

Thixo Additive TA2

Thixotroping Agent for Flexil-S Range of Moulding Rubbers

1. DESCRIPTION

Thixo Additive TA2 is a completely new, specially formulated thixotroping agent for use with the Flexil-S Range of high strength 2-Part Silicone Moulding Rubbers, including C204.

It has been designed to produce an attractive butter-on consistency within seconds of addition to the catalysed or uncatalysed liquid rubber.

It can be employed with Catalyst CAT S Green where a long working period is required or, it can be used with Catalyst CAT F Yellow for a fast cure system which can be demoulded within 3 to 4 hours.

2. CHARACTERISTICS

a) CONSTITUENTS:

	TA2	CAT S Green	CAT F Yellow
Appearance	Liquid	Medium Viscosity Liquid	Medium Viscosity Liquid
Colour	Clear, Colourless to pale yellow	Bright Blue	Bright Red
Relative Density @ 25°C	0.90	~1.0	~1.0
Viscosity at 25°C, mPa.s	800	~200	~200

b) MIXING:

Flexil-S Base	100 parts by weight
CAT S Green	5 parts by weight
TA2	2 parts by weight

3. USAGE GUIDE

a) ORDER OF ADDITION:

It is not important when using the conventional catalyst CAT S Green. However, the order of addition shown above is recommended because it allows the catalyst to be fully dispersed in the liquid rubber before thixotropy is generated.

Thixo Additive TA2 added at approximately 2% on the rubber generates thixotropy within 15 to 60 seconds.

A "brush on" or softer thixotropy can be achieved by adding 0.5 to 1.5% of TA2.

Information contained in this document is the result of careful tests carried out objectively. It has been produced to aid the Buyer, but without implying any commitment on our part. The Buyer shall remain responsible for satisfying himself that the products as supplied by us are suitable for his intended purpose. Since we cannot control the application, process, or use of these products, we cannot accept responsibility therefore.

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b) PROCEDURE

Catalyse the rubber in the normal way by adding 5 parts by weight of CAT S Green to 100 parts by weight of Flexil-S Base and mix quickly with minimum aeration until uniformly blue. Add the desired amount of Thixo Additive TA2 and mix intimately into the catalysed rubber. If necessary the catalysed rubber may be degassed by intermittent evacuation prior to addition of the thixotroping agent. Leave to relax for a few minutes and then test, before use, on a vertical piece of cardboard or similar substrate to ensure adequate thixotropy has been achieved.

The thixotropic, catalysed rubber may be applied by normal brush or butter-on techniques for a period of up to 60 minutes or longer with certain rubbers.

(Note: the actual working time depends on the ambient temperature and humidity and the catalyst).

c) FOR FAST CURE AND RAPID DEMOULDING

Reverse the order of addition described above, adding CAT F Yellow after thoroughly mixing TA2 into the rubber base.

Because of the much faster rate of cure, the working, or pot life of this system is much shorter. A typical application period is approximately 15 minutes and demoulding time can be as short as 2 hours and is seldom greater than 4 (all times depending on ambient temperature and humidity)

d) TYPICAL PHYSICAL PROPERTIES OF THE CURED RUBBER

Typical physical properties for the Flexil-S Range are given in the corresponding technical data sheets.

Because of the thixotropic nature of a Flexil-S Range/TA2 catalysed with CAT S Green show little significant change in physical properties from the conventionally cured rubber.

A slight drop in physical properties is encountered with the Flexil-S Rnge/CAT F Yellow /TA2 system, but no more than that expected with fast curing systems.

5. PACKING

Flexil-S Range and C204 and other rubbers in this series are normally supplied in kit form from the proportionate amount of CAT S Green.

Customers requiring Thixo Additive TA2 and CAT F Yellow are advised to discuss their requirements with Jacobson Chemicals Ltd.

Typical package sizes from Thixo Additive TA2 are:- 50g, 100g, 500g, 1kg.

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6. HEALTH & SAFETY

(Refer to Health & Safety Data Sheet)

Handling and mixing of Silicone Softener requires the following precautions:

- i. Wear gloves & goggles
- ii. Do not eat, drink or smoke.
- iii. Avoid swallowing or skin or eye contact.
- iv. If contact does occur, wash with clean water immediately and in the case of eye contact, consult a doctor.

7. SHELF LIFE

All products discussed in this data sheet should be stored in their original sealed containers at temperatures between 5 and 30°C.

The shelf life of Thixo Additive TA2 is 12 months under the above conditions. Thixo Additive TA2 is unlikely to freeze under normal storage conditions, but should freezing occur it may be thawed without impairing its performance.

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