SAFETY DATA SHEET

Revision Date: *30-Nov-2018* **Revision Number:** *2*

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	**LACQUER RETARDER**
Product Code	**1A-114FR**
Alternate Product Code	HL9200
Product Class	LACQUER
Color	Clear
Recommended use	Solvent mixture
Restrictions on use	No information available

Manufactured For
Benjamin Moore & Co., Limited
8775 Keele Street
Concord ON L4K 2N1
Phone: 1-800-361-5898
lenmar-coatings.ca

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

Emergency Telephone
CANUTEC: 613-996-6666

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the Hazardous Products Regulations (HPR: SOR/2015-17)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Label elements

Danger

Hazard statements
Harmful if swallowed
Harmful in contact with skin
Causes skin irritation
Causes serious eye irritation
Suspected of causing cancer
May cause respiratory irritation. May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure
May be fatal if swallowed and enters airways
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
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
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
Keep cool

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
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
Call a POISON CENTER or doctor/physician if you feel unwell
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

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 container tightly closed

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other information
No information available

3. COMPOSITION INFORMATION ON COMPONENTS

Chemical name	CAS No.	Weight-%
2-Butoxyethanol	111-76-2	30 - 60%
n-Butyl acetate	123-86-4	10 - 30%
Xylene	1330-20-7	10 - 30%
Ethyl benzene	100-41-4	3 - 7%

4. 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.

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)	83.0
Flash Point (°C)	28.3
Method	PMCC

Flammability Limits In Air

Lower flammability limit:	Not available
Upper flammability limit:	Not available

NFPA **Health:** 2 **Flammability:** 3 **Instability:** 0 **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, 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Chemical name	ACGIH TLV	Alberta	British Columbia	Ontario	Quebec
2-Butoxyethanol	20 ppm - TWA	20 ppm - TWA 97 mg/m³ - TWA	20 ppm - TWA	20 ppm - TWA	20 ppm - TWAEV 97 mg/m³ - TWAEV
n-Butyl acetate	150 ppm - TWA 200 ppm - STEL	150 ppm - TWA 713 mg/m³ - TWA 200 ppm - STEL 950 mg/m³ - STEL	20 ppm - TWA	150 ppm - TWA 200 ppm - STEL	150 ppm - TWAEV 713 mg/m³ - TWAEV 200 ppm - STEV 950 mg/m³ - STEV
Xylene	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 434 mg/m³ - TWA 150 ppm - STEL 651 mg/m³ - STEL	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 150 ppm - STEL	100 ppm - TWAEV 434 mg/m³ - TWAEV 150 ppm - STEV 651 mg/m³ - STEV
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 434 mg/m³ - TWA 125 ppm - STEL 543 mg/m³ - STEL	20 ppm - TWA	20 ppm - TWA	100 ppm - TWAEV 434 mg/m³ - TWAEV 125 ppm - STEV 543 mg/m³ - STEV

Legend
ACGIH - American Conference of Governmental Industrial Hygienists
Alberta - Alberta Occupational Exposure Limits
British Columbia - British Columbia Occupational Exposure Limits
Ontario - Ontario Occupational Exposure Limits
Quebec - Quebec Occupational Exposure Limits
N/E - Not established

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 Protective gloves and impervious clothing.

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	liquid
Odor	solvent
Odor Threshold	No information available
Density (lbs/gal)	7.35 - 7.45
Specific Gravity	0.88 - 0.90
pH	No information available
Viscosity (cps)	No information available
Solubility(ies)	No information available
Water solubility	No information available
Evaporation Rate	No information available
Vapor pressure @20 °C (kPa)	No information available
Vapor density	No information available
Wt. % Solids	0 - 10
Vol. % Solids	0 - 10
Wt. % Volatiles	90 - 100

Vol. % Volatiles	90 - 100
VOC Regulatory Limit (g/L)	< 950
Boiling Point (°F)	257
Boiling Point (°C)	125
Freezing Point (°F)	No information available
Freezing Point (°C)	No information available
Flash Point (°F)	83.0
Flash Point (°C)	28.3
Method	PMCC
Flammability (solid, gas)	Not applicable
Upper flammability limit:	Not applicable
Lower flammability limit:	Not applicable
Autoignition Temperature (°F)	No information available
Autoignition Temperature (°C)	No information available
Decomposition Temperature (°F)	No information available
Decomposition Temperature (°C)	No information available
Partition coefficient	No information available

10. STABILITY AND REACTIVITY

Reactivity	Not Applicable
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 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. Vapor may cause irritation.
Skin contact	May cause skin irritation and/or dermatitis. Prolonged skin contact may defat the skin and produce dermatitis.
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.
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.
Sensitization	No information available.
Neurological Effects	No information available.
Mutagenic Effects	No information available.
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target organ effects	No information available.
STOT - single exposure	May cause disorder and damage to the. Respiratory system. Central nervous system.
STOT - repeated exposure	Causes damage to organs through prolonged or repeated exposure if inhaled. Causes damage to organs through prolonged or repeated exposure if swallowed. Causes damage to organs through prolonged or repeated exposure in contact with skin. May cause disorder and damage to the. blood. Causes damage to organs through prolonged or repeated exposure.
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)	905 mg/kg
ATEmix (dermal)	1538 mg/kg
ATEmix (inhalation-dust/mist)	7.7 mg/L
ATEmix (inhalation-vapor)	21.7 mg/L

Component Information

2-Butoxyethanol
LD50 Oral: 470 mg/kg (Rat)
LD50 Dermal: 220 mg/kg (Rabbit)
LC50 Inhalation (Vapor): 450 ppm (Rat, 4 hr.)
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)
Xylene
LD50 Oral: 4300 mg/kg (Rat)
LD50 Dermal: > 1700 mg/kg (Rabbit)
LC50 Inhalation (Vapor): 5000 ppm (Rat, 4 hr.)
Ethyl benzene
LD50 Oral: mg/kg (Rat)
LD50 Dermal: > mg/kg (Rabbit)
LC50 Inhalation (Vapor): mg/m^3 (Rat, 2 hr.)

Chronic Toxicity

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

Chemical name	IARC	NTP
Ethyl benzene	2B - Possible Human 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
No information available

Component Information

Acute Toxicity to Fish

2-Butoxyethanol
LC50: 1490 mg/L (Bluegill sunfish - 96 hr.)
n-Butyl acetate
LC50: 18 mg/L (Fathead Minnow - 96 hr.)
Xylene
LC50: 13.5 mg/L (Rainbow Trout - 96 hr.)
Ethyl benzene
LC50: 12.1 mg/L (Fathead Minnow - 96 hr.)

Acute Toxicity to Aquatic Invertebrates

n-Butyl acetate
EC50: 72.8 mg/L (Daphnia magna - 48 hr.)
Ethyl benzene
EC50: 1.8 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.)
Ethyl benzene
EC50: 4.6 mg/L (Green algae (Scenedesmus subspicatus), 72 hrs.)

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with federal, state, provincial, 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

TDG

Proper Shipping Name	PAINT
Hazard class	3
UN-No.	UN1263
Packing Group	III
Description	UN1263, PAINT, 3, III

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.

National Pollutant Release Inventory (NPRI)

NPRI Parts 1- 4
This product contains the following Parts 1-4 NPRI chemicals:

Chemical name	CAS No.	Weight-%	NPRI Parts 1- 4
2-Butoxyethanol	111-76-2	30 - 60%	Listed
Xylene	1330-20-7	10 - 30%	Listed
Ethyl benzene	100-41-4	3 - 7%	Listed

NPRI Part 5
This product contains the following NPRI Part 5 Chemicals:

Chemical name	CAS No.	Weight-%	NPRI Part 5
2-Butoxyethanol	111-76-2	30 - 60%	Listed
n-Butyl acetate	123-86-4	10 - 30%	Listed
Xylene	1330-20-7	10 - 30%	Listed

WHMIS Regulatory Status

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. OTHER INFORMATION

HMIS - **Health:** 2* **Flammability:** 3 **Reactivity:** 0 **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 logging onto Health Canada @ http://www.hc-sc.gc.ca/ewh-semt/contaminants/lead-plomb/asked_questions-questions_posees-eng.php.

Prepared By

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Disclaimer

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END OF SAFETY DATA SHEET