

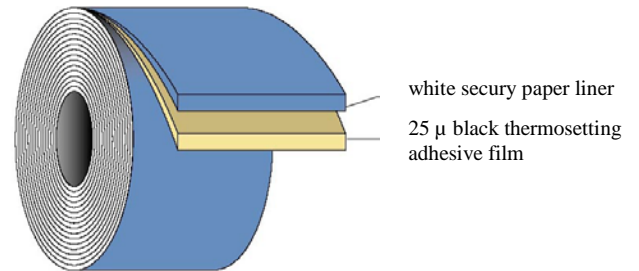
MACfilm IF-4020A

**GENERAL
INTRODUCTION**

IF-4020A is a 25 μ thick dry film of thermosetting adhesive. It is protected by a 90 gr security paper liner, release coated on both sides.

The adhesive can typically be transferred from the protective release liner to the bondable substrate with the use of modest heat (approx. 65° C). The selected cure schedule should then be performed to obtain the full bond to the end use substrate.

When properly cured, IF-4020A exhibits good strength properties at both low and elevated temperatures. It also exhibits excellent plastic flow which contributes toward obtaining 100% contact with the substrates to be bonded.



**TYPICAL
APPLICATION**

Automotive Industry : Assembly of break discs, clutches

PROPERTIES

PHYSICAL PROPERTIES TYPICAL PROPERTIES TEST METHOD

PHYSICAL PROPERTIES	TYPICAL PROPERTIES	TEST METHOD
Disc Shear Strength, bars		
23° C	170	SAE J840
205° C	35	

SHELF LIFE

Storage should be under cool (20°C or less), dry conditions to maximize shelf life. MACTac IF-4020A “filmed” adhesive” must be laminated within 15 months of MACTac coating date (“filming” date).

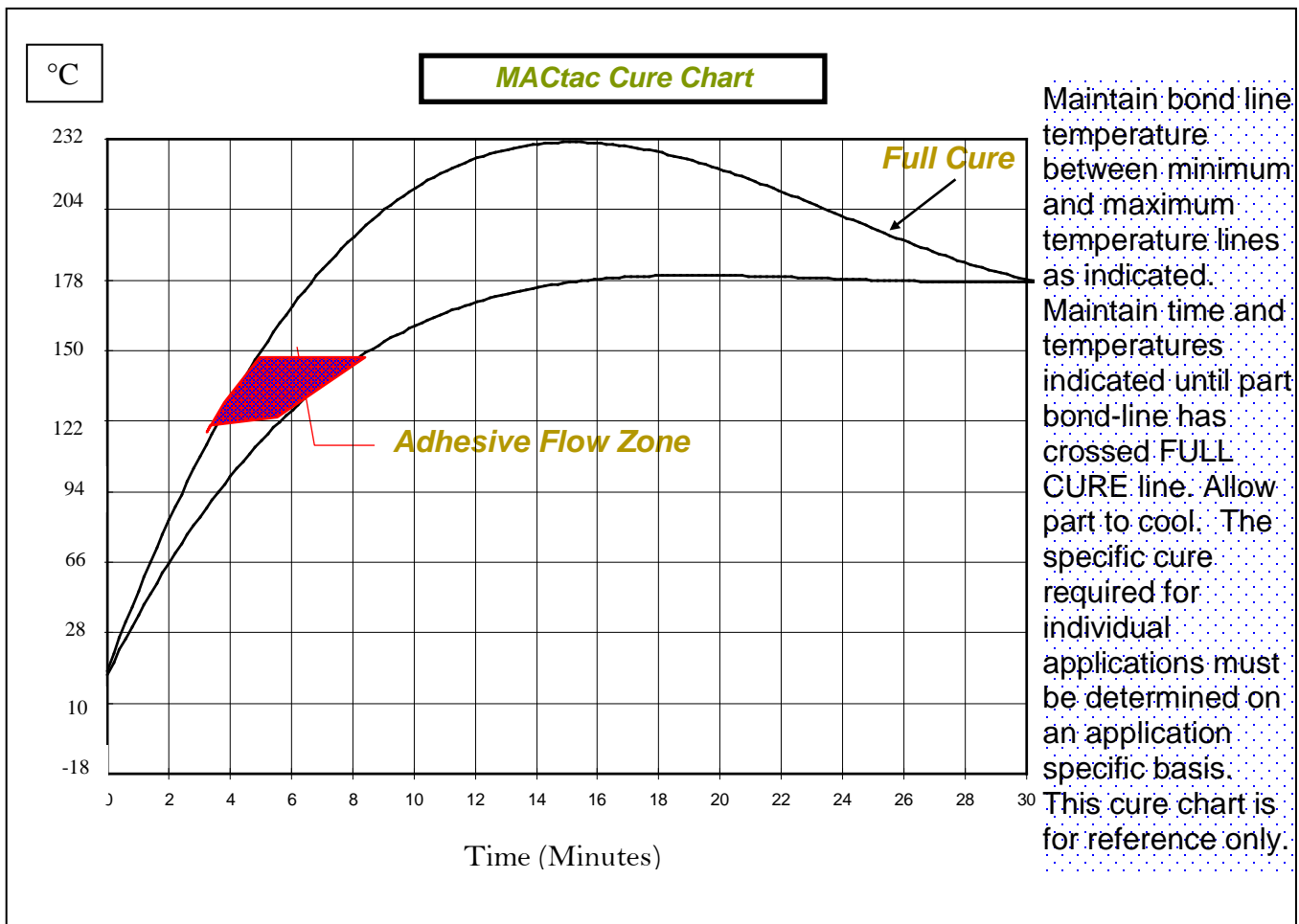
CURING CONDITIONS

The desired disc shear strength can be obtained with any of the following “bond line” temperatures and times:

- A. 175° C for 15 minutes
- B. 190° C for 10 minutes
- C. 205° C for 5 minutes

The above temperatures and times are for hot press cure times. Shorter cures are possible at higher temperatures, however, setting the cure requires experience and often must be established based on available equipment and substrates to be bonded. Constant pressure is mandatory throughout the cure cycle. The pressure should be sufficient to bring the surfaces into intimate contact. The normal working pressure range is 3.5 – 17 bars (See Cure Chart)

Surfaces to be bonded should be free of rust, grease, oil, or any foreign matter. For metallic surfaces, this may be accomplished by shot-blasting or chemical etching. Non-metallic surfaces may be wiped with a clean rag saturated with an oil-free solvent such as acetone.



IMPORTANT NOTICE

All MACtac products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning MACtac products are based upon research which the Company believes to be reliable but such information do not constitute a warranty. Because of the variety of possible uses for MACtac products and the continuing development of new uses, the purchaser should carefully consider the fitness and performance of the product for each intended use and the purchaser assumes all risks in connection with such use. Seller shall not be liable for damages in excess of the purchase price of the product or for incidental or consequential damages. All specifications are subject to change without prior notice.