offered, supporting lubrication and reliability program development, implementation, and sustainability for all departments: operations, maintenance, reliability and management.

Contact Kyle Perna at kyle.perna@calumet.com for more information on Performance Brands products.

# **CALUMET SPECIALTY PRODUCTS & SOLUTIONS**

Calumet manufactures, formulates, and markets a diversified slate of specialty branded products to customers in various consumer-facing and industrial markets. We are headquartered in Indianapolis, Indiana, with approximately 1,400 employees and 12 facilities across North America, and we serve over 2,700 global customers in 90 countries.

















#### TECHNICAL ASSISTANCE

For product or technical questions, contact your Sales Representative or Calumet Product Support at (800) 437-3188 or email technical@calumet.com.

To the best of our knowledge, the information contained herein is accurate, but is given without warranty or guarantee. We assume no liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any information or material for the use contemplated, the name of use and whether there is any infringement of patents is the sole responsibility of the user.

Calumet's sampling and testing procedures in effect at the time of production will be used for certification testing. Results may be based on tank certification, manufacturing data, periodic testing and/or most recent product restock. Typical values only represent the values one would expect if the property were tested in our laboratories with our test methods on the specified date. Some product properties are not frequently measured, and accordingly typical values on a statistically relevant number of tests.

The information in this document relates only to the named product. The user is solely responsible for all determination regarding any use and any process.



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