

Revision Date: 11-Jul-2018

**Revision Number:** 4

1. PRODUCT AND COMPANY IDENTIFICATION

### Product Name

Product Code Alternate Product Code Product Class Color Recommended use Restrictions on use

## Manufacturer

Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 Phone: 1-866-708-9180 Ienmar-coatings.com

# DURALAQ HIGH-SOLIDS, HIGH-VOLUME PRODUCTION SYSTEM GLOSS 1LL-689 HL8573

LACQUER All Paint No information available

# Emergency Telephone

CHEMTREC (US): 800-424-9300 CHEMTREC (outside US): (703)-527-3887

2. HAZARDS IDENTIFICATION

## **Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 2

## Label elements

Danger

Hazard statements Causes skin irritation Causes serious eye irritation May damage fertility or the unborn child Causes damage to organs May cause damage to organs through prolonged or repeated exposure May be fatal if swallowed and enters airways Highly flammable liquid and vapor



Appearance liquid

Odor little or no odor

## **Precautionary Statements - Prevention**

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Wash face, hands and any exposed skin thoroughly after handling Wear eye/face protection Do not breathe dust/fume/gas/mist/vapors/spray Do not eat, drink or smoke when using this product Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof electrical/ventilating/lighting/equipment Use only non-sparking tools Take precautionary measures against static discharge

### **Precautionary Statements - Response**

IF exposed: Call a POISON CENTER or doctor/physician

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

Skin

If skin irritation occurs: Get medical advice/attention

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomiting

### Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

## **Precautionary Statements - Storage**

Store locked up Store in a well-ventilated place. Keep cool

## **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

## Hazards not otherwise classified (HNOC)

Not applicable

# Other information

No information available

# 3. COMPOSITION INFORMATION ON COMPONENTS

Chemical name	CAS No.	Weight-%
Toluene	108-88-3	25
n-Butyl acetate	123-86-4	20
VM&P naphtha	64742-89-8	10
Ethyl acetate	141-78-6	10
Ethanol	64-17-5	5
Acetone	67-64-1	5
Methyl alcohol	67-56-1	5
cellulose, nitrate	9004-70-0	5
Butyl benzyl phthalate	85-68-7	5
Isopropyl alcohol	67-63-0	5
Octane	111-65-9	0.5
Heptane	142-82-5	0.5

# 4. FIRST AID MEASURES

#### **Description of first aid measures**

General Advice	If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation persists, consult a specialist.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration. Call a physician immediately.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician.
Protection Of First-Aiders	Use personal protective equipment.
Most Important Symptoms/Effects	No information available.
Notes To Physician	Treat symptomatically.
	5. FIRE-FIGHTING MEASURES

Flammable Properties

Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause flash fire.

Suitable I	Extinguishing Media			or water. Use extinguishing measures to local circumstances and the ament.
Protective Firefighte	e Equipment And Pr ers	ecautions For		self-contained breathing apparatus MSHA/NIOSH (approved or equivalent) ear.
Hazardou	s combustion produ	ıcts		in carbon dioxide, carbon monoxide on products of varying composition and/or irritating.
Specific I	lazards Arising Fro	n The Chemical	distance. Keep prod heat and sources of rupture if exposed to	back possible over considerable duct and empty container away from f ignition. Closed containers may o fire or extreme heat. Thermal lead to release of irritating gases and
Sensitivit	y To Mechanical Im	pact	No	
Sensitivit	y To Static Discharg	e	Yes	
	Point (°F) Point (°C)		29 -2 PMCC	
Flammab	ility Limits In Air			
	flammability limit: flammability limit:		Not available Not available	
<u>NFPA</u>	Health: 2	Flammability: 3	Instability: 1	Special: Not Applicable
NFPA Leg 0 - Not Haz 1 - Slightly 2 - Modera 3 - High	ardous			

3 - High

4 - Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

# 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** 

Remove all sources of ignition. Take precautions to prevent flashback. Ground and bond all containers and handling equipment. Take precautionary measures against static discharges. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Other Information	Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.
Environmental precautions	See Section 12 for additional Ecological Information.
Methods for Cleaning Up	Dam up. Soak up with inert absorbent material. Use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. Clean contaminated surface thoroughly.

# 7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not breathe vapors or spray mist. Use only in ventilated areas. Prevent vapor build-up by providing adequate ventilation during and after use.
	Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and flame. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Ignition and/or flash back may occur.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat. Keep away from open flames, hot surfaces and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children.
Incompatible Materials	Incompatible with strong acids and bases and strong oxidizing agents.
<b>Technical measures/Precautions</b> Ensure adequate ventilation. Use only where airflow will keep vapors from buildiup in or near the work area in adjoining rooms. Comply with all national, state, a local codes pertaining to the storage, handling, dispensing and disposal of flammable liquids.	
	Dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. All equipment should be non-sparking and explosion proof. Use explosion proof electrical equipment for ventilation, lighting and material handling.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL
Toluene	20 ppm - TWA	200 ppm - TWA 300 ppm - Ceiling
n-Butyl acetate	150 ppm - TWA 200 ppm - STEL	150 ppm - TWA 710 mg/m³ - TWA
Ethyl acetate	400 ppm - TWA	400 ppm - TWA 1400 mg/m³ - TWA
Ethanol	1000 ppm - STEL	1000 ppm - TWA 1900 mg/m³ - TWA
Acetone	250 ppm - TWA	1000 ppm - TWA

## 1LL-689 - DURALAQ HIGH-SOLIDS, HIGH-VOLUME **PRODUCTION SYSTEM GLOSS**

	500 ppm - STEL	2400 mg/m <sup>3</sup> - TWA
Methyl alcohol	200 ppm - TWA 250 ppm - STEL Skin	200 ppm - TWA 260 mg/m³ - TWA
Isopropyl alcohol	200 ppm - TWA 400 ppm - STEL	400 ppm - TWA 980 mg/m³ - TWA
Octane	300 ppm - TWA	500 ppm - TWA 2350 mg/m³ - TWA
Heptane	400 ppm - TWA 500 ppm - STEL	500 ppm - TWA 2000 mg/m³ - TWA

#### Legend

ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits OSHA - Occupational Safety & Health Administration Exposure Limits

N/E - Not Established

# Appropriate engineering

controls

Engineering Measures	Ensure adequate ventilation, especially in confined areas.	
Personal Protective Equipment		
Eye/Face Protection	Safety glasses with side-shields. If splashes are likely to occur, wear:. Tightly fitting safety goggles.	
Skin Protection	Long sleeved clothing. Protective gloves.	
Respiratory Protection	Use only with adequate ventilation. In operations where exposure limits are exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions. When spraying the product or applying in confined areas, wear a NIOSH approved respirator specified for paint spray or organic vapors.	
Hygiene Measures	Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Odor Odor Threshold Density (lbs/gal) Specific Gravity pH Viscosity (cps) Solubility(ies) Water solubility Evaporation Rate Vapor pressure @20 °C (kPa) Vapor density Wt. % Solids Vol. % Solids Wt. % Volatiles Vol. % Volatiles VoC Regulatory Limit (g/L) Pailing Point (°E)	liquid little or no odor No information available 7.4 - 7.8 0.89 - 0.93 No information available No information available No information available No information available No information available No information available No information available 20 - 30 15 - 25 70 - 80 75 - 85 < 680
Boiling Point (°F)	132

Boiling Point (°C)
Freezing Point (°F)
Freezing Point (°C)
Flash Point (°F)
Flash Point (°C)
Method
Flammability (solid, gas)
Upper flammability limit:
Lower flammability limit:
Autoignition Temperature (°F)
Autoignition Temperature (°C)
Decomposition Temperature (°F)
<b>Decomposition Temperature (°C)</b>
Partition coefficient

56 No information available No information available 29 -2 PMCC Not applicable No information available No information available

**10. STABILITY AND REACTIVITY** 

Reactivity	No data available
Chemical Stability	Stable under normal conditions. Hazardous polymerisation does not occur.
Conditions to avoid	Keep away from open flames, hot surfaces, static electricity and sources of ignition. Sparks. Elevated temperature.
Incompatible Materials	Incompatible with strong acids and bases and strong oxidizing agents.
Hazardous Decomposition Products	Thermal decomposition can lead to release of irritating gases and vapors.
Possibility of hazardous reactions	None under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Product Information	
Information on likely routes of e	exposure
Principal Routes of Exposure	Eye contact, skin contact and inhalation.
Acute Toxicity	
Product Information	Repeated or prolonged exposure to organic solvents may lead to permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal.
Symptoms related to the physic	al, chemical and toxicological characteristics
Symptoms	No information available
Delayed and immediate effects	as well as chronic effects from short and long-term exposure

Eye contact Skin contact	Causes serious eye irritation. May cause redness, itching, and pain. May cause skin irritation and/or dermatitis. Prolonged skin contact may defat the
Ingestion	skin and produce dermatitis. Harmful if swallowed. Ingestion may cause irritation to mucous membranes. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.
Inhalation	Harmful by inhalation. High vapor / aerosol concentrations are irritating to the eyes, nose, throat and lungs and may cause headaches, dizziness, drowsiness, unconsciousness, and other central nervous system effects.
Sensitization	No information available
Neurological Effects	No information available.
Mutagenic Effects	No information available.
Reproductive Effects	May damage fertility or the unborn child.
Developmental Effects	No information available.
Target organ effects	No information available.
STOT - repeated exposure	Causes damage to organs through prolonged or repeated exposure if inhaled. May cause disorder and damage to the. liver. kidney. spleen. blood. Central nervous system.
STOT - single exposure	May cause disorder and damage to the. Respiratory system. Central nervous system.
Other adverse effects	No information available.
Aspiration Hazard	May be harmful if swallowed and enters airways. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	2024 mg/kg
ATEmix (dermal)	7530 mg/kg
ATEmix (inhalation-dust/mist)	14.1 mg/L
ATEmix (inhalation-vapor)	34 mg/L

### Acute Toxicity Component Information

TolueneLD50 Oral: 636 mg/kg (Rat)LD50 Dermal: 14100 μL/kg (Rabbit)LC50 Inhalation (Vapor): 49000 mg/m³ (Rat, 4 hr.)n-Butyl acetateLD50 Oral: 10768 mg/kg (Rat)LD50 Dermal: > 17600 mg/kg (Rabbit)LC50 Inhalation (Vapor): ppm (Rat, 4 hr.)Sensitization non-sensitizing (guinea pig)Ethyl acetateLD50 Oral: 5620 mg/kg (Rat)LD50 Dermal: > 20 mL/kg (Rabbit)LC50 Inhalation (Vapor): 200000 mg/m³ (Rat)Ethanol

## 1LL-689 - DURALAQ HIGH-SOLIDS, HIGH-VOLUME PRODUCTION SYSTEM GLOSS

LD50 Oral: mg/kg (Rat) LC50 Inhalation (Vapor): ppm (Rat, 10 hr.) <u>Acetone</u> LD50 Oral: 5800 mg/kg (Rat) <u>Methyl alcohol</u> LD50 Oral: 5600 mg/kg (Rat) LD50 Dermal: 15800 mg/kg (Rabbit) LC50 Inhalation (Vapor): 64000 ppm (Rat, 4 hr.) <u>Isopropyl alcohol</u> LD50 Oral: mg/kg (Rat) LD50 Dermal: mg/kg (Rabbit) LC50 Inhalation (Vapor): ppm (Rat) <u>Heptane</u> LC50 Inhalation (Vapor): 103000 mg/m<sup>3</sup> (Rat, 4 hr.)

## Carcinogenicity

There are no known carcinogenic chemicals in this product above reportable levels.

12. ECOLOGICAL INFORMATION

# Ecotoxicity Effects

The environmental impact of this product has not been fully investigated.

## Product Information

## Acute Toxicity to Fish

No information available

## Acute Toxicity to Aquatic Invertebrates

No information available

### Acute Toxicity to Aquatic Plants

No information available

### Persistence / Degradability

No information available.

### **Bioaccumulation**

There is no data for this product.

### Mobility in Environmental Media

No information available.

## Ozone

Not applicable

## **Component Information**

### Acute Toxicity to Fish

n-Butyl acetate

LC50: 18 mg/L (Fathead Minnow - 96 hr.) Acetone LC50: 8300 (Bluegill - 96 hr.) mg/L

## Acute Toxicity to Aquatic Invertebrates

n-Butyl acetate EC50: 72.8 mg/L (Daphnia magna - 48 hr.) Acetone EC50: 12600 mg/L (Daphnia magna - 48 hr.)

## Acute Toxicity to Aquatic Plants

<u>n-Butyl acetate</u> EC50: 674.7 mg/L (Green algae (Scenedesmus subspicatus), 72 hrs.)

	13. DISPOSAL CONSIDERATIONS
Waste Disposal Method	Dispose of in accordance with federal, state, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.
Empty Container Warning	Emptied containers may retain product residue. Follow label warnings even after container is emptied. Residual vapors may explode on ignition.
	14. TRANSPORT INFORMATION
DOT	

Proper Shipping Name Hazard class UN-No. Packing Group Description	PAINT 3 UN1263 II UN1263, PAINT, 3, II
ICAO / IATA	Contact the preparer for further information.
IMDG / IMO	Contact the preparer for further information.

15. REGULATORY INFORMATION

# International Inventories

TSCA: United States	Yes - All components are listed or exempt.
DSL: Canada	Yes - All components are listed or exempt.

# Federal Regulations

SARA 311/312 hazardous categorization	
Acute health hazard	Yes
Chronic Health Hazard	Yes

Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

## <u>SARA</u> 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS No.	Weight-%	CERCLA/SARA 313 (de minimis concentration)
Toluene	108-88-3	25	1.0
Methyl alcohol	67-56-1	5	1.0
Isopropyl alcohol	67-63-0	5	1.0

# Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Chemical name	CAS No.	Weight-%	Hazardous Air Pollutant
			<u>(HAP)</u>
Toluene	108-88-3	25	Listed
Methyl alcohol	67-56-1	5	Listed

## US State Regulations

### **California Proposition 65**

MARNING: Cancer and Reproductive Harm– www.P65warnings.ca.gov

#### State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania
Toluene	Х	X	Х
n-Butyl acetate	Х	X	Х
Ethyl acetate	X	X	Х
Ethanol	Х	X	Х
Acetone	X	X	Х
Methyl alcohol	Х	X	Х
cellulose, nitrate	X	Х	Х
Butyl benzyl phthalate	Х	X	Х
Isopropyl alcohol	X	X	Х
2-Butoxyethanol	X	X	Х

## Legend

X - Listed

**16. OTHER INFORMATION** 

<b>Invito - Inearth:</b> 2 Flammability: 3 Reactivity: 1 PPE: -	HMIS -	Health: 2*	Flammability: 3	Reactivity: 1	PPE: -
---	--------	------------	-----------------	---------------	--------

#### HMIS Legend

- 0 Minimal Hazard
- 1 Slight Hazard
- 2 Moderate Hazard
- 3 Serious Hazard
- 4 Severe Hazard
- \* Chronic Hazard

X - Consult your supervisor or S.O.P. for "Special" handling instructions.

Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer, has chosen to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

**WARNING!** If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Prepared By	Product Stewardship Department Benjamin Moore & Co. 101 Paragon Drive Montvale, NJ 07645 800-225-5554
Revision Date:	11-Jul-2018
Revision Summary	Not available

Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

## END OF SAFETY DATA SHEET