



Fastener Adhesive 2353 Pink

Technical Data Sheet

July 2018



3M™ Fastener Adhesive 2353 pink is microencapsulated, room-temperature curing adhesive that enhance the anchorage of threaded fasteners. The adhesive is designed to be coated on the fasteners and dried; they remain dormant until the shearing action of engaging the fastener into a nut or threaded cavity breaks the capsules and allows the adhesive to cure. Typical applications is the fastener for the engine compartment or safety-related parts.

Plastics prone to stress-cracking should not be used in proximity to 3M Fastener Adhesives.

This is a normal temp formula that is designed for applications where the service temperature will not exceed 116°C (240°F).

Physical Properties

Bulk Adhesive	2353 P
Color	Pink
Solvent Base	Toluene

Bulk Adhesive Storage and Handling

Container Sizes	18.9 liter (5 gallon) pails
Shelf life	Fifteen months from date of manufacture. Rotate inventory on FIFO (first-in, first-out) basis.
Storage conditions	Store pails at 4°- 38°C (40°- 100°F) Store in a facility rated for storage of flammable liquids. Check local codes. PROTECT FROM FREEZING. Storage below 12°C (32°F) for extended periods will cause precipitation of an ingredient which floats about the solvent. Stirring at room temperature will re-dissolve the precipitated ingredient.
Mix before use	Adhesive solids settle to bottom of pail. Mix prior to use. Use stirrer, pail-shaker or pail-tumbler rated for flammables.

Coated Fasteners Storage and Handling

Shelf life	One year from date of adhesive application Shelf life can be as long as four years, depending on the storage conditions. Fasteners which are more than one year from the date of adhesive application should be checked for performance prior to use.
Storage conditions	Store coated fasteners at 4°-38°C (40°- 100°F).

Technical Data Sheet

3M™ Fastener Adhesives 2353P

Performance Properties	Prevailing In Torque (PIT)	2353P
	Initial ¹	1 ft-lb (1.4 Nm)
	Break-Loose Torque (BLT)	
	Initial ¹	41 ft-lbs (55.8 Nm)
	Break-Away Torque (BAT)	
	Initial ¹	14 ft-lbs (19.0 Nm)
	Heat aging ²	No change (±10% of initial value)
	Cycles ³	No change (±10% of initial value)
	Water immersion ⁴	No change (±10% of initial value)
	Gasoline immersion ⁵	No change (±10% of initial value)
Hot motor oil immersion ⁶	No change (±10% of initial value)	
Transmission fluid immersion ⁷	No change (±10% of initial value)	
Anti-freeze immersion ⁸	No change (±10% of initial value)	
Prevailing Out Torque (POT)		
Initial ¹	11 ft-lbs (15.0 Nm)	

NOTE: These properties are representative of the products' performance, and are supported by laboratory test data. However, the values reported are not intended to be used for specification purposes. All testing, unless otherwise stated, was performed on 3/8" x 16" plain steel bolts with matching plain steel nuts.

1 24 hours at room temperature

2 3 weeks at 104°C (220°F)

3 Conditioned under 3 of the following cycles: 1 1/2 hours at -56°C (-68°F), 1 hour at 177°C (350°F), and 1 1/2 hours at 24°C (75°F)

4 Immersion in distilled water for 1 week at 24°C (75°F)

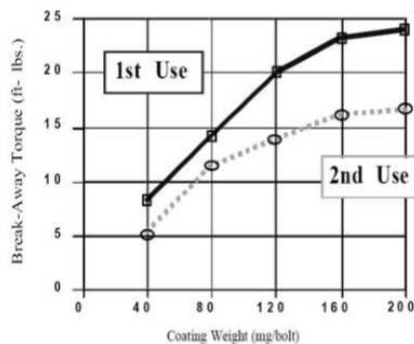
5 Immersion in regular, unleaded gasoline for 1 week at 24°C (75°F)

6 Immersion in SAE 30 motor oil for 1 week at 24°C (75°F)

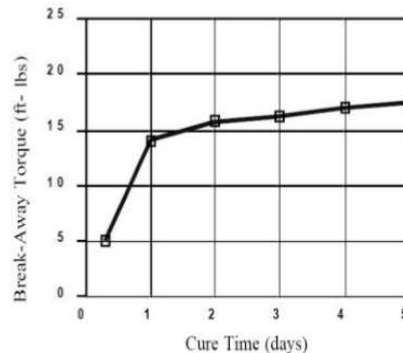
7 Immersion in transmission fluid for 1 week at 24°C (75°F)

8 Immersion in a 50% solution of ethylene glycol in water for 1 week at 49°C (120°F)

Break-Away Torque (initial) vs Adhesive Coating Weight



Break-Away Torque vs Cure Time (at room temperature)



Technical Data Sheet
3M™ Fastener Adhesives 2353 P

Features, Advantages and Benefits	Feature	Advantage	Benefit
	Epoxy chemistry	<ul style="list-style-type: none"> • High torque values on coated fasteners • Environmental resistance • (to heat, automotive fluids, vibration, thermal and mechanical shock) 	Robust, structural bonding performance
	Two-part (microencapsulated)	<ul style="list-style-type: none"> • Extended shelf life (bulk adhesive and coated fasteners) • Controlled reactivity (adhesive activates and cures upon insertion) • Reusability (additional capsules break with each re-insertion) 	Convenient handling by the end-users
	Flow coatable formula	<ul style="list-style-type: none"> • Allows controlled application to fasteners; viscosity can be adjusted to achieve target coating weights • Penetrates oil coatings • Fast drying • Bonds to a broad range of fastener finishes 	Broad handling, dispensing and drying windows for the applicators

Contact Information

The information provided in this technical document is intended as a guide for this product. For more information or help in selecting a 3M product for an application, please contact your Automotive Division technical or sales representative.

Technical Data Sheet
3M™ Fastener Adhesives 2353 P

3M is a Trademark of 3M Company.

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

Warranty, Limited Remedy, and Disclaimer: Unless an additional warranty is specifically stated on the applicable 3M product packaging or product literature, 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. If the 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.

3M

Automotive Division
3M Center, Building 223-1S-02
St. Paul, MN 55144-1000
800-328-1684