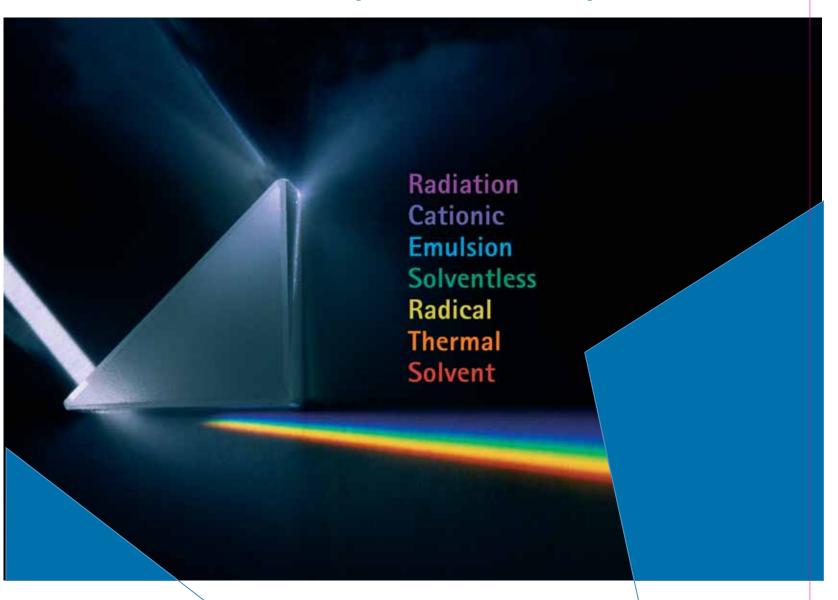
SILCOLEASE® release coatings

...using science to a fine art



Unleash your potential with Bluestar Silicones full spectrum of silicone release solutions



# SILCOLEASE® release coatings... ...using science to a fine art

SILCOLEASE® silicone release coatings are used in a multitude of applications involving Pressure Sensitive Adhesives (PSA's) and other tacky materials.

These formulated systems coat easily and cure quickly onto a broad range of paper or film substrates to give the release properties required in diverse applications.

In an industry with an infinite combination of possible substrates, adhesives and manufacturing processes, the technical challenges can only be met by the widest range of silicone release materials.

Our full spectrum of technological solutions enable silicone coaters to enhance their products for release applications used for self adhesive labels and tapes, protective strips for medical and hygiene products, graphic arts, stationary, industrial packaging and cooking/baking papers to name but a few.



Technology	Advantages	Disadvantages
Solvent Tin Thermal (polycondensation)		
	<ul><li>Low coatweights</li><li>Low inhibition potential</li><li>Low acrylic adhesive interaction</li></ul>	<ul> <li>Safety (solvent and tin toxicity)</li> <li>Slow cure (post cure required/off-line only)</li> <li>Blocking</li> <li>Short bath life</li> </ul>
Solvent Platinum Thermal (polyaddition)		
	<ul> <li>Faster cure and longer bath life (vs tin)</li> <li>Low coatweights with excellent coverage</li> <li>In-line laminating possible (vs tin)</li> <li>Very easy release</li> <li>Excellent anchorage on films</li> </ul>	<ul><li>Inhibition of Pt catalyst</li><li>Solvent (safety and cost)</li></ul>
Solventless Platinum		
-	<ul> <li>Fast cure, high line speeds</li> <li>Flatter release profile (vs solvent)</li> <li>Environment/safety</li> <li>Easy mixing</li> </ul>	<ul> <li>Higher coatweights than solvent based</li> <li>Sophisticated coating techniques required</li> <li>High quality substrate required</li> <li>Poor anchorage on films</li> </ul>
Emulsion Platinum Thermal		
	<ul> <li>Simple coating technique</li> <li>No organic solvent (environment/safety)</li> <li>Easy modification of coating bath</li> </ul>	<ul> <li>Water effect on papers</li> <li>Drying requirements (longer cure times vs solventless)</li> <li>Transport (vs solventless)</li> </ul>
Solventless Radiation		
	<ul> <li>Very fast cure</li> <li>Excellent anchorage on films</li> <li>Low or no thermal input to substrate</li> <li>Compact installation and energy costs</li> </ul>	<ul><li>Limited range of release</li><li>Cost (chemistry and investment)</li><li>Higher coatweights</li></ul>





Bluestar Silicones release coating industry specialists are a vital element to help you choose the right SILCOLEASE® system.

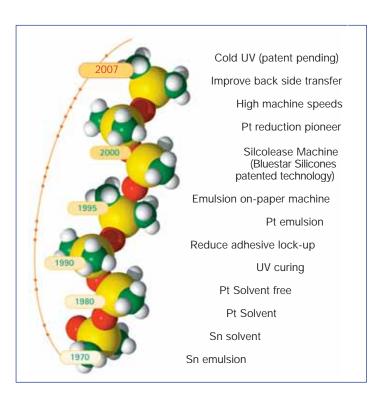
With production sites on four continents and technical centres around the world, there are dedicated teams to assist with the optimisation of your product and process.







## Innovation and Performance



#### enhancement

As a pioneer in the release coating industry for more than 30 years,
Bluestar Silicones has been at the forefront of many of the most exciting technological advances.

### Bluestar Silicones

## throughout the world

Norway, Sweden, Denmark
Bluestar Silicones Scandinayia A/S

Dronningensgate 6 N - 0152 Oslo Tel. + 47 22 91 07 61 Fax + 47 22 91 07 64

Finland

Bluestar Silicones Finland OY Viliatie 4 C

FI - 00700 Helsinki

Tel + 358 9 350 877 30 Fax + 358 9 350 877 17

France, Belgium, Luxembourg, the Netherlands

Bluestar Silicones France SAS Customer Service

55, rue des Frères Perret - BP 22 F - 69191 Saint-Fons cedex Tel. + 33 4 72 73 74 75

Fax + 33 4 72 73 76 45

Italy

Bluestar Siliconi Italia S.p.A

Via Archimede, 602 I - 21042 Caronno Pertusella (Va)

Tel. + 39 02 964 14 245 Fax + 39 02 964 50 209

Germany, Switzerland, Austria Bluestar Silicones Germany GmbH

Quettinger Strasse 289 D - 51381 Leverkusen

Tel. + 00 49 2171 5009 0 Fax + 00 49 2171 5009 67

Spain, Portugal

Bluestar Siliconas España S.A. Vic 3, Poligono Industrial La Florida

E - 08130 Santa Perpetua de Mogoda (Barcelona)

Tel. + 34 93 504 02 600 Fax + 34 93 560 80 49 Commonwealth of independant States (CIS), Middle East, Eastern Europe, Africa

Bluestar Silicones France SAS

/21, avenue Georges Pompidou F - 69486 Lyon, cedex 03

đel. + 33 (0)4 72 13 19 00 Fax + 33 (0)4 72 13 19 83

United Kingdom Ireland Bluestar Silicones (UK) Ltd

Wolfe Mead, Farnham Road Bordon, Hampshire GU35 ONH

Tel. + 44 14 20 606 000

Fax + 44 14 20 606 060

USA - Canada

Bluestar Silicones North America

911 E. White Street - PO Box 17674 Rock Hill, SC 29731 - USA

Tel. (1) 803 329 5260

Fax (1) 803 329 5269 Toll free (1) 866 474 6342

Latin America

Bluestar Silicones Brasil Ltda

Av. Maria Coelho Aguiar, 215

Bloco B - CENESP

05804-902 Sao Paulo - SP Brazil

Tel. + 55 11 3741 8860 Fax + 55 11 3741 9539

Asia Pacific

Regional office

Bluestar Silicones Hong Kong Trading Co., Ltd.

29/F, 88 Hing Fat Street

Causeway Bay, Hong Kong

Tel. + 852 3106 2313 Fax + 852 2979 0241

China office

Bluestar Silicones Shanghai Co., Ltd.

3966 Jin Du Rd.

Xin Zhuang Industrial Zone

Shanghai 201108, Ghina Tel. + 86 21 5442 6600 Fax + 86 21 5442 3733

#### Legal Disclaimer:

The information contained in this document is given in good faith and based on Bluestar Silicones current knowledge. Bluestar Silicones makes no representation or warranty as to the accuracy, completeness of such information or as to the compatibility of such information with the user's intended application: information is supplied on an "as-Is" basis and is not binding on Bluestar Silicones. Nothing contained herein is intended as a recommendation to use the products so as to infringe any patent. Bluestar Silicones assumes no liability for users' violation of patent or other rights and disclaims any liability for loss, injury or damage which may result from the use of the products. Therefore, information contained herein must not be used as a substitute for necessary prior tests which are the sole responsibility of the user and which alone can ensure that a product is suitable for a given use.

#### Bluestar Silicones France SAS

21, avenue Georges Pompidou F-69486 Lyon Cedex 03 - France Tel: +33 4 72 13 19 00 - Fax: +33 4 72 13 19 88 www.bluestarsilicones.com



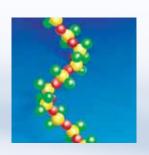
The SILCOLEASE® range is unique in its ability to cover all technologies used in silicone release coatings;

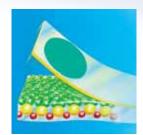
- Solventless Thermal
   Pt catalysed vinyl reactive polymers
- Solventless Radiation
   Epoxy chemistry with cationic cure
   Acrylate chemistry with free radical cure
- EmulsionBoth Pt and Tin catalysed systems

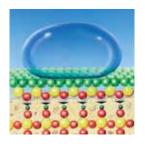
Solvent

Both Pt and Tin catalysed systems

Within these product groups there are comprehensive ranges of base polymers, crosslinkers, catalysts, release modifiers and other performance additives to tailor our SILCOLEASE® release system to meet your needs.







# SILCOLEASE®

release coatings range