

Revision Date: 17-Sep-2018 Revision Number: 4

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name DURALAQ HIGH-BUILD NITROCELLULOSE PRO SEALER
Product Code 1C-383 3000939

Product Code 1C-383, 3000939

Alternate Product Code HL1583, HL1599

SAP Material Number NA, 3000939

Product Class SEALER

Color All

Recommended use Surface coating

Restrictions on use No information available

Manufacturer Emergency Telephone

Benjamin Moore & Co. CHEMTREC (US): 800-424-9300
101 Paragon Drive CHEMTREC (outside US): (703)-527-3887

101 Paragon Drive Montvale, NJ 07645 Phone: 1-866-708-9180 lenmar-coatings.com

## 2. HAZARDS IDENTIFICATION

## Classification

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

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	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
Harmful if swallowed
Harmful if inhaled
Causes skin irritation

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Causes serious eye irritation

Suspected of causing cancer

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 solvent

#### **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

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Wear eye/face protection

Do not breathe dust/fume/gas/mist/vapors/spray

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

## Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

Rinse mouth

#### 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
VM&P naphtha	64742-89-8	20
Ethyl acetate	141-78-6	15
n-Butyl acetate	123-86-4	10
cellulose, nitrate	9004-70-0	10
Methyl alcohol	67-56-1	5
2-Pentanone, 4-methyl-	108-10-1	5
Isopropyl alcohol	67-63-0	5
Butyl benzyl phthalate	85-68-7	5
Zinc stearate	557-05-1	5
Ethanol	64-17-5	5
Acetone	67-64-1	5
Octane	111-65-9	1
Heptane	142-82-5	1

## 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. Keep eye wide open while

rinsing. If symptoms persist, call a physician.

**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.

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Suitable Extinguishing Media Foam, dry powder or water. Use extinguishing measures

that are appropriate to local circumstances and the

surrounding environment.

**Protective Equipment And Precautions For** 

**Firefighters** 

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear.

**Hazardous combustion products**Burning may result in carbon dioxide, carbon monoxide

and other combustion products of varying composition

which may be toxic and/or irritating.

Specific Hazards Arising From The Chemical Flammable. Flash back possible over considerable

distance. Keep product and empty container away from heat and sources of ignition. Closed containers may rupture if exposed to fire or extreme heat. Thermal decomposition can lead to release of irritating gases and

vapors.

Sensitivity To Mechanical Impact No

Sensitivity To Static Discharge Yes

Flash Point Data

Flash Point (°F) 31.0
Flash Point (°C) -0.6
Method PMCC

Flammability Limits In Air

Lower flammability limit:Not availableUpper flammability limit:Not available

NFPA Health: 2 Flammability: 3 Instability: 1 Special: Not Applicable

#### NFPA Legend

- 0 Not Hazardous
- 1 Slightly
- 2 Moderate
- 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,

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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.

**Technical measures/Precautions** Ensure adequate ventilation. Use only where airflow will keep vapors from building

up in or near the work area in adjoining rooms. Comply with all national, state, and

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.

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL
Toluene	20 ppm - TWA	200 ppm - TWA
		300 ppm - Ceiling
Ethyl acetate	400 ppm - TWA	400 ppm - TWA
		1400 mg/m³ - TWA
n-Butyl acetate	150 ppm - TWA	150 ppm - TWA
	200 ppm - STEL	710 mg/m³ - TWA
Methyl alcohol	200 ppm - TWA	200 ppm - TWA
	250 ppm - STEL	260 mg/m³ - TWA
	Skin	
2-Pentanone, 4-methyl-	20 ppm - TWA	100 ppm - TWA
	75 ppm - STEL	410 mg/m³ - TWA
Isopropyl alcohol	200 ppm - TWA	400 ppm - TWA
	400 ppm - STEL	980 mg/m³ - TWA
Zinc stearate	10 mg/m³ - TWA	15 mg/m³ - TWA
	-	5 mg/m³ - TWA
Ethanol	1000 ppm - STEL	1000 ppm - TWA
		1900 mg/m³ - TWA
Acetone	250 ppm - TWA	1000 ppm - TWA
	500 ppm - STEL	2400 mg/m³ - TWA
Octane	300 ppm - TWA	500 ppm - TWA
		2350 mg/m <sup>3</sup> - TWA
Heptane	400 ppm - TWA	500 ppm - TWA
	500 ppm - STEL	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

AppearanceliquidOdorsolvent

Odor Threshold No information available

 Density (lbs/gal)
 7.3 - 7.7

 Specific Gravity
 0.88 - 0.92

pH No information available
Viscosity (cps) No information available
Solubility(ies) No information available

Water solubilityNo information availableEvaporation RateNo information availableVapor pressure @20 °C (kPa)No information available

Vapor pressure @20 °C (kPa)

Vapor density

No information available

 Wt. % Solids
 20 - 30

 Vol. % Solids
 15 - 25

 Wt. % Volatiles
 70 - 80

 Vol. % Volatiles
 75 - 85

 VOC Regulatory Limit (g/L)
 < 680</td>

 Boiling Point (°F)
 136

 Boiling Point (°C)
 58

Freezing Point (°F)

No information available
No information available

Flash Point (°F)

Flash Point (°C)

Method

PMCC

Flammability (solid, gas) Not applicable

Upper flammability limit:

Lower flammability limit:

Autoignition Temperature (°F)

Autoignition Temperature (°C)

Decomposition Temperature (°F)

Decomposition Temperature (°C)

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

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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.

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#### 11. TOXICOLOGICAL INFORMATION

#### **Product Information**

Information on likely routes of 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 physical, 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** Contact with eyes may cause irritation.

**Skin contact** May cause skin irritation and/or dermatitis. Prolonged skin contact may defat the

skin and produce dermatitis.

Ingestion 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.

SensitizationNo information availableNeurological EffectsNo information availableMutagenic EffectsNo information available

**Reproductive Effects** May damage fertility or the unborn child.

Developmental Effects

Target organ effects

No information available.

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) 1818 mg/kg

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ATEmix (dermal) 5731 mg/kg
ATEmix (inhalation-dust/mist) 10.3 mg/L
ATEmix (inhalation-vapor) 17 mg/L

**Acute Toxicity** 

**Component Information** 

Toluene

LD50 Oral: 636 mg/kg (Rat)

LD50 Dermal: 14100 µL/kg (Rabbit)

LC50 Inhalation (Vapor): 49000 mg/m³ (Rat, 4 hr.)

Ethyl acetate

LD50 Oral: 5620 mg/kg (Rat) LD50 Dermal: > 20 mL/kg (Rabbit)

LC50 Inhalation (Vapor): 200000 mg/m3 (Rat)

n-Butyl acetate

LD50 Oral: 10768 mg/kg (Rat)

LD50 Dermal: > 17600 mg/kg (Rabbit) LC50 Inhalation (Vapor): ppm (Rat, 4 hr.) Sensitization non-sensitizing (guinea pig)

Methyl alcohol

LD50 Oral: 5600 mg/kg (Rat)

LD50 Dermal: 15800 mg/kg (Rabbit)

LC50 Inhalation (Vapor): 64000 ppm (Rat, 4 hr.)

2-Pentanone, 4-methyl-

LD50 Oral: 2080-4600 mg/kg (Rat) LC50 Inhalation (Vapor): 100000 mg/m<sup>3</sup>

Isopropyl alcohol LD50 Oral: mg/kg (Rat) LD50 Dermal: mg/kg (Rabbit) LC50 Inhalation (Vapor): ppm (Rat)

Zinc stearate

LD50 Oral: 5000 mg/kg (Rat)

Product LD50 Dermal: 2000 mg/kg (Rabbit)

Ethanol

LD50 Oral: mg/kg (Rat)

LC50 Inhalation (Vapor): ppm (Rat, 10 hr.)

Acetone

LD50 Oral: 5800 mg/kg (Rat)

Heptane

LC50 Inhalation (Vapor): 103000 mg/m<sup>3</sup> (Rat, 4 hr.)

#### Carcinogenicity

The information below indicates whether each agency has listed any ingredient as a carcinogen:.

Chemical name	IARC	NTP	OSHA
	2B - Possible Human		Listed
2-Pentanone, 4-methyl-	Carcinogen		

Legend

IARC - International Agency for Research on Cancer

NTP - National Toxicity Program

OSHA - Occupational Safety & Health Administration

## 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**

n-Butyl acetate

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

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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 PAINT Hazard class 3 UN-No. UN1263

Packing Group

**Description** 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 DSL: Canada**Yes - All components are listed or exempt.
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

#### **SARA 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
2-Pentanone, 4-methyl-	108-10-1	5	1.0
Isopropyl alcohol	67-63-0	5	1.0
Zinc stearate	557-05-1	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-%	<b>Hazardous Air Pollutant</b>
			<u>(HAP)</u>
Toluene	108-88-3	25	Listed
Methyl alcohol	67-56-1	5	Listed
2-Pentanone, 4-methyl-	108-10-1	5	Listed

## **US State Regulations**

#### **California Proposition 65**

⚠

WARNING: Cancer and Reproductive Harm— www.P65warnings.ca.gov

#### State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania
Toluene	X	X	X
Ethyl acetate	X	Х	X
n-Butyl acetate	X	Х	X
cellulose, nitrate	X	X	Х
Methyl alcohol	X	Х	X
2-Pentanone, 4-methyl-	X	X	Х
Isopropyl alcohol	X	X	Х
Butyl benzyl phthalate	X	X	X
Zinc stearate	X	X	Х
Ethanol	X	Х	Х
Acetone	X	Х	X

## Legend

X - Listed

## 16. OTHER INFORMATION

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

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#### Disclaimer

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**END OF SAFETY DATA SHEET**