

TCS 357 M

TECHNICAL DATA SHEET

May 2015

Description

Product Description- **TCS 357 M** is a fast set, rapid curing, 100% solids, flexible, two-component polyurea elastomer spray coating material. **TCS 357 M** is used by itself or in combination with other materials to produce coatings, liners, wearing courses and resilient surfaces on metal and other substrates. Its extremely fast gel time makes it suitable for applications down to -40°F without special conditioning of the component resins and isocyanates. **TCS 357 M** produces an extremely tough film at all thicknesses. Single or multiple pass applications produce films from 10 to 1000 mils with appreciable sag or runs. **TCS 357 M** may be applied in all positions and to any properly prepared substrates. **TCS 357 M** is inert, it will not hydrolyze, leach, or contaminate other materials, and is bondable and paintable. **TCS 357 M** is relatively moisture and temperature insensitive, allowing application in the most problematic ambient conditions.

Uses

TCS 357 M is a superior concrete and metal coating material designed specifically for industrial applications receiving constant or intermittent attack from contained materials, most corrosive substrates and abrasive action. **TCS 357 M** is flexible, accommodating to movement of the substrate, yet strong enough to remain intact under all conditions except major structural dislocations. With or without reinforcements, **TCS 357 M** may be used in transitional areas with confidence. **TCS 357 M** may be used in interior or exterior applications.

Advantages

100% WATERPROOF – does not break down when exposed to temperature when fully cured

VERSATILE – ideal for a variety of substrates, simple to use

TEMPERATURE RESISTANT – once dry, **TCS 357 M** is unaffected by extreme heat or cold

Passes ASTM C836-00 for 1/8" crack bridging at 80 mils

ODORLESS, NO VOC'S

1:1 MIX RATIO BY VOLUME

FAST RETURN TO SERVICE

Can accept asphalt overlays within one hour

RAPID GEL TIME

INSTALLATION TEMP RANGE -40° F to 300° F

Preparation & Installation

Please review the Material Processing & Handling Information for preparation and application procedures. Substrates priming is not required on all metals, consult TCS for recommendations. Clean up – Cured product may be disposed of without restriction.

Mixing

TCS 357 M must be spray applied using approved equipment. Use 1:1 ratio pump, with appropriate material heaters as required for individual application.

Physical Properties:

(Typical) 1:1 Mix Ratio		
Cured Film Properties	Test Method	Typical Value
VOC	ASTM D3960	Zero
Solids content		100%
Gel time		4 – 8 seconds
Tack free		10 – 15 seconds
The following properties are typical after maintaining cured product at 70°F - 77°F for 50 days:		
Tensile strength (psi)	ASTM D638	2300 – 2800
Tensile elongation (%)	ASTM D638	580 – 650
Modulus of elasticity (psi)	ASTM D638	300 – 600
Tear strength (lb/in)	ASTM D624	360 – 390
Shore D hardness	ASTM D2240	45
Tabor abrasion, mg wt loss (1000g, 1000 revs, H-18)	ASTM D4060	250
Moisture Vapor Transmission	ASTM E 96	<0.025 perms
Electrical Volume Resistivity	ASTM D 257-99	2.0 x 10 ¹³ ohm-cm
The value ranges stated in this Technical Data Sheet are based on system processing under laboratory conditions. Equipment configurations and/or field application conditions may produce variances in final system values.		

Limitations – TCS 357 M should not be used for direct contact with extremely high or low pH attack. Composite systems available. Consult TCS

Coverage Rates- Theoretical square feet per gallon

*Note: 1604 mil inches per gallon. Totally dependent on substrate texture and condition.

Mils	10	15	50	60	80	100	125
Sq. Ft.	160	107	32	27	20	16	13

Packaging: One Hundred Eight Gallon Kit: 54 gallons of 'A' side and 54 gallons of 'B' side. Drum containers filled by weight, volume is closely approximated.

Colors: Standard color is medium gray, light gray or black. Other colors available upon request.

REFER AND READ MSDS BEFORE USE. THIS IS AN INDUSTRIAL PRODUCT

Safety – Not R.C.R.A or DOT regulated. Read Safety Data Sheet before using. Seal container tightly after use to prevent introduction of moisture-laden air.

Basic safety for personal protection is:

- Long sleeve overalls or disposable Tyvex overalls
- Rubber gloves
- Splash shield or safety glasses with splash guards
- Rubber or leather boots
- Respirator Fit Tested
- Do not use near high heat or open flame
- Do not take internally
- Keep out of reach of children

Shelf Life – One year from date of shipment, in original, unopened factory containers, under normal storage conditions of 55°F to 95°F (18°C-35°C).

Warranty – TCS will refund the price or replace, at its election, product it finds to be defective provided the product has been used properly. Except as expressly stated above, the Company makes no warranty of merchantability and no warranty of fitness for any particular purpose, nor does it make any warranty, expressed or implied, of any nature whatsoever with respect to the product or its use. In no event shall the company be liable for delay caused by defects, for loss of use, for indirect, special, or consequential damages, or for any charges or expenses of any nature incurred without its written consent.

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