

---

# SYSTHANE 20EW

---

FUNGICIDE

Product Registration Number: MAPP 19160

An oil in water emulsion containing 200 g/litre (20% w/w) myclobutanil.

A systemic fungicide for the control of APPLE SCAB, PEAR SCAB and POWDERY MILDEW in APPLES and PEARS, BROWN ROT in CHERRY, AMERICAN POWDERY MILDEW in CURRANTS, GOOSEBERRIES, RASPBERRIES and BLACKBERRIES, POWDERY MILDEW in STRAWBERRIES and POWDERY MILDEW in GRAPES

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

**READ DIRECTIONS FOR USE ON ATTACHED LEAFLET.**

**PROTECT FROM FROST.**

Pack size: 0.5 – 10 Litres

*Approval holder:*

**Dow AgroSciences Limited**

Latchmore Court, Brand Street,  
Hitchin, Hertfordshire. SG5 1NH.

Telephone: Hitchin (01462) 457272

Fax: (01462) 426605

24 Hour Emergency Telephone Number:  
0870 600 2999

Technical Hotline: 0800 689 8899

e-mail:ukhotline@corteva.com

*Distributed by:*

**Landseer Limited**

Lodge Farm, Goat Hall Lane,

Galleywood, Chelmsford, Essex CM2 8PH

Tel: (01245) 357109

Fax: (01245) 494165

\*,®, Trademarks of Dow AgroSciences, DuPont or Pioneer, and their affiliated companies or their respective owners. © 2019 CORTEVA

This label is compliant with the CPA Voluntary Initiative Guidance



## **SAFETY PRECAUTIONS**

### **Operator protection:**

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

**WEAR SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD)** when handling the concentrate.

**WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS, HOOD) AND SUITABLE PROTECTIVE GLOVES** when applying via air assisted spraying equipment.

**WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES** when applying via hand-held equipment.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

**WASH CONCENTRATE** from skin or eyes immediately.

**WASH HANDS AND EXPOSED SKIN** before eating, drinking or smoking and after work.

### **Environmental protection:**

To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.

**DO NOT ALLOW DIRECT SPRAY** from broadcast air-assisted sprayers to fall within 20m of the top of the bank of any static or flowing waterbody when applied to apple, pear and cherry; within 10m when applied to blackcurrant, redcurrant, gooseberry, raspberry and blackberry; within 5m when applied to grape. Or within 5m of a ditch which is dry at the time of application of the top of the bank of a static or flowing waterbody, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 5m of the top of a ditch which is dry at the time of application. Aim spray away from water.

**DO NOT ALLOW DIRECT SPRAY** from horizontal boom sprayers to fall within the distance specified for the crop to the top of the bank of a static or flowing water body, or within 1 m of the top of a ditch which is dry at the time of application. For crops with 5m buffer zone only: **DO NOT ALLOW DIRECT SPRAY** from hand-held sprayers to fall within 1 m of the top of the bank of a static or flowing water body. Aim spray away from water. **ALL CROPS WITH A BUFFER ZONE GREATER THAN 5M ARE NOT ELIGIBLE FOR BUFFER ZONE REDUCTION UNDER THE LERAP HORIZONTAL BOOM SPRAYERS SCHEME.**

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer or a broadcast air-assisted sprayer, either a LERAP must be carried out in accordance with CRD's published guidance or the statutory buffer zone as appropriate to the crop must be maintained. The results of the LERAP must be recorded and kept available for three years.

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.

**Storage and Disposal:**

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.



**Product Identifier according to Art.18 of Reg. (EC) No 1272/2008 [CLP]: Systhane® 20EW; Myclobutanil**

**WARNING**

**Causes serious eye irritation.**

**Suspected of damaging the unborn child.**

**May cause damage to organs through prolonged or repeated exposure.**

**Toxic to aquatic life with long lasting effects.**

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/clothing/eye/face protection.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical advice/attention if you feel unwell.

Dispose of contents/container to a licensed waste disposal contractor or collection site except for empty clean triple rinsed containers which can be disposed of as non-hazardous waste

Repeated exposure may cause skin dryness or cracking.

**To avoid risks to human health and the environment, comply with the instructions for use.**

**IMPORTANT INFORMATION**

FOR USE ONLY AS A PROFESSIONAL FUNGICIDE

<b>Crop/situations</b>	<b>Maximum Individual Dose</b>	<b>Maximum Total Dose</b>	<b>Maximum number of treatments</b>	<b>Latest Time of Application</b>	<b>Aquatic buffer zone distance (metres):</b>
Apple, pear	0.45 litres product/ha  (see Other Specific Restrictions*)	1.35 litres product/ha/annum	3	14 days before harvest	20m
Cherry (outdoor and grown under temporary rain covers)	0.45 litres product/ha	0.9 litres product/ha/annum	2	7 days before harvest	20m
Blackcurrant and redcurrant, gooseberry, raspberries, blackberries (outdoor and protected)	0.45 litres product/ha	1.35 litres product/ha/annum	3	14 days before harvest	10m
Strawberry (outdoor)	0.5 litres product/ha	1.0 litres product/ha/annum	2	14 days before harvest	-
Strawberry (protected)	0.3 litres product/ha	0.9 litres product/ha/annum	3	3 days before harvest	-
Grape (wine)	0.24 litres product/ha	0.72 litres product/ha/annum	3	14 days before harvest	5m

**Other Specific Restrictions:**

Only 1 application may be made to apple, pear and cherry crops during August.

DO NOT HANDLE TREATED GRAPEVINES for at least 12 days after treatment

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

## DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

SYSTHANE 20EW with the active Myclobutanil is a systemic fungicide of the triazole class providing protectant activity. Systhane 20EW must be used as a preventative application, alone or in combination with a contact fungicide or as part of a seasonal spray program. Myclobutanil is a triazole fungicide, which acts by inhibiting sterol biosynthesis in fungi.

## TAINT TESTING

Taint tests have shown that SYSTHANE 20EW does not taint apple and currants, but growers should consult processors before use on any other crop.

## RESISTANCE

SYSTHANE 20EW contains a DMI fungicide. Sensitivity shifts to some DMI fungicides has been identified in Apple Scab (*Venturia inaequalis*) and powdery mildew (*Podosphaera leucotricha*) in apple and pear which may affect the performance of some products.

As part of an effective resistance risk management strategy Systhane 20 EW must be applied as a preventative application at the full label rate to ensure full crop coverage. Use Systhane 20EW in mixture or alternate with a different mode of action product at a rate which is effective on the target pathogen.

For further advice on resistance management in DMIs contact your agronomist or specialist advisor, and visit the FRAG-UK website.

## IPM PROGRAMMES

The effect of Systhane 20EW on pathogenic fungi based methods of IPM control has not been investigated, therefore use of Systhane 20EW in these situations is done so at the growers discretion.

## MIXING

**SYSTHANE 20EW Alone:** Shake the container well before use. Partially fill spray tank with water and start agitation. Pour required amount of Systhane 20EW into the tank and fill to required level. Maintain agitation during mixing and loading and until spraying is complete.

Tank mixing with PP Captan 80 WG: Pour the SYSTHANE 20EW into the partially filled spray tank as described above. Remove the filter basket and pour the required amount of PP Captan 80 WG directly into spray tank. DO NOT add the PP Captan 80 WG in a sudden large quantity. Agitate whilst topping up the tank and continue agitation before and during spraying.

## APPLES AND PEARS

Systhane 20EW is a systemic fungicide with protectant activity for the moderate control of apple scab (*Venturia inaequalis*), pear scab (*Venturia pirina*) and powdery mildew (*Podosphaera leucotricha*).

Systhane 20EW is most effective when used as part of a routine preventative spray programme from bud burst to the onset of petal fall. SYSTHANE 20EW is safe to use during flowering. From the onset of petal fall SYSTHANE 20EW should be tank-mixed with protectant fungicides to enhance fruit scab control. From mid June, SYSTHANE 20EW can be applied alone for the moderate control of secondary mildew.

SYSTHANE 20EW is safe to use on all the main commercial varieties of apples and pears grown in the UK. For PP Captan 80 WG mixtures with SYSTHANE 20EW please consult the PP Captan 80 WG label for details of varietal restrictions.

### SPRAY TIMING AND RATES OF USE

To help prevent leaf scab and reduce the development of powdery mildew from primary infections, apply SYSTHANE 20EW from bud burst to the onset of petal fall. To improve control of fruit scab after the onset of petal fall, tank mix SYSTHANE 20EW with PP Captan 80 WG (see COMPATIBILITY and MIXING).

Minimum spray interval	Bud burst to petal fall	From onset of petal fall
	Tank mix the listed rates (per ha) of Systhane 20EW with either	
	Systhane 20EW	PP Captan 80WG
10 days	0.34 litres / ha	0.85 kg
10-14 days	0.45 litres / ha	1.2 kg

In periods of rapid growth or high disease pressure, SYSTHANE 20EW and partner fungicides should be used at 10 day instead of 10-14 day intervals.

Pest	Apple powdery mildew ( <i>Podosphaera leucotricha</i> ), apple scab ( <i>Venturia inaequalis</i> ) and pear scab ( <i>Venturia pirina</i> )
Level of control	Moderate control of powdery mildew ( <i>Podosphaera leucotricha</i> ). Moderate control of scab ( <i>Venturia inaequalis</i> and <i>Venturia pirina</i> ).
Rate	0.34 l/ha (10 day interval) 0.45 (10-14 day interval)
Water volume	200-500 liters per hectare
Maximum number of applications	3
Time of application	Apply SYSTHANE 20EW from the beginning of bud burst. Where disease pressure is high, use the shorter spray interval for optimum disease control.
Latest time of application	14 days before picking fruit

SAMPLE

## STONE FRUIT (CHERRY)

Pest	Brown Rot ( <i>Monilia fructicola</i> and <i>laxa</i> )
Level of control	Moderate control of <i>Monilia fructicola</i> and <i>Monilia laxa</i>
Rate	0.45 l/ha
Water volume	500-1000 liters per hectare
Maximum number of applications	2
Time of application	SYSTHANE 20EW can be applied from bud burst. 10 days minimum should elapse before a further application of SYSTHANE 20EW is made.
Latest time of application	7 days before picking fruit

## CURRENTS (BLACK, RED, WHITE), GOOSEBERRIES, RASPBERRIES AND BLACKBERRIES

### CURRENTS (BLACK, RED, WHITE), GOOSEBERRIES, RASPBERRIES AND BLACKBERRIES

SYSTHANE 20EW is most effective when used as part of a routine preventative spray programme from just before the first signs of mildew infection up to two weeks before picking if necessary.

Pest	Powdery Mildew ( <i>Sphaerotheca mors-uvae</i> )
Level of control	Moderate control of powdery mildew ( <i>Sphaerotheca mors-uvae</i> ).
Rate	0.45 l/ha
Water volume	400-1000 liters per hectare
Maximum number of applications	3
Time of application	Apply SYSTHANE 20EW from the first leaves unfolded for currants and white bud stage for gooseberry and raspberry. First application should be made at early infection at a minimum of 10 day intervals
Latest time of application	14 days before picking fruit



## STRAWBERRIES

SYSTHANE 20EW should be applied pre-harvest, beginning at or just prior to first flower and thereafter at the recommended spray intervals up to 3 days (protected) or 14 days (outdoor) before picking. Post-harvest sprays may be required where mildew is present and likely to be damaging (especially mildew susceptible varieties). This will help to produce vigorous growth and reduce the amount of over-wintering inoculum.

### STRAWBERRIES – PROTECTED USE

#### SPRAY TIMING AND RATE OF USE

Pest	Powdery Mildew ( <i>Sphaerotheca macularis</i> )
Level of control	Moderate control of powdery mildew ( <i>Sphaerotheca macularis</i> )
Rate	0.3 l/ha
Water volume	400-1000 liters per hectare
Maximum number of applications	3
Time of application	Apply SYSTHANE 20EW from the first set of flowers at the bottom of the rosette. First application should be made at early infection at a minimum of 10 day intervals
Latest time of application	3 days before harvest

### STRAWBERRIES – OUTDOOR USE

#### SPRAY TIMING AND RATE OF USE

Pest	Powdery Mildew ( <i>Sphaerotheca macularis</i> )
Level of control	Moderate control of powdery mildew ( <i>Sphaerotheca macularis</i> )
Water volume	1000-2000 liters per hectare
Maximum number of applications	2
Time of application	Apply SYSTHANE 20EW from the first set of flowers at the bottom of the rosette. First application should be made at early infection at a minimum of 10 day intervals
Latest time of application	14 days before harvest

## GRAPE (WINE)

### SPRAY TIMING AND RATE OF USE

Pest	Powdery mildew ( <i>Uncinula necator</i> )
Rate	0.06 – 0.24 l/ha
Water volume	400-1600 litres per hectare
Maximum number of applications	3
Time of application	Apply SYSTHANE 20EW from the first flower hoods detached stage at a minimum 10 day interval between applications. Adjust rate to match growth stage and canopy development.
Latest time of application	14 days before harvest

### TANK CLEANING

All spraying equipment must be thoroughly cleaned both inside and out using a proprietary spray tank cleaner or bleach containing 5 % hypochlorite as follows:

1. Immediately after spraying thoroughly and completely rinse all internal surfaces.
  2. Rinse inside of tank with clean water and flush through booms and in-line strainers using at least one tenth of the spray tank volume. Drain tank completely.
  3. Fill tank with clean water (minimum 10% of tank capacity) and add tank cleaner at the recommended rate and agitate for 15 minutes. Flush the boom and hoses and drain tank completely.
  4. Nozzles and filters should be removed and cleaned separately with a tank cleaner at the recommended rate.
  5. Rinse the tank with clean water and flush through the boom and hoses using at least one tenth of the spray tank volume. Drain tank completely.
  6. For disposal of washings, follow Code of Practice for Using Plant Protection Products. Do not spray onto sensitive crop or land intended for cropping with sensitive crop.
- Note: If it is not possible to drain the tank completely, step 3 must be repeated before going onto step 4.

Follow specific tank cleaning advice required for any partner products used in mixture with Systhane 20EW.

### COMPATIBILITY

SYSTHANE 20EW is compatible with PP Captan 80 WG

For compatibility information on other products please contact your dealer or advisor.

### TRADEMARK ACKNOWLEDGEMENTS

SYSTHANE 20EW is a trademark of Dow AgroSciences, DuPont or Pioneer, and their affiliated companies or their respective owners.

All other brand names used in this document are trademarks of other manufacturers in which proprietary rights may exist.