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# 07005 Chlorinated Rubber Traffic Paint

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## 07005-1 <u>General</u>

Supply all materials, as specified herein, and in accordance with the Contract Documents.

### 07005-2 Scope

This specification covers the supply of white or yellow chlorinated rubber traffic paint of a consistency suitable for spray application on bituminous and concrete roadways for marking traffic lines.

#### 07005-3 General Requirements of Product

It is the intent of this specification to procure, for use by the City of Saskatoon, the most efficient traffic paint possible with regard to service and cost. Service includes general appearance, colour, night visibility, and durability. The composition of the paint shall be left to the discretion of the manufacturer, and it is his responsibility to formulate and produce in sufficient quantity, a paint meeting the requirements specified herein.

#### 3.1 Reflectorization

Reflectorization of the paint lines is to be obtained by the introduction during paint application of drop-on (overlay-type) glass beads at the rate of 0.6 kilograms per litre of paint sprayed on the road surface.

The glass beads will be introduced or applied to the wet paint film by means of guns and under air pressure.

### 3.2 <u>Uniformity</u>

The paint shall be homogeneous, and shall be well dispersed to a uniform and smooth consistency.

The paint shall be capable of easy application with an automatic spray gun and shall flow evenly and smoothly without overspray, using the internal method of atomization.

### 3.3 <u>Package Stability</u>

The paint shall not cake, liver, curdle, get thicker, settle badly or show any objectional properties in the original unopened container for 12 (twelve) months from date of



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delivery, when stored at a temperature not exceeding 38 degrees C. At the end of this time, it should be capable of being mixed to a uniform condition by simple stirring without difficulty by the use of a paddle.

#### 3.4 Colour

After drying, the white paint shall be pure white, free from dirt or tint, and shall be identical to the white 513-301. The yellow paint shall be identical to the yellow 505-308. The colours 513-301 and 505-308 are established by Canadian Government Specifications Board 1-GP-12.1C. The paint shall not contain any organic colouring matters and shall not discolour in sunlight.

### 3.5 **Quality**

The paint must possess the characteristics such that it will not run (flow) when the glass beads are applied in the manner indicated in section 07005-3.1 of the General Requirement.

The paint shall be free from skins, dirt and other foreign matter.

#### 3.6 <u>Samples</u>

Each prospective bidder shall submit (2) two four litre cans of the paint he proposes to furnish at no charge to the City of Saskatoon. The samples shall be plainly marked showing the manufacturer's code number and name for easy reference.

Only those manufacturers whose samples meet all the requirements of this specification shall be considered for eligibility to tender.

Manufacturers may submit up to (3) three samples of different formula if he so desires, providing they meet the specifications as requested. Samples shall be delivered to the City of Saskatoon not later than the date specified on the request for samples, unless an extension of time has been granted by the Engineer. Failure to receive samples by the specified date may be considered sufficient cause for rejection of the sample.

#### 3.7 Acceptance and Rejection

Paint furnished under contract shall be identical to the samples submitted and shall comply with the specification requirements.



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In the event that the traffic paint does not comply with these specifications, or is not identical to the sample submitted, the manufacturer will be required to replace all such paint at his own expense, including all handling and transportation.

#### 07005-4 Specific Requirements of Product

#### 4.1 <u>Hiding Power</u>

The paint shall flow evenly and smoothly and cover solidly in (1) one coat when applied at a rate of 8 square metres per litre.

#### 4.2 <u>Viscosity</u>

The viscosity of the paint shall be eighty (80) plus or minus five (5) Krebs Units at 25 degrees C.

#### 4.3 <u>Settling Rate</u>

The paint shall provide a rating of seven (7) or higher (A.S.T.M. D1309-56).

### 4.4 Colour

The colour is based on a comparison of the colour under section 07005-3.4.

NOTE: The paint film made by the overlay method of glass beads in the proportion of 0.6 kilograms to one (1) litre of paint shall comply with the following requirements.

#### 4.5 <u>Drying Properties</u>

The paint shall dry to an elastic adherent finish that will not discolour in the sunlight.

The Paint (applied to a sheet of plate glass to give a wet film thickness of 0.38 millimetres) shall dry to the touch in not less than two (2) or more than ten (10) minutes and dry to "no pickup" in not more than twenty (20) minutes at 25 degrees C, 50% to 60% relative humidity (A.S.T.M. D711-55).

NOTE: The paint film is considered to be touch dry when a light touch by the fingers shows a tacky condition but none of the paint adheres to the fingers.



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The paint shall dry sufficiently hard within thirty (30) minutes after application so that there will be no displacement (smear) or discolouration (dirt retention) under traffic conditions.

#### 4.6 <u>Bleeding</u>

The bleeding characteristics shall provide a rating of six (6) or higher of the Photographic Reference Standards. Application A.S.T.M. D969-54. Evaluation A.S.T.M. D898-48.

#### 4.7 Flexibility

The paint shall not crack or peel when subject to the bending test at 23 degrees C. plus or minus 1.5 degrees C. using a 12 mm mandrel (C.G.S.B. Method 119.1).

#### 07005-5 Packaging

The paint shall be packaged in twenty (20) litre pails and/or in two hundred and five (205) litre drums. The pails shall have a removable top (open head) and shall be sturdy enough to withstand normal handling. The drums shall have a removable top (open head) and SHALL BE STURDY ENOUGH TO WITHSTAND ROUGH HANDLING WHEN FILLED WITH PAINT. All pails and drums shall be clean and in good order and shall be plainly marked showing litre or gallonage content, lot or batch number, name and address of manufacturer, manufacturer's code number for the paint and date of packaging. NO DRUM SHALL CONTAIN MORE THAN 205 LITRES OF PAINT.

Pails and drums containing white paint shall be stencilled with white labels, and pails and drums containing yellow paint shall be stencilled with yellow labels for identification purposes.

Pails and drums shall be vapour-proof sealed.

All containers must be shipped on pallets and must be loaded in such a manner as to facilitate unloading by a forklift.

If pails and/or drums are returnable for credit, this must be so specified on the Tender Form.



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### 07005-6 <u>Certification of Material</u>

The supplier shall submit one complete "Paint Data Form" for each test sample (see Appendix 1). Test samples for which a "Paint Data Form" has not been submitted will not be considered.

Bidders shall state the recommended type of thinner required for the paint that the quotations are based on.

Material supplied of inferior quality shall be replaced by the supplier.

#### 07005-7 <u>Measurements</u>

Traffic paint will be measured in litres.

**End of Specification 07005** 



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# Appendix 1

### **Paint Data Form**

Manufacturer			
Manufacturer's Code No			
Type of Paint (coning, nor	n-coning)		
Colour of Paint			
Composition of Paint	% by Mass	% by Volume	
Pigment			
Non-Volatile			
Volatile			
Composition of Pigment	% by Mass		
1)			_
2)			_
3)			_
4)			
5)			
6)			
Type of Vehicle			_
Type of Thinner			_
Type of Driers			_
Viscosity of Finished Pain	t (Krebs)		<u></u>