

1. Product and Company Identification

Product Name: Quick Mender L.O. (B-Side)

VersaFlex / Raven Lining Systems 686 South Adams Street

Kansas City, KS 66105

www.versaflex.com / www.ravenlining.com

Company Phone: (913) 321-9000 Company Toll Free: (800) 324-2810

CHEMTREC 24 hour Emergency USA: (800) 424-9300 CHEMTREC 24 hour International: (703) 527-3887

Product Use: Primer / Sealer / Coating / Lining Not recommended for: Non Professional Use

2. Hazards Identification

Signal Word: Danger





GHS Ratings:

Flammable liquid 4 Flash point >= 60°C (140°F) and <= 93°C (200°F).

Skin corrosive 3 Reversible adverse effects in dermal tissue, Draize score: >=

1.5 < 2.3.

Mutagen 1B Known to produce heritable mutations in human germ cells

Subcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell

mutagenicity.

Carcinogen 1B Presumed Human Carcinogen, Based on demonstrated animal

carcinogenicity.

Reproductive toxin 1B Presumed, Based on experimental animals.

GHS Hazards

H227	Combustible liquid.
H316	Causes mild skin irritation.
H340	May cause genetic defects.
H350	May cause cancer.

H360 May damage fertility or the unborn child.

GHS Precautions

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces - No smoking.

P235 Keep cool.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P281 Use personal protective equipment as required.

P308+P313 IF exposed or concerned: Get medical advice/attention.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P370+P378 In case of fire: Use water for or fine spray for extinction.

P405 Store locked up.

P403+P235 Store in a well ventilated place. Keep cool.

P501 Dispose of contents/container according to Section 13 of the SDS.

3. Composition / Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
Amine-based Polyol		30 - 60%
Trade Secret		15 - 40%
Trade Secret		5 - 10%
Solvent naphtha, petroleum, light aromatic	64742-95-6	3 - 7%
1,2,4-Trimethylbenzene	95-63-6	1 - 5%
N-Butyl-2-(1-ethylpentyl)-1,3-oxazolidine	165101-57-5	1 - 2%

4. First Aid Measures

Inhalation: Remove to fresh air if effects occur. Consult a physician.

Eye Contact: Flush with large quantities of water for at least 15 minutes. Consult a physician.

Skin Contact: Wash thoroughly with soap and flowing water.

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Notes to Physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

Flash Point: 71 C (160 F)

Flammable Properties: Product is considered a fire hazard, and will burn if ignited.

The definition and classification of flammable and combustible liquids are addressed in NFPA 30. A flammable liquid is defined as a liquid whose flash point is < 100 deg F (38 deg C), while a combustible liquid is one whose flash point is \geq 100 deg F. These groups are further classified into the following NFPA Flammability Classes:

Class IA liquids are flammable liquids that have a flash point < 73 deg F (23 deg C) and boiling point < 100 deg F.

Class IB liquids are flammable liquids that have a flash point < 73 deg F and a boiling point > 100 deg F.

Class IC liquids are flammable liquids that have a flash point > 73 deg F, but < 100 deg F.

Class II liquids are combustible liquids that have a flash point > 100 deg F, but < 140 deg F (60 deg C).

Class IIIA liquids are combustible liquids that have a flash point > 140 deg F, but < 200 deg F (93 deg C).

Class IIIB liquids are combustible liquids that have a flash point \geq 200 deg F.

Suitable Extinguishing Media: Carbon dioxide, dry chemical, water fog or fine spray. Alcohol resistant foams are preferred, general purpose synthetic foams or protein foams may function, but will not be as effective.

Unsuitable Extinguishing Media: Do not use direct water stream, as it may spread fire.

Products of Combustion: Thermal decomposition in the presence of air may yield carbon monoxide, carbon dioxide, phenolics, ammonia, nitrogen oxides and other unidentified toxic and/or irritating compounds.

Fire Fighting: Stay upwind and keep people away. Isolate fire and deny unnecessary entry. Keep out of low areas where gases (fumes) can accumulate. Water is not recommended, but may be applied in large quantities as a fine spray when other extinguishing agents are not available. Use water spray to cool fire-exposed containers and fire-affected zone until fire is out. Contain fire water run-off if possible, as it may cause environmental damage. Review section 6 and section 12 of this SDS.

Protection of Firefighters: Wear positive pressure self-contained breathing apparatus (SCBA) and approved protective clothing (helmet, coat, trousers, boots and gloves). If contact is likely, use full chemical resistant fire fighting clothing

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6. Accidental Release Measures

Personal Precautions: Put on appropriate personal protective equipment (see section 8).

Environmental Precautions: Prevent spilled material from contact with soil, drains and sewers.

Methods for Containment: Contain by diking with sand, earth or other suitable material.

Methods for Clean-up: Absorb spill with an inert material, use non-sparking tools to place into labeled waste container for disposal.

7. Handling and Storage

Handling: Wear appropriate personal protective equipment (see section 8). Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Do not ingest. Avoid prolonged or repeated contact with skin. May cause allergic skin reaction, persons with a history of skin sensitization should not be employed in any process in which this product is used. Wash thoroughly with soap and water after handling. Do not handle or store near flame, heat or strong oxidants. Keep away from sources of ignition and hot metal surfaces.

Storage: Store original unopened containers in a sheltered area between 60°F and 80°F (15°C and 27°C) at atmospheric pressure. Do not store in direct sunlight. Keep containers closed when not in use.

8. Exposure Controls / Personal Protection

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Amine-based Polyol	Not Established	Not Established	Not Established
Trade Secret	Not Established	Not Established	Not Established
Trade Secret	Not Established	Not Established	Not Established
Solvent naphtha, petroleum, light aromatic 64742-95-6	Not Established	Not Established	Not Established
1,2,4-Trimethylbenzene 95-63-6	Not Established	Not Established	NIOSH: 25 ppm TWA; 125 mg/m3 TWA
N-Butyl-2-(1-ethylpentyl)-1,3- oxazolidine 165101-57-5	Not Established	Not Established	Not Established

Engineering Controls: General mechanical ventilation is sufficient for most conditions. Control airborne levels below the exposure guidelines, if established.

Local exhaust ventilation may be necessary for some operations.

General Hygiene Considerations: Wash thoroughly after handling and before eating, drinking or smoking.

Eye/face Protection: Use chemical safety glasses, splash-proof eye goggles or goggles with full faceshield.

Skin Protection: Use nitrile or other impermeable chemical resistant gloves to prevent skin irritation. If potential for skin contact is present, wear impervious, long-sleeved, body covering clothing and rubber boots.

Respiratory Protection: Respiratory protection should not be needed. If exposure may or does exceed occupational exposure limits, respiratory irritation is experienced, or during spray application, use a properly fitted MSHA/NIOSH approved respirator fitted with organic vapor cartridges. In addition, spray application may require the use of paint pre-filters. If the respirator is the sole means of protection, use a full-face supplied air respirator. If sanding or grinding on cured material, use above respirator fitted with HEPA filters or a dust mask.

Contaminated Gear: Remove contaminated clothing and shoes while washing. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

9. Physical and Chemical Properties

Appearance Clear to dark yellow	Odor Ammonia-like
Odor Threshold No data found	Physical State Liquid

pH No data found

Boiling Point 169°C

Flash Point 160°F,71°C

Flammability (solid, gas) No data found

Vapor Pressure No data found

Specific Gravity 0.9 - 1.1

Partition Coefficient No data found

(n-octanol/water)

Decomposition Temperature No data found

Lbs VOC/Gallon Less Water 0.7

Melting/Freezing Point No data found
Boiling Range No data found
Evaporation Rate No data found
LEL/UEL No data found
Vapor Density No data found
Solubility in Water No data found
Autoignition Temperature No data found

Viscosity No data found

10. Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions (see Section 7).

Conditions to Avoid: Elevated temperatures may cause product to decompose.

Incompatible Materials: Strong acids, bases, or oxidizing agents. Avoid unintended contact with isocyanates and/or epoxies.

Products of Combustion: Thermal decomposition in the presence of air may yield carbon monoxide, carbon dioxide, phenolics, ammonia, nitrogen oxides and other unidentified toxic and/or irritating compounds.

Hazardous polymerization will not occur.

11. Toxicological Information

Mixture Toxicity

Inhalation Toxicity LC50: 7mg/L

Component Toxicity

Likely Routes of Exposure:

No data found

Target Organs

May cause damage to the following organs:

Blood Eyes Central Nervous System Skin Respiratory System

Effects of Overexposure

CAS Number Description % Weight Carcinogen Rating

64742-95-6 Solvent naphtha, petroleum, light 3 - 7% Solvent naphtha, petroleum, light

aromatic aromatic: EU REACH: Present (P)

12. Ecological Information

Component Ecotoxicity

Trade Secret 96 Hr LC50 Pimephales promelas: >1.55 mg/L [static]

48 Hr EC50 Daphnia magna: >1.46 mg/L

Solvent naphtha, petroleum, light 96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L

aromatic 48 Hr EC50 Daphnia magna: 6.14 mg/L

1,2,4-Trimethylbenzene 96 Hr LC50 Pimephales promelas: 7.19 - 8.28 mg/L [flow-through]

48 Hr EC50 Daphnia magna: 6.14 mg/L

13. Disposal Considerations

Waste Disposal Methods: Dispose of in accordance with federal, state and local regulations. The preferred method for

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disposal of uncontaminated product is by recycling, reclaiming, incineration or other thermal destruction device using a licensed and permitted waste disposal contractor.

14. Transport Information

<u>Agency Proper Shipping Name UN Number Packing Group Hazard Class</u>

DOT Combustible liquids, n.o.s. (solvent naphtha, NA1993 III 3

petroleum, light aromatic)

Reclassified in accordance with 49 CFR 173.150(f) since the flash point is above 38C (100F)

ICAO/IATA Not Regulated IMDG Not Regulated TDG Not Regulated

15. Regulatory Information

USA Federal: This SDS has been prepared in compliance with the Occupational Safety and Health Act (OSHA) Hazard Communication Standard (29 CFR 1910.1200). This product is considered to be a hazardous chemical under that standard. The specific chemical identity and/or exact percentage of any proprietary ingredient(s) may be withheld as a trade secret, pursuant to the standard.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): To the best of our knowledge, this product contains the following chemicals which are known to the State of California to cause cancer, developmental or reproductive toxicity at levels which require warning under this statute:

- None

USA Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) - section 103 Hazardous Substances Reportable Quantities (RQs): To the best of our knowledge, this product contains the following chemicals which are listed in 40 CFR 302.4:

- None

Massachusetts Right to Know: To the best of our knowledge, this product contains the following chemicals at levels which require reporting under this statute:

95-63-6 1,2,4-Trimethylbenzene 1 to 5 %

New Jersey Right to Know: To the best of our knowledge, this product contains the following chemicals at levels which require reporting under this statute:

95-63-6 1,2,4-Trimethylbenzene 1 to 5 %

Pennsylvania Right to Know: To the best of our knowledge, this product contains the following chemicals at levels which require reporting under this statute:

95-63-6 1,2,4-Trimethylbenzene 1 to 5 %

USA Resource Conservation and Recovery Act (40 CFR 261): To the best of our knowledge, this product contains the following chemicals at levels which require reporting under this statute:

- None

USA Superfund Amendments and Reauthorization Act (SARA) of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) - section 313 Toxic Release Inventory (TRI) Form R: To the best of our knowledge, this product contains the following chemicals which are listed in 40 CFR 372.65:

- None

USA Superfund Amendments and Reauthorization Act (SARA) of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) - section 302 Extremely Hazardous Substances Threshold Planning Quantities (TPQs): To the best of our knowledge, this product contains the following chemicals at levels which require reporting under this statute:

- None

USA Toxic Substances Control Act (TSCA) - section 12(b): To the best of our knowledge, this product contains the following chemicals above the de minimus concentration(s) which requires notification to the Environmental Protection Agency (EPA) per 40 CFR 707, subpart D, if any person intends to export:

- None

<u>Country</u>	<u>Regulation</u>	All Components Listed
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Canada Domestic Substance List	Yes
Canada	Canada Non-Domestic Substances List (NDSL)	No
China	China Inventory of Existing Chemical Substances	Yes
EU	EU REACH List of Registered Intermediates	No
EU	EU REACH List of Pre-Registered Substances	Yes
EU	EU REACH List of Registered Substances	No
Japan	Japanese Existing and New Chemical Substances List	No
South Korea	South Korea Existing Chemicals Inventory	No
Philippines	Philippines Inventory of Chemicals and Chemical	No
USA	USA TSCA Inventory list section 8(b)	Yes

- None

16. Other Information

Legend	
ACGIH	American Conference of Governmental Industrial Hygienists, Inc.
ADR/RID	European Agreement for transport of dangerous goods by road (ADR) and by rail (RID)
CAS No.	Chemical Abstract Service Registry Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act, AKA "Superfund"
DOT	Department of Transportation (USA)

HCS OSHA Hazard Communication Standard (29 CFR 1910.1200)
IARC International Agency for Research on Cancer
IATA International Air Transport Association

IATA International Air Transport Association
ICAO International Civil Aviation Organization
IMO International Maritime Organization
IMDG International Maritime Dangerous Goods
MSHA Mine Safety and Health Administration

N.A. Not ApplicableN.D. Not DeterminedN.E. Not Established

NFPA National Fire Protection Association

NIOSH National Institute for Occupational Safety and Health

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration (USA)

PEL Permissible Exposure Limit

SARA Superfund Amendments and Reauthorization Act of 1986 (40 CFR)
STEL Short Term Exposure Limit (15 minute Time Weighted Average)

TDG Canada Transport of Dangerous Goods regulations

TLV Threshold Limit Value TWA Time Weighted Average

WHMIS Canada Workplace Hazardous Materials Information System

Hazardous Material Information System (HMIS)

National Fire Protection Association (NFPA)



HMIS & NFPA Hazard Rating Legend

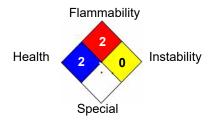
* = Chronic Health Hazard

0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH



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Reviewer Revision

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