#### A THERMOPLASTIC PORTFOLIO ENGINEERED FOR ALL

## **SWARCOTHERM ECO-LINE**









## DURABILITY MEETS EFFICIENCY

Thermoplastic road marking compounds have been used extensively in the road marking industry since the 1950's as a durable and economical road marking on the world's highways. It remains today the durable marking of choice due to long term performance, cost benefit and a wide range of application techniques that improve motorist safety and provide agencies a long term marking solution.

Today's formulations and application techniques have evolved to provide enhanced safety benefits to the motoring public which include improved wet-night reflective solutions, audible profile solutions and economical thin-line spray solutions.



SWARCOTHERM ECO-LINE products are rosin-ester based thermoplastic markings that consist of bio-based resins which provide excellent levels of performance while also offering significant reductions in  $CO_2$ . This is achieved through using bio-based resins. As a result, our systems ensure a  $CO_2$  reduction compared to conventional products based on synthetic hydrocarbon resins.

SWARCO Road Marking Systems sets defined guidelines for SWARCOTHERM ECO-LINE products. It is clearly stated that one of these criteria has to be fulfilled for each thermoplastic product:

- The amount of bio-based resins exceeds 90 %.
- · At least 30 percent of the additives consist of bio-based raw materials.
- The product is manufactured with at least 10% recycled materials.

Our experts always aim to develop new products that have a smaller environmental footprint than our previous products. We increase the use of secondary raw materials and renewable resources while maintaining a high product quality.

## CHOOSE THE RIGHT SOLUTION 🕏





#### SWARCOTHERM ECO HIBRITE

SWARCOTHERM ECO HIBRITE offers an economical solution with high levels of durability, retroreflectivity and colour. Ideal for use on a wide range of roads with application through screed or extrusion. Retroflection can be further enhanced by adding drop-on beads during application.





#### SWARCOTHERM ECO HIBRITE AR

SWARCOTHERM HIBRITE AR is a high-performance grade engineered to achieve superior levels of durability, retroreflectivity and colour. This product is formulated to achieve even greater durability than SWARCOTHERM HIBRITE grades.





#### SWARCOTHERM ECO HILINE

A durable non-reflective road marking solution with excellent adhesion, colour and heat stability. SWARCOTHERM ECO HILINE is ideal for a wide range of non-reflective road marking schemes, from car parks to red route schemes.





#### SWARCOTHERM ECO HIBRITE Spray

SWARCOTHERM ECO HIBRITE Spray offers an economical method for rejuvenating existing road markings that have fallen below specified performance levels. This is without the need to remove existing substandard markings.





#### SWARCOTHERM ECO RAINSAFE

SWARCOTHERM ECO RAINSAFE consists of a castellated low profile repeated into the base line of markings. This works to increase visibility and drainage in wet conditions, while also offering an auditory aid to drivers





#### SWARCOTHERM ECO RIB

Specifically developed to improve road safety through a structured line. SWARCOTHERM ECO RIB offers increased visibility in dark and wet conditions while also offering a noticeable vibratory warning to drivers when crossing this line.



## APPLICATION METHODS



### Screed/Extrusion

Thermoplastic material is forced through a dispensing shoe that rides directly on the road surface. A continuous line is formed by a three sided die with a control gate set to a pre-determined thickness.

#### Spray

Spraying combines air and hot thermoplastic under pressure depositing it onto the road through a nozzle. The primary advantage is that marking can occur at higher speeds.



#### Profile

Thermoplastic markings are constructed with an alternating elevated and recessed profile which provide night-time retroreflectivity under wet conditions, and in cases where the profiles are large enough, a rumble effect can be felt when driving over the markings.

## SWARCOTHERM ECO-LINE 🕃

SWARCOTHERM ECO-LINE products are developed for a wide range of application areas and environments across the globe. We employ the finest raw materials and manufacturing techniques to reach high quality across the whole portfolio. Each product is tested and refined to meet the industry's standards and requirements.

|                               | Grade   | Colour  | Min. luminance<br>(EN Class)  |  |
|-------------------------------|---|---|---|--|
| SWARCOTHERM ECO HIBRITE       | <ul> <li>70</li> <li>100</li> <li>100/55</li> <li>150</li> <li>150/55</li> <li>200</li> <li>200/50</li> <li>200/55</li> <li>Yellow</li> </ul> | <ul> <li>White</li> <li>White</li> <li>White</li> <li>White</li> <li>White</li> <li>White</li> <li>White</li> <li>Yellow</li> </ul> | 0.70 (LF4)     0.80 (LF6)     0.40 (LF1) |  |
| SWARCOTHERM ECO HIBRITE AR    | <ul> <li>100 AR</li> <li>150 AR</li> <li>150/55 AR</li> <li>200 AR</li> <li>200/55 AR</li> </ul>  | <ul><li>White</li><li>White</li><li>White</li><li>White</li><li>White</li></ul>   | <ul> <li>0.80 (LF6)</li> <li>0.80 (LF6</li> <li>0.80 (LF6</li> <li>0.80 (LF6</li> <li>0.80 (LF6</li> </ul>  |  |
| SWARCOTHERM ECO HILINE        | <ul><li>White</li><li>Yellow</li><li>Primrose</li><li>Deep Cream</li><li>Redroute</li><li>Perception Bar</li></ul>                            | <ul><li>White</li><li>Yellow</li><li>Primrose</li><li>Cream</li><li>Signal Red / BS 381</li><li>Yellow</li></ul>                    | <ul> <li>0.70 (LF4)</li> <li>0.40 (LF1)</li> <li>0.40 (LF1)</li> <li>0.40 (LF1)</li> <li>Init. 10-11.5</li> <li>0.40 (LF1)</li> </ul>             |  |
| SWARCOTHERM ECO HIBRITE Spray | . 100   | · White   | · 0.80 (LF4)  |  |
| SWARCOTHERM ECO RAINSAFE      | · RAINSAFE  | · White   | · 0.80 (LF4)  |  |
| SWARCOTHERM ECO RIB           | <ul><li>70</li><li>100</li><li>150</li><li>200</li></ul>  | <ul><li>White</li><li>White</li><li>White</li><li>White</li></ul>   | <ul><li>0.70 (LF4)</li><li>0.80 (LF6)</li><li>0.80 (LF6)</li><li>0.80 (LF6)</li></ul>   |  |

| SWARCO     |
|------------|
| The Better |
| Way. Ev    |
| very Da    |
| 9y.   7    |
|            |
|            |
|            |
|            |
|            |

| Min. on the road luminance (EN Class)  • 0.30 (B2)  | Min. softening<br>point in °C<br>(EN Class)  | Min. SRV<br>(EN Class)  | Retroreflectivity value dry (EN Class) mcd/m²/lux  · <100 (R0)  | Retroreflectivity value wet (EN Class) mcd/m²/lux • N/A   |
|---|--|---|---|---|
| 0.40 (B3)   | <ul> <li>65 (SP1)</li> </ul> | <ul> <li>45 (S1)</li> <li>*55 (S3)</li> <li>45 (S1)</li> <li>55 (S3)</li> <li>45 (S1)</li> <li>50 (S2)</li> <li>55 (S3)</li> <li>45 (S1)</li> </ul> | <ul> <li>100 (R2)</li> <li>100 (R2)</li> <li>150 (R3)</li> <li>150 (R3)</li> <li>200 (R4)</li> <li>200 (R4)</li> <li>200 (R4)</li> <li>N/A</li> </ul> | <ul> <li>N/A</li> <li>N/A</li> <li>N/A</li> <li>N/A</li> <li>N/A</li> <li>N/A</li> <li>N/A</li> <li>N/A</li> <li>N/A</li> </ul> |
| <ul> <li>0.40 (B3)</li> <li>0.40 (B3)</li> <li>0.40 (B3)</li> <li>0.40 (B3)</li> <li>0.40 (B3)</li> </ul>   | <ul><li>65 (SP1)</li><li>65 (SP1)</li><li>65 (SP1)</li><li>65 (SP1)</li><li>65 (SP1)</li></ul>   | <ul> <li>45 (S1)</li> <li>45 (S1)</li> <li>*55 (S3)</li> <li>45 (S1)</li> <li>55 (S3)</li> </ul>  | <ul> <li>100 (R2)</li> <li>150 (R3)</li> <li>150 (R3)</li> <li>200 (R4)</li> <li>200 (R4)</li> </ul>  | <ul><li>N/A</li><li>N/A</li><li>N/A</li><li>N/A</li><li>N/A</li></ul>   |
| O.30 (B2) O.20 (B1) O.20 (B1) O.30 (B3) Omega for the second control of the second cont | <ul><li>65 (SP1)</li><li>65 (SP1)</li><li>65 (SP1)</li><li>65 (SP1)</li><li>65 (SP1)</li><li>65 (SP1)</li></ul>  | <ul> <li>45 (S1)</li> <li>45 (S1)</li> <li>45 (S1)</li> <li>45 (S1)</li> <li>45 (S1)</li> <li>45 (S1)</li> </ul>                                    | <ul> <li>N/A</li> <li>N/A</li> <li>N/A</li> <li>N/A</li> <li>N/A</li> <li>N/A</li> </ul>  | <ul><li>N/A</li><li>N/A</li><li>N/A</li><li>N/A</li><li>N/A</li><li>N/A</li></ul>   |
| · 0.40 (B3)   | · 65 (SP1)   | · 45 (S1)   | · 100 (R2)  | · N/A   |
| · 0.40 (B3)   | · 95 (SP3)   | · 55 (S3)   | · 150 (R3)  | · 50 (RW3)  |
| 0.30 (B2)     0.40 (B3)     0.40 (B3)     0.40 (B3)   | <ul><li>95 (SP3)</li><li>95 (SP3)</li><li>95 (SP3)</li><li>95 (SP3)</li></ul>  | <ul><li>50 (S2)</li><li>50 (S2</li><li>50 (S2</li><li>50 (S2</li></ul>  | <ul><li>100 (R2)</li><li>100 (R2)</li><li>150 (R3)</li><li>200 (R4)</li></ul>   | <ul><li>N/A</li><li>N/A</li><li>N/A</li><li>N/A</li></ul>   |

# SHOWING THE WAY, WORLDWIDE

**SWARCO** | The Better Way. Every Day.

In 1969 we started out with manufacturing tiny reflective glass beads. Today we have grown to become the world's largest systems provider for road markings. Making roads safer and saving lives on a daily basis. Our high quality products and services, direct traffic flow safely from A to B, every day and night. On all roads, in any weather, and all from SWARCO.

We prepare for the future, by fusing knowledge with innovation at our Competence Center for Glass Technology and Marking Systems. So, even with smart and autonomous driving, we continue to blaze the trail of premium road markings to the world. Jump in and drive with us; we will be happy to help you find your ideal road marking solutions.

www.swarco.com/rms

#### IMPRINT

Responsible for content: SWARCO Road Marking Systems, www.swarco.com/rms | Idea, design, and artwork: www.studio0816.at Photos: SWARCO Road Marking Systems, shutterstock Print: Bell Graphics | Subject to change without notice. No liability for errors or misprints.

© 12/2023 SWARCO



