

# Testing Results for PS# 3025-47-03471

Company	Noroo Paint & Coatings
Contact Name	Yun-Jae So
Report Date	03/03/2021
Category	47 - Alkyd, Interior, Semi-Gloss (MPI G5)
Category Type	Confirmation
PS #	3025-47-03471
Product Label	NOROO
Product Name	Green Enamel Interior Semigloss
Product Code	NA
Test Results	Pass
Comments	



## Green Enamel Interior (MPI 47) Alkyd Semi-Gloss( MPI Gloss Level 5 ) Interior

#### **GENERAL INFORMATION**

This paint is based on Alkyd-based paint, colored semi-gloss finish, intended for use on new or previously painted interior wood and metal surface. This product will be primarily used for residential and commercial buildings, on trim, doors fames and siding.

#### SUITABLE USE

The Paint complying with this specification is intended for use on new or previously painted interior surfaces including primed wood and metal surfaces.

#### SPECIFICATION

Α.	A. Type: Alkyd resin / Semi-Gloss / Interior			
В.	Drying Times:	5℃	<b>20</b> ℃	<b>30</b> ℃
	Set to Touch	7H	3H	2H
	Dry Hard	36H	15H	12H
	For Over coat (Min.)	48H	24H	18H

- \* H: Hour
- C. Consistency: Ready for use
- D. Thinner: DR-291 (Max. 10%)
- E. Specific Gravity: Appr. 1.28
- F. Theoretical Coverage: 5~7 m<sup>2</sup>/L/2 coats/60µ (Dry film thickness)

(Dry film tr

- G. Shade: White and tints
- H. Texture: Semi-Gloss (Gloss 60 degree : 35 70 )

#### **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°C(41°F) nor above 35°C(95°F)

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

\* 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: 2009.04

NOROO Paint & Coatings Co., Ltd.

# MATERIAL SAFETY DATA SHEET

# SECTION I GENERAL INFORMATION

A. PRODUCT NAME: Green Enamel Interior (MPI 47)
Alkyd / Interior / Semi-Gloss(MPI Gloss Level 5)
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
Alkyd resin	NOT HAZARD	40 ~ 60
DEODORIZED KEROSENE	8020-83-5	4 ~ 8
TITANIUM DIOXIDE	13463-67-7	30 ~ 40
S1	_	< 5
S2	_	< 5

# SECTION III PHYSICAL PROPERTIES

BOILING RANGE	314~387 deg.F
EVAPORATION RATE	SLOWER THAN ETHER
VAPOR DENSITY	HEAVIER THAN AIR
% VOLATILE VOLUME	50 MAX
SPECIFIC GRAVITY	1.3±0.1
VISCOSITY	110±10 KU

# SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION:COMBUSTIBLE LIQUIDFLASH POINT:(TCC)100 Deg.FLEL:LEL:1.01.0

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

#### UNUSUAL FIRE AND EXPLOSION HAZARDS:

LIQUID EVAPORATES AND FORMS INVISIBLE VAPORS WHICH SPREAD EASILY AND CAN BE IGNITED BY MANY SOURCES SUCH AS PILOT LIGHTS, WELDING EQUIPMENT, ELECTRICAL MOTORS AND SWITCHES. FIRE HAZARD IS GREATER AS LIQUID TEMP. RISES ABOVE 85 Deg.F.

#### SPECIAL FIREFIGHTING PROCEDURES:

USE AIR SUPPLIED RESCUE EQUIPMENT FOR ENCLOSED AREAS. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING PURPOSES.

## SECTION V - HEALTH HAZARD DATA

#### EFFECTS OF OVEREXPOSURE:

EYE CONTACT-SHORT TERM LIQUID OR VAPOR CONTACT MAY RESULT IN EYE IRRITATION. SKIN CONTACT-PROLONGED AND REPEATED SKIN CONTACT MAY CAUSE DEFATTING AND DRYING OF THE SKIN RESULTING IN SKIN IRRITATION AND DERMATITIS. INHALATION-EXPOSURE TO HIGH VAPOR CONCENTRATIONS MAY BE IRRITATING TO THE MUCOUS MEMBRANES.

#### MEDICAL CONDITIONS PRONE TO AGGRAVATIO BY EXPOSURE:

HEADACHES, DIZZINESS, NAUSEA, AND LOSS OF CONSCIOUSNESS.

**PRIMARY ROUTE(S) OF ENTRY:** INHALATION, INGESTION

#### EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT-WASH EYES WITH FRESH WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, SEE A DOCTOR. SKIN CONTACT-WASH THROUGHLY WITH SOAP AND WATER. INAHALATION-IF AFFECTED BY INHALING VAPORS, MOVE PERSON TO FRESH ARI. IF BREATHING HAS STOPPED APPLY ARTIFICIAL RESPIRATION.CALL A DOCTOR IMMEDIATELY. INGESTION-IF SWALLOWED, DO NOT MAKE PERSON VOMIT. CALL A DOCTOR IMMEDIATELY.

### SECTION VI - REACTIVITY DATA

#### HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

NONE ESTABLISHED.

#### HAZARDOUS DECOMPOSITION PRODUCTS:

COMBUSTION CAN PRODUCE CARBON DIOXIDE, CARBON MONOXIDE, ACROLEIN, SMOKE, ACRID FUME

#### CONDITIONS TO AVOID:

DIRECT HEATING, HIGH TEMPERATURE, POORLY VENTED HOT AREAS, FLAMES AND SPARKS.

#### INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG OXIDANTS. WILL DISSOLVE AND SOFTEN SOME RUBBER AND PLASTICS.

## SECTION VII - SPILL OR LEAK PROCEDURES

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

REMOVE ALL IGNITION SOURCES, VENTILATE CONFINED SPACES, KEEP PEOPLE AWAY. ADD ABSOBENT SAND, EARTH, OR SAWDUST AND RECOVER INTO A SUITABLE CONTAINER.

#### WASTE DISPOSAL METHOD:

DISPOSE OF SPILLED AND ABSORBENT MATERIAL ACCORDING TO LOCAL, STATE, AND FEDERAL REGULATIONS. DO NOT DUMP INTO LAKES, STREAMS, OR OTHER WATER SUPPLY. CONSULT WITH HAZARDOUS SASTE REGULATORS REGARDING LANDFILL DUMPING AND OR INCINERATION.

## SECTION VIII - SAFE HANDLING AND USE INFORMATION

#### RESPIRATORY PROTECTION:

WEAR APPROVED ORGANIC VAPOR RESPIRATOR OR AN AIR SUPPLYING RESPIRATOR UNLESS VENTILATION EQUIPMENT IS ADEQUATE TO KEEP AIRBORNE CONCENTRATIONS BELOW THE EXPOSURE STANDARDS. OTHER SPECIAL PRECAUTIONS SUCH AS ENVIRONMENTAL CONTAIN-MENT DEVICES MAY BE REQUIRED IN EXTREME CASES. 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.



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## KOREA CONFORMITY LABORATORIES

Add.: 1029-32 Hogye-dong, Dongan-gu, Anyang-si, Gyeonggi-do, Korea Tel.: 031-429-2308 Fax.: 031-429-2309 Url.: wy

Url.: www.kcl.re.kr

# Certificate of Testing (Inspection) Result

Sample No. of Issue	: TSRB15007
Name of Applicant	: NOROO Paint & Coatings Co., Ltd. Kim Soo Kyoung
Address of Applicant	: 615, Bakdal 2-dong, Manan-gu, Anyang-si, Gyeonggi-do, Korea
Date of Receipt	: 2010-11-15
Name of Test Sample	: Green Enamel Interior (MPI 47)
Object of Test	: Quality control
Test Result(s)	: Please see the following page(s)

The above is the result of testing (inspection) specimen provided by the applicant, and the name of sample has been submitted by the applicant

Jan. 10 2011 day month year 1220 Signed :

The general manager of Korea Conformity Laboratories

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# KCL

## KOREA CONFORMITY LABORATORIES

 Add.: 1029-32 Hogye-dong, Dongan-gu, Anyang-si, Gyeonggi-do, Korea

 Tel.: 031-429-2308
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Url.: www.kcl.re.kr

## Certificate of Testing (Inspection) Result

Sample No. of Issue :	TSRB15007
Date of Receipt :	2010-11-15
Name of Test Sample :	Green Enamel Interior (MPI 47)

#### Result of Testing(Inspection)

Test Items	Unit	Sample	Results	Test Method
Consistency	K.U.	1	127	MPI # 47 : 2010
Dry time, Dry hard	h	1	4	MPI # 47 : 2010
Dry time, Tack free	min	1	30	MPI # 47 : 2010
Finess of Grind	NS	1	7	MPI # 47 : 2010
Flash point	C	1	45	MPI # 47 : 2010
Gloss 60 degree		1	57	MPI # 47 : 2010
Hiding power	%	1	99.6	MPI # 47 : 2010
Reflectance	%	1	93	MPI # 47 : 2010
Scrubbability	%	1	15	MPI # 47 : 2010
Applicability and Appearance		1	pass	MPI # 47 : 2010
Cleaning Properties	-	1	No stain, ⊿E∶0.81	MPI # 47 : 2010
Flexibility		1	pass	MPI # 47 : 2010
VOCs content	g/L	1	Not detected	EPA-method 24