



Laboratory Testing Report

<i>Company</i>	Noroo Paint And Coatings
<i>Contact Name</i>	Sung Woo Jung swjung@noroo.com Yun-jae So syj@noroo.com
<i>Report Date</i>	October 16, 2018
<i>Category</i>	Detailed Performance
<i>Category Type</i>	Initial
<i>IPS#</i>	3025-I-2018-52-16458
<i>MPI Category #</i>	52
<i>Product Label</i>	Noroo Paint
<i>Product Name</i>	Soon Soo Latex Eggshell
<i>Product Code</i>	NA
<i>Batch Number</i>	118 SEPT 1111A
<i>Testing Results</i>	PASS
<i>Approval Expiry Date</i>	Approximately 2 years
<i>Failure Notice</i>	
<i>Comments</i>	
<i>MPI Technical Director</i>	Bob Welch
<i>MPI Senior Admin Assistant</i>	Matt Jacobs
<i>MPI Invoice #</i>	D18-1013

A pass report is not the final approval.

**Final approval occurs when the product is published in the MPI Approved Products List.
The MPI Approved Products List is updated by the 5th of each month.**

*2800 Ingleton Avenue, Burnaby, BC V5C 6G7 Canada
Tel: 604-298-7578 Fax: 604-298-7571
Toll-Free Tel: 1-888-674-8937, Toll Free Fax: 888-211-8708
October 16, 2018*

■GENERAL INFORMATION

This paint is based on Acrylic polymer, pigment and stabilizers. It is a eggshell-gloss Emulsion Paint with such advantages as good scrubbable resistance, alkali resistance, water resistance, cleansability(washable), durability, mildew resistance for interior use, it is th most suitable for walls and ceilings composed of concrete, mortar, plaster, P.C. and insulation materials.

■SUITABLE USE

Various kinds of ceilings and walls (concrete, P.C., mortar, plaster and interior wall and ceiling surface including gypsum wallboard,plaster,primed wood surfaces)

■SPECIFICATION

A. Type: Acrylic polymer/Interior

B. Drying Times:	5℃	20℃	30℃
Set to Touch	1H	1/2H	1/3H
Dry Hard	2H	1H	2/3H
For Over coat (Min.)	6H	3H	2H

* H: Hour

C. Consistency: Ready for use

D. Thinner: Tap-Water (Max. 10% at 1st coating,
Max. 5% at 2nd coating)

E. Specific Gravity: Appr. 1.36

F. Theoretical Coverage: 5~7 m²/L/2 coats/60μ
(Dry film thickness)

G. Shade: White and tints

H. Texture: Egg shell (Gloss 60 degree : 10 - 25)
(Gloss 85 degree : 10 - 35)

■DIRECTION FOR USE

A. Surface Preparation

1. Eliminate oil, water, grit, dirt, marked paint and any foreign matters.

B. Preparation of Paint

1. Stir to be mixed uniformly.
2. Avoid excessive thinning.

C. Application

1. Can be applied by brush, spray.

■OTHER CAUTIONS -

1. Will not form a homogeneous film below 5℃(41°F) or at humidities greater than 95% R.H.
2. Don't store or ship the paint at temperatures less than 5℃(41°F) nor above 35℃(95°F)

3. Surface to be painted shall be prepared an instrument-measured moisture content not exceeding 8% and less than 9 pH.

* This paint is in accordance with Korea Standard.

* The information and date given herein are based upon tests and experiences considered reliable, and are believed to be accurate. The coverage depend on the shape of surface to be coated, surface roughness, weathe conditions during application and application method, so that you are urged fully to review them prior to your practical application.

* The date of issue: 2008.12

MATERIAL SAFETY DATA SHEET

SECTION I GENERAL INFORMATION

A. PRODUCT NAME: Soon&Soo Latex-Eggshell (MPI #52)

Latex / Interior

B. MANUFACTURERS NAME: NOROO Paint & Coatings Co., Ltd.

615 PARK DAL DONG, AN YANG CITY

KYUNG KI DO, KOREA

TEL: (031)467-6150

SECTION II COMPOSITION

CHEMICAL NAME	CAS NO	CONTENTS
ACRYLIC POLYMER	NOT HAZARD	20~50
WATER	7732-18-5	30~50
TITANIUM DIOXIDE	13463-67-7	15~30
CALCINED CLAY	66402-68-4	0~10
MICA	12001-26-2	10~20
S1	-	0~3

SECTION III PHYSICAL PROPERTIES

BOILING RANGE	200~225 deg.F
EVAPORATION RATE	SLOWER THAN ETHER
VAPOR DENSITY	HEAVIER THAN AIR
% VOLATILE VOLUME	50 MAX
SPECIFIC GRAVITY	1.2~1.4
VISCOSITY	90~110KU

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION:

FLASH POINT: NOT ESTABLISHED

LEL: N/A

EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS:

EXTINGUISHING MEDIA ABOVE IS RECOMMENDED ON DRIED FILMS OF THIS MATERIAL THAT IS BURNING. THIS MATERIAL IS NON-COMBUSTIBLE BUT DRIED FILMS ARE CAPABLE OF BURNING AND SUPPORTING COMBUSTION WHEN IN CONTACT WITH OPEN FLAMES.

SPECIAL FIREFIGHTING PROCEDURES:

OBSERVE RECOMMENDED PROCEDURES IN HANDLING FIRE AREAS. WEAR APPROPRIATE FIRE FIGHTING EQUIPMENT INCLUDING A SELF CONTAINED BAEATHING APPARATUS.

SECTION V – HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:

VAPOR ODORS MAY CAUSE IRRITATION IN THE UPPER AND LOWER RESPIRATORY TRACTS, NAUSEA, HEADACHES, AND DIZZINESS. EYE CONTACT CAN CAUSE IRRITATION, REDNESS, AND VOMITING, DIARRHEA, AND GASTROINTESTINAL IRRITATION.

MEDICAL CONDITIONS PRONE TO AGGRAVATIO BY EXPOSURE:

OVEREXPOSURE TO VAPORS CAN PRODUCE HEADACHES, DIZZINGESS, AND NAUSEA.

PRIMARY PROUTE(S) OF ENTRY: INHALATION, INGESTION

EMERGENCY AND FIRST AID PROCEDURES:

IF AFFECTED BY VAPORS, MOVE PERSON TO FRESH AIR. APPLY ARTIFICIAL RESPIRATION TO PRESON WHO LOSES CONSCIOUSNESS AND CALL A DOCTOR IMMEDIATELY. TREAT EYE AND SKIN CONTACT BY THOROUGHLY WASHING WITH CLEAN WATER. IF IRRITATION PER-SISTS SEE A DOCTOR IMMEDIATELY. IF MATERIAL IS INGESTED AND THE PERSON IS CONSCIOUS GIVE TWO GLASSES OF WATHER TO DRINK AND CALL A DOCTOR IMMEDIATELY.

SECTION VI – REACTIVITY DATA

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

HAZARDOUS POLYMERIZATION INFORMATION IS NOT ESTABLISHED.

HAZARDOUS DECOMPOSITION PRODUCTS:

BURNING CAN PRODUCE CARBON DIOXIDE AND OR CARBON MONOXIDE.

CONDITIONS TO AVOID:

AVOID TEMPERATURES BELOW 40 degrees Faranheit. AVOID FREEZING CONDITIONS.

INCOMPATIBILITY (MATERIALS TO AVOID):

AVOID MATERIALS THAT REACT WITH WATER, ALSO STRONG ACIDS AND ALKALAIS.

SECTION VII – SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

DIKE AND ABSORB SPILLED MATERIAL WITH INERT ABSORBENT MATERIAL SUCH AS SAND, EARTH, AND SAW DUST. USE RAGS TO CLEAN UP SALL AMOUNTS OF SPILLED MATERIAL.

WASTE DISOSAL METHOD:

COLLECT MATERIAL CONTAMINATED ABSORBENT AND RAGS INTO A DISPOSABLE CONTAINER AND DISPOSE OF IN ACCORDANCE TO LOCAL, STATE, AND FEDERAL REGULATIONS. CON-
SULT WITH YOUR LOCAL HAZARDOUS WASTE REGULIORS REGARDING LANDFILL DUMPING.

SECTION VIII – SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION:

WEAR APPROVED ORGANIC VAPOR RESPIRATOR UNLESS VENTILATION EQUIPMENT IS ADEQUATE TO KEEP AIRBORNE CONCENTRATIONS BELOW THE EXPOSURE STANDARDS.

VENTILATION:

GENERAL MECHANICAL VENTILATION MAY BE SUFFICIENT TO KEEP PRODUCT VAPOR

CONCENTRATIONS BELOW SPECIFIED TLV RANGES. IF INADEQUATE, USE LOCAL EXHAUST.

PROTECTIVE GLOVES:

USE IMPERMEABLE SOLVENT RESISTANT GLOVES TO PROTECT FROM SKIN CONTACT.

EYE PROTECTION:

USE SAFETY GOGGLES, CHEMICAL SAFETY GLASSES AND OR FACE SHIELDS TO PROTECT EYES

OTHER PROTECTIVE EQUIPMENT:

IMPERMEABLE APRONS AND PROTECTIVE CLOTHING ARE ADVISED WHEN WORKING WITH THIS PRODUCT. THE USE OF HEAD CAPS ARE RECOMMENDED WHENEVER POSSIBLE.

HYGIENIC PRACTICES:

EYE WASHES AND SAFETY SHOWERS IN THE WORKPLACE ARE RECOMMENDED.

SECTION IX – SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

KEEP CONTAINERS CLOSED WHEN NOT IN USE. DO NOT STORE OR HANDLE NEAR HEAT, FLAMES AND STRONG OXIDANTS. INSPECT FOR LEAKS IN ALL CONTAINERS.

OTHER PRECAUTIONS:

DO NOT STORE IN FREEZING AREAS. KEEP ABOVE 40 degrees F. KEEP OUT OF REACH OF CHILDREN.

- * * DISCLAIMER- THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED
- * * ACCURATE. HOWEVER, NO WARRANTY, WHETHER EXPRESSED OR IMPLIED IS MAE.

TEST REPORT

1. No : SSR2802020

2. Client

- o Name : NOROO Paint &Coatings Co., Ltd. Kim Soo Kyoung
- o Address : 615, Bakdal 2-dong, Manan-gu, Anyang-si, Gyeonggi-do, Korea
- o Date of Receipt : 2012/08/02
- o Date of Issued : 2013/02/19

3. Use of Report : Quality management

4. Test Sample : Soon & Soo Latex-Eggshell(MPI #52)

5. Test Results

Test Items	Unit	Sample	Test Results	Test method used
Consistency, Krieb Units	K.U	1	109	MPI # 52 : 2010
Dry time, Dry hard	min	1	20	MPI # 52 : 2010
Finess of Grind, Hegman	N.S	1	6	MPI # 52 : 2010
Gloss 60 degree	-	1	11	MPI # 52 : 2010
Sheen 85 degree	-	1	27	MPI # 52 : 2010
Hiding power	%	1	98.8	MPI # 52 : 2010
Reflectance	%	1	98.1	MPI # 52 : 2010
Alkali Resistance - Appearance (lifting, wrinkling, disintegration, slight color change)	-	1	pass	MPI # 52 : 2010
Scrubbability	%	1	15	MPI # 52 : 2010
Applicability and Appearance	-	1	pass	MPI # 52 : 2010
Flexibility - Appearance (cracking, peeling, loss of adhesion)	-	1	pass	MPI # 52 : 2010

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Affirmation	Tested by	Technical Manager
	Name : <i>Yoo Chang-soo</i>	Name : Kim, Sang Chul <i>Kim Sang Chul</i>
Our report apply only to the standard or procedures identifiide and to the sample(s) tested unless otherwise specified. The test results are not indicative of repressentative of the qualities of the lot from which the sample was taken or of apparently identical or similar products.		

Korea Conformity Laboratories President Jae Bi *Jae Bin Song*

Address : 459-28, Gasan-dong, Geumcheon-Gu, Seoul, Korea 031-888-9463

Result Inquiry : Advanced Materials Reliability Center ☎031-429-3454

TEST REPORT

No : SSR2802020

Test Results

Test Items	Unit	Sample	Test Results	Test method used
VOCs content	g/L	1	18.5	USEPA Method 24 : 2000

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