



# LENMAR<sup>®</sup>

## SAFETY DATA SHEET

Revision Date: 17-Dec-2015

Revision Number: 2

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** FLOW ADDITIVE  
**Product Code** 1B-210  
**Alternate Product Code** TE5800  
**Product Class** SOLVENT THINNED PAINT  
**Color** All  
**Recommended use** Chemical additive  
**Restrictions on use** No information available

**Manufacturer**  
Benjamin Moore & Co.  
101 Paragon Drive  
Montvale, NJ 07645  
Phone: 800-225-5554  
lenmar-coatings.com

**Emergency Telephone Number(s)**  
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)

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 3

#### Label elements

##### **Warning**

##### **Hazard statements**

Harmful if inhaled  
Causes skin irritation  
Causes eye irritation  
Suspected of causing cancer  
May cause damage to organs  
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  
Use only outdoors or in a well-ventilated area  
Wash face, hands and any exposed skin thoroughly after handling  
Do not breathe dust/fume/mist/vapors/spray  
Do not eat, drink or smoke when using this product  
Keep away from heat/sparks/open flames/hot surfaces, 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 or concerned get medical 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 attention

##### **Skin**

If skin irritation occurs get medical attention

If on skin (or hair) take off immediately all contaminated clothing. Rinse skin with water

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 physician

Do NOT induce vomiting

##### **Fire**

In case of fire use CO<sub>2</sub>, 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

#### **Other Hazards**

**IMPORTANT:** Designed to be mixed with other components. Mixture will have hazards of all components. Before opening packages, read all warning labels. Follow all precautions.

### 3. COMPOSITION INFORMATION ON COMPONENTS

Chemical Name	CAS-No	Weight % (max)
Xylene	1330-20-7	55
n-Butyl acetate	123-86-4	30
Ethyl benzene	100-41-4	20

### 4. FIRST AID MEASURES

#### First aid measures

<b>General Advice</b>	If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration. Call a physician immediately.
<b>Ingestion</b>	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.
<b>Protection Of First-Aiders</b>	Use personal protective equipment.
<b>Most Important Symptoms/Effects</b>	No information available.
<b>Notes To Physician</b>	Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause flash fire.
<b>Suitable Extinguishing Media</b>	Foam, dry powder or water. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Protective Equipment And Precautions For Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Specific Hazards Arising From The Chemical</b>	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)**

80

**Flash Point (°C)**

27

**Flash Point Method**

PMCC

**Flammability Limits In Air****Lower Explosion Limit**

Not available

**Upper Explosion 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](http://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 Clean-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**

No information available

**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.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Limits**

Chemical Name	ACGIH	OSHA
Xylene	100 ppm - TWA 150 ppm - STEL	100 ppm - TWA 435 mg/m <sup>3</sup> - TWA
n-Butyl acetate	150 ppm - TWA 200 ppm - STEL	150 ppm - TWA 710 mg/m <sup>3</sup> - TWA
Ethyl benzene	20 ppm - TWA	100 ppm - TWA 435 mg/m <sup>3</sup> - 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.

**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**

liquid

**Odor**

solvent

**Odor Threshold**

No information available

Density (lbs/gal)	7.25 - 7.35
Specific Gravity	0.86 - 0.88
pH	No information available
Viscosity (cps)	No information available
Solubility	No information available
Water Solubility	No information available
Evaporation Rate	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Wt. % Solids	0 - 5
Vol. % Solids	0 - 5
Wt. % Volatiles	95 - 100
Vol. % Volatiles	95 - 100
VOC Regulatory Limit (g/L)	<855
Boiling Point (°F)	257
Boiling Point (°C)	125
Freezing Point (°F)	No information available
Freezing Point (°C)	No information available
Flash Point (°F)	80
Flash Point (°C)	27
Flash Point Method	PMCC
Flammability (solid, gas)	Not applicable
Upper Explosion Limit	No information available
Lower Explosion Limit	No information available
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 (n-octanol/water)	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 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.

**Information on toxicological effects**

**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.  
**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 - repeated exposure** No information available.  
**STOT - single exposure** No information available.  
**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

<b>ATEmix (oral)</b>	5961 mg/kg
<b>ATEmix (dermal)</b>	2029 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	1.6 mg/L
<b>ATEmix (inhalation-vapor)</b>	1333 mg/L

**Acute Toxicity**

**Component**

Xylene

LD50 Oral: 4300 mg/kg (Rat)  
 LD50 Dermal: > 1700 mg/kg (Rabbit)  
 LC50 Inhalation (Vapor): 5000 ppm (Rat, 4 hr.)

n-Butyl acetate

LD50 Oral: 10768 mg/kg (Rat)  
 LD50 Dermal: > 17600 mg/kg (Rabbit)  
 LC50 Inhalation (Vapor): 390 ppm (Rat, 4 hr.)  
 Sensitization: non-sensitizing (guinea pig)

Ethyl benzene

LD50 Oral: 3500 mg/kg (Rat)  
 LD50 Dermal: > 5000 mg/kg (Rabbit)  
 LC50 Inhalation (Vapor): 55000 mg/m<sup>3</sup> (Rat, 2 hr.)

**Carcinogenicity**

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

Chemical Name	IARC	NTP	OSHA Carcinogen Listed
Ethyl benzene	2B - Possible Human Carcinogen		Listed

**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 / Accumulation**

No information available.

**Mobility in Environmental Media**

No information available.

**Ozone**

Not Applicable

**Component****Acute Toxicity to Fish**Xylene

LC50: 13.5 mg/L (Rainbow Trout - 96 hr.)

n-Butyl acetate

LC50: 18 mg/L (Fathead Minnow - 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****DOT**

<b>Proper Shipping Name</b>	Paint related material
<b>Hazard Class</b>	3
<b>UN-No</b>	UN1263
<b>Packing Group</b>	III
<b>Reportable Quantity (RQ)</b>	Ethylbenzene: RQ kg= 454.00, n-Butyl acetate: RQ kg= 2270.00, Xylenes mixed isomers: RQ kg= 45.40, Benzene: RQ kg= 4.54
<b>Description</b>	UN1263, Paint related material, 3, III, RQ

**ICAO / IATA**

Contact the preparer for further information.

**IMDG / IMO**

Contact the preparer for further information.

**15. REGULATORY INFORMATION****International Inventories**

<b>DSL: Canada</b>	Yes - All components are listed or exempt.
<b>TSCA: United States</b>	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 NameCAS-NoWeight % (max)CERCLA/SARA 313  
(de minimis concentration)

Xylene	1330-20-7	55	1.0
Ethyl benzene	100-41-4	20	0.1

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

This product contains the following HAPs:

<u>Chemical Name</u>	<u>CAS-No</u>	<u>Weight % (max)</u>	<u>Hazardous Air Pollutant (HAP)</u>
Xylene	1330-20-7	55	Listed
Ethyl benzene	100-41-4	20	Listed

**State Regulations****California Proposition 65**

*This product may contain small amounts of materials known to the state of California to cause cancer or reproductive harm.*

**State Right-to-Know**

<u>Chemical Name</u>	<u>Massachusetts</u>	<u>New Jersey</u>	<u>Pennsylvania</u>
Xylene	X	X	X
n-Butyl acetate	X	X	X
Ethyl benzene	X	X	X

**Legend**

X - Listed

## 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 contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to [www.epa.gov/lead](http://www.epa.gov/lead).

**Prepared By**

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**Revision Summary** Not available

Disclaimer

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**END OF SAFETY DATA SHEET**