HH-66 Vinyl Cement

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)
Issue date: 2022-12-07 Revision date: 2023-11-27 Version: 1.2

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Trade name : HH-66 Vinyl Cement
Synonyms : PVC Vinyl Adhesive

1.2. Recommended use and restrictions on use

Recommended use : Adhesives
Restrictions on use : No additional information available

1.3. Manufactured For:

ENPAC, LLC
34355 Melinz Parkway
Eastlake, OH 44095
800-936-7229

1.4. Emergency telephone number

Emergency number : 1-800-535-5053 INFOTRAC; 1-352-323-3500 INFOTRAC International

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Flammable liquids Category 2	H225	Highly flammable liquid and vapor
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Reproductive toxicity Category 2	H361	Suspected of damaging fertility or the unborn child
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure
Hazardous to the aquatic environment – Acute Hazard Category 3	H402	Harmful to aquatic life

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS CA labeling

Hazard pictograms (GHS CA) :

Signal word (GHS CA) : Danger

Hazard statements (GHS CA) : H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H361 - Suspected of damaging fertility or the unborn child
H373 - May cause damage to organs through prolonged or repeated exposure
H402 - Harmful to aquatic life

Precautionary statements (GHS CA) : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical, ventilating, lighting equipment.
P242 - Use only non-sparking tools.
P243 - Take action to prevent static discharges.
P260 - Do not breathe vapors, mist, spray.
P264 - Wash hands and forearms, and other exposed area thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P312 - Call a POISON CENTER, a doctor if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use Water spray or fog, carbon dioxide (CO2), alcohol resistant foam, Dry chemical 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 to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Other hazards which do not result in classification : Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown acute toxicity (GHS CA)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Methyl ethyl ketone	butanone, ethyl methyl ketone	CAS-No.: 78-93-3	30 - 60	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Acetone	acetone, propan-2-one, propanone	CAS-No.: 67-64-1	30 - 60	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
Toluene	toluene	CAS-No.: 108-88-3	5 - 10	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 3, H412

Full text of hazard classes and H-statements : see section 16

Comments : The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Get medical attention if symptoms occur.

First-aid measures after eye contact : 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.

First-aid measures after ingestion : Rinse mouth out with water. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

First-aid measures general : Call a poison center/doctor/physician if you feel unwell. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

Symptoms/effects after skin contact : Absorbed through the skin. Repeated exposure may cause skin dryness or cracking. May cause slight irritation. Redness. Itching.

Symptoms/effects after eye contact : Causes serious eye irritation. Lacrimation. Redness. Blurred vision.

Symptoms/effects after ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhea. Abdominal pain.

Chronic symptoms : Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Alcohol-resistant foam. Carbon dioxide.

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use a heavy water stream.

5.3. Specific hazards arising from the hazardous product

Fire hazard : Highly flammable liquid and vapor. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors. Heating will cause a rise in pressure with a risk of bursting. In case of fire and/or explosion do not breathe fumes.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Move containers from fire area if it can be done without personal risk. Exercise caution when fighting any chemical fire. Fight fire with normal precautions from a reasonable distance. Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment. Evacuate the danger area. Eliminate all ignition sources if safe to do so.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid contact with skin and eyes. No flames, no sparks. Eliminate all sources of ignition. Use special care to avoid static electric charges.

6.2. Methods and materials for containment and cleaning up

For containment : Stop leak, if possible without risk. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Remove ignition sources.

Methods for cleaning up : Caution : this product can cause the floor to be slippery. Move containers from spill area. Prevent entry to sewers and public waters. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Clean contaminated surfaces with an excess of water. Use non-sparking tools.

Other information : Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation to minimize dust and/or vapor concentrations. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing fume, vapors, mist. Eliminate all ignition sources if safe to do so. Handling this product may result in electrostatic accumulation. Use proper grounding procedures. Take precautionary measures against static discharge. Use explosion-proof equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Store in a dry place. Keep cool. Keep away from food, drink and animal feedingstuffs. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in accordance with local, regional, national or international regulation.

Incompatible products	:	Strong acids. Strong bases. Oxidizing agent. Amines. Inorganic acids. Metallic salts.
Incompatible materials	:	Direct sunlight. Sources of ignition.
Storage area	:	Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Methyl ethyl ketone (78-93-3)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK; 2-Butanone)
OEL TWA	590 mg/m³
	200 ppm
OEL STEL	885 mg/m³
	300 ppm
Regulatory reference	Alberta Regulation 191/2021
Canada (Quebec) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK, 2-Butanone)
VECD (OEL STEV)	300 mg/m³
	100 ppm
VEMP (OEL TWAEV)	150 mg/m³
	50 ppm
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK)
OEL TWA	50 ppm
OEL STEL	100 ppm
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK)
OEL TWA	200 ppm
OEL STEL	300 ppm
Notations and remarks	TLV® Basis: URT irr; CNS & PNS impair. Notations: BEI
Regulatory reference	ACGIH 2023
Canada (New Brunswick) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK)
OEL TWA	200 ppm
OEL STEL	300 ppm
Notations and remarks	URT irr; CNS & PNS impair

Methyl ethyl ketone (78-93-3)	
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK)
OEL TWA	200 ppm
OEL STEL	300 ppm
Notations and remarks	TLV® Basis: URT irr; CNS & PNS impair. Notations: BEI
Regulatory reference	ACGIH 2023
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK)
OEL TWA	200 ppm
OEL STEL	300 ppm
Notations and remarks	TLV® Basis: URT irr; CNS & PNS impair. Notations: BEI
Regulatory reference	ACGIH 2023
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK)
OEL TWA	200 ppm
OEL STEL	300 ppm
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK)
OEL TWA	200 ppm
OEL STEL	300 ppm
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-013-2020)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK)
OEL TWAEV	200 ppm
	300 ppm
Regulatory reference	Ontario Occuational Exposure Limits under Regulation 833
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK)
OEL TWA	200 ppm
OEL STEL	300 ppm
Notations and remarks	TLV® Basis: URT irr; CNS & PNS impair. Notations: BEI
Regulatory reference	ACGIH 2023
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Methyl ethyl ketone (MEK)
OEL TWA	200 ppm

OEL STEL	300 ppm
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10

Acetone (67-64-1)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Acetone
OEL TWA	1200 mg/m³
	500 ppm
OEL STEL	1800 mg/m³
	750 ppm
Regulatory reference	Alberta Regulation 87/2009 (Alberta Regulation 150/2020)
Canada (Quebec) - Occupational Exposure Limits	
Local name	Acetone
VECD (OEL STEV)	2380 mg/m³
	1000 ppm
VEMP (OEL TWAEV)	1190 mg/m³
	500 ppm
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Acetone
OEL TWA	250 ppm
OEL STEL	500 ppm
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Acetone
OEL TWA	250 ppm
OEL STEL	500 ppm
Notations and remarks	TLV® Basis: URT & eye irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH
Canada (New Brunswick) - Occupational Exposure Limits	
Local name	Acetone
OEL TWA	250 ppm
OEL STEL	500 ppm
Notations and remarks	eye irr; CNS impair; BEI
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Acetone
OEL TWA	250 ppm
OEL STEL	500 ppm

Acetone (67-64-1)	
Notations and remarks	TLV® Basis: URT & eye irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Acetone
OEL TWA	250 ppm
OEL STEL	500 ppm
Notations and remarks	TLV® Basis: URT & eye irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Acetone
OEL TWA	500 ppm
OEL STEL	750 ppm
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Acetone
OEL TWA	500 ppm
OEL STEL	750 ppm
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-013-2020)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Acetone
OEL TWAEV	250 ppm
	500 ppm
Regulatory reference	Ontario Occuational Exposure Limits under Regulation 833
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Acetone
OEL TWA	250 ppm
OEL STEL	500 ppm
Notations and remarks	TLV® Basis: URT & eye irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Acetone
OEL TWA	500 ppm
OEL STEL	750 ppm
Regulatory reference	The Occupational Health and Safety Regulations, 1996. Chapter O-1.1 Reg 1

Toluene (108-88-3)	
Canada (Alberta) - Occupational Exposure Limits	
Local name	Toluene (Toluol)
OEL TWA	188 mg/m³
	50 ppm
Notations and remarks	Substance may be readily absorbed through intact skin.
Regulatory reference	Alberta Regulation 191/2021
Canada (Quebec) - Occupational Exposure Limits	
Local name	Toluene
VEMP (OEL TWAEV)	188 mg/m³
	20 ppm
Notations and remarks	Pc
Regulatory reference	S-2.1, r. 13 - Regulation respecting occupational health and safety
Canada (British Columbia) - Occupational Exposure Limits	
Local name	Toluene
OEL TWA	20 ppm
Notations and remarks	R (Adverse reproductive effect)
Regulatory reference	OHS Guidelines Part 5: Chemical Agents and Biological Agents (WorkSafe BC)
Canada (Manitoba) - Occupational Exposure Limits	
Local name	Toluene
OEL TWA	20 ppm
Notations and remarks	TLV® Basis: CNS, visual & hearing impair; female repro system eff; pregnancy loss. Notations: OTO; A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2023
Canada (Newfoundland and Labrador) - Occupational Exposure Limits	
Local name	Toluene
OEL TWA	20 ppm
Notations and remarks	TLV® Basis: CNS, visual & hearing impair; female repro system eff; pregnancy loss. Notations: OTO; A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2023
Canada (Nova Scotia) - Occupational Exposure Limits	
Local name	Toluene
OEL TWA	20 ppm
Notations and remarks	TLV® Basis: CNS, visual & hearing impair; female repro system eff; pregnancy loss. Notations: OTO; A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2023
Canada (Nunavut) - Occupational Exposure Limits	
Local name	Toluene (toluol)
OEL TWA	50 ppm

Toluene (108-88-3)	
OEL STEL	60 ppm
Notations and remarks	Skin
Regulatory reference	Occupational Health and Safety Regulations, Nu Reg 003-2016 (Amendment R-044-2021)
Canada (Northwest Territories) - Occupational Exposure Limits	
Local name	Toluene (toluol)
OEL TWA	50 ppm
OEL STEL	60 ppm
Notations and remarks	Skin
Regulatory reference	Occupation Health and Safety Regulations R-039-2015 (R-013-2020)
Canada (Ontario) - Occupational Exposure Limits	
Local name	Toluene
OEL TWAEV	20 ppm
Regulatory reference	Ontario Occuational Exposure Limits under Regulation 833
Canada (Prince Edward Island) - Occupational Exposure Limits	
Local name	Toluene
OEL TWA	20 ppm
Notations and remarks	TLV® Basis: CNS, visual & hearing impair; female repro system eff; pregnancy loss. Notations: OTO; A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2023
Canada (Saskatchewan) - Occupational Exposure Limits	
Local name	Toluene (toluol)
OEL TWA	50 ppm
OEL STEL	60 ppm
Notations and remarks	Skin
Regulatory reference	The Occupational Health and Safety Regulations, 2020. Chapter S-15.1 Reg 10

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide local exhaust or general room ventilation. Handle in accordance with good industrial hygiene and safety procedures. Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Avoid release to the environment. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:
Wear recommended personal protective equipment. Personal protective equipment should be chosen according to the NIOSH standards and in discussion with the supplier of the protective equipment.

Hand protection:
Chemical resistant gloves (according to NIOSH standard). Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Selection of protective gloves should be made based on the type of task performed.

Eye protection:
Use splash goggles when eye contact due to splashing is possible. Chemical goggles or safety glasses

Skin and body protection:
Wear suitable protective clothing. Skin protection appropriate to the conditions of use should be provided

Respiratory protection:
Where excessive vapor, mist, or dust may result, use approved respiratory protection equipment. Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	No data available
Color	:	white
Odor	:	strong aromatic odor/sharp mint like fragrance
Odor threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butyl acetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	> 35 °C
Flash point	:	-14 °C (Method: ASTM D-56)
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	> 1 (heavier than air)
Relative density	:	0.83 (water=1)
Density	:	827.2 g/l
Solubility	:	insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Viscosity, kinematic	:	1232 – 1408 mm²/s
Explosion limits	:	Lower explosion limit: 1 vol % Upper explosion limit: 12 vol %

9.2. Other information

VOC content	:	53 % (437 g/l)

SECTION 10: Stability and reactivity

Reactivity	:	Highly flammable liquid and vapor. Can form explosive mixtures with air. Heating may cause a fire or explosion.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Hazardous polymerization: Will not occur. Reacts vigorously with strong oxidizers and acids.
Conditions to avoid	:	None under recommended storage and handling conditions (see section 7). Protect from sunlight. Overheating. Extremely high or low temperatures. No flames, no sparks. Eliminate all sources of ignition.

Incompatible materials : Oxidizing agent. Strong acids. Strong bases. Amines. Inorganic acids. Metallic salts.
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hardening time: : No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Methyl ethyl ketone (78-93-3)	
LD50 oral rat	2054 mg/kg
LD50 dermal rat	> 10 ml/kg
LD50 dermal rabbit	5000 mg/kg
LC50 Inhalation - Rat [ppm]	11700 ppm/4h

Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg
LD50 dermal rabbit	15688 mg/kg
LC50 Inhalation - Rat	44 g/m³

Toluene (108-88-3)	
LD50 oral rat	2600 mg/kg
LD50 dermal rabbit	12000 mg/kg
LC50 Inhalation - Rat	25.7 mg/l/4h

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes serious eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Toluene (108-88-3)	
IARC group	3 - Not classifiable

Reproductive toxicity : Suspected of damaging fertility or the unborn child.
STOT-single exposure : May cause drowsiness or dizziness.

Methyl ethyl ketone (78-93-3)	
STOT-single exposure	May cause drowsiness or dizziness.

Acetone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.

Toluene (108-88-3)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Toluene (108-88-3)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

HH-66 Vinyl Cement	
Viscosity, kinematic	1232 – 1408 mm²/s

Symptoms/effects after inhalation : Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

Symptoms/effects after skin contact : Absorbed through the skin. Repeated exposure may cause skin dryness or cracking. May cause slight irritation. Redness. Itching.

Symptoms/effects after eye contact : Causes serious eye irritation. Lacrimation. Redness. Blurred vision.

Symptoms/effects after ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhea. Abdominal pain.

Chronic symptoms : Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure.

Other information : No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Harmful to aquatic life.

Hazardous to the aquatic environment, long–term (chronic) : Not classified

Methyl ethyl ketone (78-93-3)	
LC50 - Fish [1]	3130 – 3320 mg/l (96 h; Pimephales promelas [flow-through])
EC50 - Crustacea [1]	520 mg/l (48 h; Daphnia magna)
EC50 - Crustacea [2]	5091 (48 h; Daphnia magna)
NOEC chronic algae	93 mg/l

Acetone (67-64-1)	
LC50 - Fish [1]	4144.846 mg/l (96 h, Oncorhynchus mykiss)
LC50 - Fish [2]	6210 – 8120 mg/l (96 h, Pimephales promelas, static)
EC50 - Crustacea [1]	1679.66 mg/l (48 h, Daphnia magna, static)
EC50 - Crustacea [2]	12600 – 12700 mg/l (48 h, Daphnia magna)

Toluene (108-88-3)	
LC50 - Fish [1]	15.22 – 19.05 mg/l (96 h; Pimephales promelas [flow-through])
LC50 - Fish [2]	12.6 mg/l (96 h; Pimephales promelas [static])
EC50 - Crustacea [1]	5.46 – 9.83 mg/l (48 h; Daphnia magna [static])
EC50 - Crustacea [2]	11.5 mg/l (48 h; Daphnia magna)
EC50 72h - Algae [1]	> 433 mg/l (Pseudokirchneriella subcapitata)
EC50 72h - Algae [2]	12.5 mg/l (Pseudokirchneriella subcapitata)
NOEC chronic fish	1.4 mg/l (Oncorhynchus kisutch)
NOEC chronic crustacea	0.74 mg/l (Ceriodaphnia dubia)

12.2. Persistence and degradability

HH-66 Vinyl Cement	
Persistence and degradability	Biodegradability in water: no data available.

Methyl ethyl ketone (78-93-3)	
Persistence and degradability	Rapidly degradable

Acetone (67-64-1)	
Persistence and degradability	Readily biodegradable.

Toluene (108-88-3)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

HH-66 Vinyl Cement	
Bioaccumulative potential	No data available concerning bioaccumulation.

Methyl ethyl ketone (78-93-3)	
Partition coefficient n-octanol/water (Log Pow)	0.29

Acetone (67-64-1)	
BCF - Fish [1]	0.69
Partition coefficient n-octanol/water (Log Pow)	-0.24

Toluene (108-88-3)	
Partition coefficient n-octanol/water (Log Pow)	2.7

12.4. Mobility in soil

HH-66 Vinyl Cement	
Ecology - soil	Adsorbs into the soil.

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not dispose of the packaging without first carrying out the necessary cleaning. Do not pierce or burn, even after use.
Additional information : Flammable vapors may accumulate in the container.
Ecological information : Avoid release to the environment.

SECTION 14: Transport information

In accordance with TDG / DOT / IMDG / IATA

14.1. UN number

UN-No. (TDG)	:	UN1133
DOT NA No	:	UN1133
UN-No. (IMDG)	:	1133
UN-No. (IATA)	:	1133

14.2. UN proper shipping name

Proper Shipping Name (TDG)	:	ADHESIVES
Proper Shipping Name (DOT)	:	Adhesives
Proper Shipping Name (IMDG)	:	ADHESIVES
Proper Shipping Name (IATA)	:	Adhesives

14.3. Transport hazard class(es)

TDG

Transport hazard class(es) (TDG) : 3
Hazard labels (TDG) : 3
:

DOT

Transport hazard class(es) (DOT) : 3
Hazard labels (DOT) : 3
:

IMDG

Transport hazard class(es) (IMDG) : 3
Hazard labels (IMDG) : 3
:

IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3
:

14.4. Packing group

Packing group (TDG)	:	II
Packing group (DOT)	:	II
Packing group (IMDG)	:	II
Packing group (IATA)	:	II

14.5. Environmental hazards

Dangerous for the environment	:	No
Other information	:	No supplementary information available.

14.6. Special precautions for user

TDG

UN-No. (TDG)	:	UN1133
Explosive Limit and Limited Quantity Index	:	5 L
Excepted quantities (TDG)	:	E2
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	:	5 L
Emergency Response Guide (ERG) Number	:	128

DOT

UN-No.(DOT)	:	UN1133
DOT Special Provisions (49 CFR 172.102)	:	149 - When transported as a limited quantity or a consumer commodity, the maximum net capacity specified in 173.150(b)(2) of this subchapter for inner packaging may be increased to 5 L (1.3 gallons). B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F).
DOT Packaging Exceptions (49 CFR 173.xxx)	:	150
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	173
DOT Packaging Bulk (49 CFR 173.xxx)	:	242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	60 L
DOT Vessel Stowage Location	:	B - (i) The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) ‘‘On deck only’’ on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

IMDG

Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
Packing provisions (IMDG)	:	PP1
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1, TP8
EmS-No. (Fire)	:	F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	:	S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	:	B
Properties and observations (IMDG)	:	Adhesives are solutions of gums, resins, etc., usually volatile due to the solvents. Miscibility with water depends upon their composition.

IATA

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	353
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	364
CAO max net quantity (IATA)	:	60L
Special provision (IATA)	:	A3
ERG code (IATA)	:	3L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

Methyl ethyl ketone (78-93-3)

Listed on the Canadian DSL (Domestic Substances List)

Acetone (67-64-1)

Listed on the Canadian DSL (Domestic Substances List)

Toluene (108-88-3)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

HH-66 Vinyl Cement

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Methyl ethyl ketone (78-93-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Acetone (67-64-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Toluene (108-88-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on INSQ (Mexican National Inventory of Chemical Substances)

SECTION 16: Other information

Issue date	:	12-07-2022
Revision date	:	11-27-2023

Indication of changes:

9.1. Information on basic physical and chemical properties.

Data sources	:	Supplier's safety documents.
Training advice	:	Training staff on good practice.
Other information	:	SDS prepared by. H2 Compliance.

Full text of H-phrases:	
H225	Highly flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), Canada

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.