

Safety Data Sheet

according to OSHA Hazard Communication
29 CFR Pat 1910.1200



Section 1. Identification

Product Information: LI-B50RR

Product Name: Vanguard Reducing Solution

Recommended Use: Surface Coating and TWSI Applications

Application Method: See CSI @ www.vanguardonline.com/downloads/

Supplied by: Vanguard ADA Systems
18122 SR 9, Suite F
Snohomish WA 98296

Emergency Telephone: Chemtrec: 800-424-9300

Section 2. Hazard(s) identification

EMERGENCY OVERVIEW: Flammable liquid and vapor.

GHS Classification

Carc. 1A, Flam. Liq. 1, Skin Irrit. 2, Skin Sens. 1, STOT SE 3 RTI

Symbol(s) of Product



Signal Word

Danger

Possible Hazards

99% of the mixture consists of ingredients of unknown acute toxicity

GHS HAZARD STATEMENTS

Carcinogenicity, category 1A	H350	May cause cancer.
Flammable Liquid, category 1	H224	Extremely flammable liquid and vapour.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.

GHS LABEL PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352	IF ON SKIN: Wash with plenty of water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER/doctor if you feel unwell.
P321	Specific treatment (see on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P370+P378	In case of fire: Use dry chemical, carbon dioxide, or foam to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local rules and regulations.

GHS SDS PRECAUTIONARY STATEMENTS

P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P363	Wash contaminated clothing before reuse.

Section 3. Composition/Information on ingredients

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt. %</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
METHYL METHACRYLATE	80-62-6	50-75	GHS02-GHS07	H225-315-317-335
2-ETHYLHEXYL ACRYLATE	103-11-7	25-50	GHS07	H227-315-317-335

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

Section 4. First-aid measures

FIRST AID - INHALATION: Move to fresh air.

FIRST AID - SKIN CONTACT: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

FIRST AID - EYE CONTACT: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse with plenty of water.

FIRST AID - INGESTION: Call a physician immediately. Do not induce vomiting without medical advice.

Section 5. Fire-fighting measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: Remove all sources of ignition.

SPECIAL FIREFIGHTING PROCEDURES: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical

Section 6. Accidental release measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Soak up with inert absorbent material and dispose of as hazardous waste.

Section 7. Handling and storage



HANDLING: Containers of this material may be hazardous when emptied. Handle in accordance with good industrial hygiene and safety practice.

STORAGE: Harmful - Store away from foodstuffs. Keep containers tightly closed. Keep in a well-ventilated place. Keep locked-up. For Industrial Use Only

Section 8. Exposure controls/personal protection

Ingredients with Occupational Exposure Limits

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH-TLV STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>
METHYL METHACRYLATE	50	100	100	NE
2-ETHYLHEXYL ACRYLATE	3 mg/m ³	NE	NE	NE

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation
Sk = Skin Sensitizer N.E. = Not Established

Personal Protection



RESPIRATORY PROTECTION: In the case of respirable dust and/or fumes, use self-contained breathing apparatus.



SKIN PROTECTION: Impervious gloves.



EYE PROTECTION: Safety glasses with side-shields.



OTHER PROTECTIVE EQUIPMENT: Impervious clothing.



HYGIENIC PRACTICES: General industrial hygiene practice. Remove and wash contaminated clothing before re-use.

Section 9. Physical and Chemical Properties

Boiling Range:	0 - 0	Vapor Density:	6.40
Odor:	Characteristic	Odor Threshold:	NE
Appearance:	Liquid	Evaporation Rate:	3.10
Solubility in Water:	NE	Specific Gravity:	0.970
Freeze Point:	NE	pH:	NE
Vapor Pressure:	40.00	Viscosity:	NE
Physical State:	Liquid	Flash Point, °C:	10, °F 50

(See section 16 for abbreviation legend)

<u>CHEMICAL NAME</u>	<u>VAPOR DENSITY</u>	<u>EVAPORATION RATE</u>	<u>BOILING POINT</u>	<u>VP mmHg</u>	<u>at DEG. F</u>
METHYL METHACRYLATE	3.60	3.10	212	40.00	68
2-ETHYLHEXYL ACRYLATE	6.40	NA	419	0.20	68

Section 10. Stability and reactivity

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Avoid contact with skin, eyes and clothing.

INCOMPATIBILITY: Strong oxidizing agents. Keep away from strong oxidizing agents, heat and open flames.

HAZARDOUS DECOMPOSITION PRODUCTS: None when used as directed.

Section 11. Toxicological information



Practical Experiences

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes).

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Local ventilation of emission sources may be necessary to maintain ambient concentrations below recommended exposure limits.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Direct eye contact may cause irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Harmful: may cause lung damage if swallowed. Harmful if swallowed.

CARCINOGENICITY: No Information

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<u>CAS-No.</u>	<u>Name according to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
80-62-6	METHYL METHACRYLATE	N.I.	N.I.	N.I.
103-11-7	2-ETHYLHEXYL ACRYLATE	N.I.	N.I.	N.I.

N.I. - No Information

Section 12. Ecological information

ECOLOGICAL INFORMATION: Do not contaminate ponds, waterways or ditches with chemical or used container.

Section 13. Disposal considerations



Product

DISPOSAL METHOD: Contact waste disposal services. Dispose of in accordance with all local, state and federal regulations.

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Soak up with inert absorbent material and dispose of as hazardous waste.

Section 14. Transport information

SPECIAL TRANSPORT PRECAUTIONS: No Information

DOT Proper Shipping:	Resin Solution	Packing Group:	II
DOT Technical Name:	Resin	Hazard SubClass:	No Information
DOT Hazard Class:	3	Resp. Guide Page:	127
DOT UN/NA Number:	1866		

Section 15. Regulatory information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Specific target organ toxicity (single or repeated exposure)

SARA SECTION 312:

<u>Chemical Name</u>	<u>CAS-No.</u>
METHYL METHACRYLATE	80-62-6
2-ETHYLHEXYL ACRYLATE	103-11-7

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<u>Chemical Name</u>	<u>CAS-No.</u>
METHYL METHACRYLATE	80-62-6

TOXIC SUBSTANCES CONTROL ACT:

All components of this material are listed on the US Toxic Substance Control Act (TSCA inventory).

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product.

No NJ Right-To-Know components exist in this product.

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

CALIFORNIA PROPOSITION 65 CARCINOGENS



WARNING

The following ingredients present in the product are known to the state of California to cause Cancer:

No Proposition 65 Carcinogens exist in this product.

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

CANADIAN WHMIS:

All components of this material are listed on the Domestic Substance List.

WHMIS Class: No Information

Section 16. Other information, including date of preparation of the last revision

Revision Date: 11/19/2020 Supercedes Date: 10/26/2017

Reason for revision: Substance and/or Product Properties Changed in Section(s):

01 - Product Information
 05 - Flammability Information
 08 - Exposure Controls/Personal Protection
 09 - Physical & Chemical Information
 14 - Transportation Information
 15 - Regulatory Information
 16 - Other Information
 Revision Statement(s) Changed

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	2	Flammability:	3	Reactivity:	2	Personal Protection:	X
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Volatile Organic Compounds, gr/ltr: 10

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H225 Highly flammable liquid and vapour.
 H227 Combustible liquid
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS02



GHS07



Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

No Information