Document Type	SAFETY DATA SHEET
Trade Name	T-C222
SDS #	S-0090 V1
Date of Issue	5/17/2024
Replaces (Date/Revision #)	5/17/2024 - NEW
Effective Date	5/17/2024

Product Name: T-C222
Product Code:
Product Type: Liquid
Recommended Use: Adhesive
Product Manufacturer: Forza Inc
3211 Nebraska Ave, Suite 300
Council Bluffs, Iowa 51501
402-731-9300

In Case of an Emergency: Chemctrc 1(800)-424-9300

Section 2. Hazards Identification

Emergency Overview
Appearance / Odor: Medium thin liquid, light amber color, solvent odor.
Classification: FLAMMABLE LIQUID; HIGHLY FLAMMABLE – Category 2, H225
ASPIRATION HAZARD – Category 1, H304
SKIN IRRITATION; - Category 2, H315
EYE IRRITATION - Category 2A, H319
SPECIFIC TARGET ORGAN TOXICITY, SINGLE EXPOSURE; [Respiratory tract irritation] – Category 3, H335
SPECIFIC TARGET ORGAN TOXICITY, SINGLE EXPOSURE; [Narcotic effects] – Category 3, H336
GERM CELL MUTAGENICITY – Category 1B, H340
CARCINOGENICITY – Category 1B, H350
REPRODUCTIVE TOXICITY – Category 2, H361
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) – Category 1, H372
HAZARDOUS TO THE AQUATIC ENVIRONMENT, LONG-TERM HAZARD- Category 2, H411

GHS Label Elements
Hazard Pictograms:

Section 2. Hazards Identification

Signal Word: DANGER

Hazard Statements:

H225: Highly flammable liquid and vapor.
H304: May be fatal if swallowed and enters airway.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H340: May cause genetic defects.
H350: May cause cancer.
H361: Suspected of damaging fertility or the unborn child.
H372: Causes damage to organs (respiratory and nervous systems, liver and kidneys) through prolonged or repeated exposure.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements

General: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention:

P203: Obtain, read and follow all safety instructions before use.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233: Keep container tightly closed.
P240: Ground and bond container and receiving equipment.
P241: Use explosion-proof electrical/ventilating/lighting equipment.
P242: Use non-sparking tools.
P243: Take action to prevent static discharges.
P260: Do not breathe sprays/mists/fumes/vapors/.
P264 + P265: Wash hands and exposed skin thoroughly after handling. Do not touch eyes.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear eye protection/face protection. Wear protective gloves.

Response:

P301 + P316: IF SWALLOWED: Get emergency medical help immediately.
P302 + P352: IF ON SKIN: Wash with plenty of water.
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse affected areas 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.
P318: If exposed or concerned, get medical advice.

Section 2. Hazards Identification

Response (cont.):
P331: Do NOT induce vomiting.
P332 + P317: If skin irritation occurs: Get medical help.
P337 + P317: If eye irritation persists: Get medical help.
P362 + P364: Take off contaminated clothing and wash it before reuse.
P370 + P378: In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide (CO_2).
P391: Collect spillage.

Storage:
P405: Store locked up
P403 + P233 + P235: Store in well ventilated place. Keep container tightly closed. Keep cool.

Disposal:
P501: Disposal of contents/container to be specified in accordance with applicable local/regional/national/international regulations.

OSHA/HCS status:
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards Not Otherwise Classified [HNOC]:
None known.

Section 3. Composition/Information on Ingredients

Substance/Mixture: Mixture.

Other Means of Identification: None.

CAS Number: Not applicable.

Component	%	CAS Number
Acetone	32.0	67-64-1
Petroleum Distillate (low boiling point naphtha (petroleum))	21.0	64741-84-0
Toluene	24.0	108-88-3

Component Information for Petroleum Distillate (CAS 64741-84-0)

Component	%	CAS Number
Petroleum Distillate (low boiling point naphtha)	100	64741-84-0
N-hexane	15-40	110-54-3
Hexane, other isomers	15-40	*
Heptane	10-30	142-82-5
Cyclohexane	1-5	110-82-7

* Various

Note: Any concentration shown as a range is due to batch variation in the petroleum source used.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First Aid Measures

Description of Necessary First Aid Measures

General Advice: Show this safety data sheet to the doctor in attendance. Move person out of exposure area. Immediate medical attention is required. If symptoms develop or if you feel unwell, seek medical advice. If symptoms persist or in all cases of doubt, seek medical advice. Never give anything by mouth to an unconscious person. Take off all contaminated clothing immediately and thoroughly wash material from skin.

Eye Contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue rinsing. Get immediate medical attention if irritation develops and persists.

Skin Contact: Take off contaminated clothing and shoes immediately. Wash off contaminated skin with soap and plenty of water. Get immediate medical attention if irritation develops and persists, if symptoms develop or if you feel unwell.

Inhalation: Remove person to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get immediate medical advice/attention.

Ingestion: ASPIRATION HAZARD IF SWALLOWED – CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. Rinse mouth with water and afterwards, drink plenty of water. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Remove dentures if any. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get immediate medical advice/attention.

Most Important Symptoms/Effects, Acute and Delayed Potential Acute Health Effects

Eye Contact: Symptoms may include stinging, tearing, redness, swelling and blurred vision.

Inhalation: Product is harmful if inhaled and may be irritating to respiratory system. Symptoms may include difficulty in breathing, coughing and/or wheezing and dizziness. Prolonged exposure or inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Skin Contact: Symptoms may include an itching or burning sensation, reddening and swelling.

Ingestion: ASPIRATION HAZARD IF SWALLOWED – CAN ENTER LUNGS AND CAUSE DAMAGE. Product may be expected to be irritating to mucous membranes. Symptoms may include cramping, localized pain, headache, nausea and vomiting.

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary

Notes to Physician: Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

Section 4. First Aid Measures

Notes to Physician (cont.):	Contact a poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically.
Specific Treatments:	No specific treatment.
Protection of First Responders:	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required (see section 8). Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing. Avoid breathing sprays, vapors or mists.

See Toxicological Information (Section 11)

Section 5. Fire Fighting Measures

Lower Explosive Limit (LEL)	1.1 % (V).
Upper Explosive Limit (UEL)	13.0 % (V).
Suitable Extinguishing Media:	Use water spray (fog), alcohol-resistant foam, dry chemical or carbon dioxide (CO_2).
Unsuitable Extinguishing Media:	Do not use a solid water stream as it may scatter and spread fire.
Unusual Fire and Explosion Hazards:	All 5 gallon or larger containers should be grounded while being transferred. Material is volatile and gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, electric motors, smoking and static discharge at locations far from the material. Product runoff to sewer may create a fire or explosion hazard. Vapors/gases released under fire conditions are heavier than air and may spread long distances along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to an ignition source and flashback. Containers may explode when heated.
Product of Combustion:	Carbon oxides (CO_X) and hydrogen chloride. Irritating fumes and organic acid vapors may be generated during exposure to elevated temperatures or open flame.
Protection of Firefighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Eliminate all local and distant ignition sources. Move containers from fire area if process can be accomplished without risk to firefighters. To reduce the possibility of explosion, use a water spray or fog to reduce direct vapors and to cool unopened containers.

Section 5. Fire Fighting Measures

Protection of Firefighters (cont.): Do not cut, grind, drill or weld on or near product containers (even empty) of this product because an explosion may result.

Fire-fighters should wear appropriate protection equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in a positive pressure mode.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Eliminate all ignition sources. No flares, smoking or flames in the hazard area. Prevent the formation and inhalation of sprays, mists, vapor or gases. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For Emergency Responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For Non-Emergency Personnel".

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for Containment

General: Eliminate all local and distant ignition sources. Move containers from spill area if safe to do so. Use spark-proof tools and explosion-proof equipment. Stop leak if without risk. DO NOT USE OXIDISABLE MATERIALS TO SOAK-UP SPILLS!

Small Spill: Contain and collect spillage using an inert absorbent material and place in an appropriate waste disposal container for disposal according to local regulations (see Section 13).

Large Spill: Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with inert, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and Storage

Protective Measures:

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Prevent the formation of sprays and mists. Do not get in eyes or on skin or clothing. Do not swallow. Do not breathe sprays, mists, vapors or gases. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Non equilibrium conditions may increase the fire hazard associated with this product. Always bond receiving containers to the fill pipe before and during loading. Always confirm that receiving container is properly grounded. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards. Carefully review operations that may increase the risks such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. In addition to bonding and grounding, efforts to mitigate the hazards may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Always keep nozzle in contact with the container throughout the loading process. Do NOT fill any portable container in or on a vehicle.

General Occupational Hygiene:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Safe Storage Conditions:

Keep away from all sources of ignition, excessive temperatures and open flame. Store in accordance with local regulations. The storage area should comply with NFPA 30 “Flammable and Combustible Liquid Code”. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

7. Handling and Storage

Safe Storage Conditions (cont.): Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. This product should only be stored and handled in areas with intrinsically safe electrical classification.

Section 8. Exposure Controls/Personal Protection

Introductory Remarks: These recommendations provide general guidance for handling this product. Because work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and conduct regular repairs. Waste from these procedures should be handled in accordance with Section 13.

Occupational Exposure Limits

List	Components	CAS-No.	Type	Value
ACGIH	N-hexane	110-54-3	TLV	50 ppm TWA S*
	Cyclohexane	110-82-7	TLV	100 ppm TWA
	Heptane	142-82-5	TLV	400 ppm TWA 500 ppm STEL
	Acetone	67-64-1	TLV	250 ppm TWA 500 ppm STEL
	Toluene	108-88-3	TLV	20 ppm TWA
NIOSH	Acetone	67-64-1	REL	250 ppm, 590 mg/mm^3 TWA
	Toluene	108-88-3	REL	100 ppm, 375 mg/mm^3 TWA 150 ppm, 560 mg/mm^3 STEL
OSHA Z1	Naphtha; low boiling point	64741-84-0	PEL	100 ppm, 400 mg/m^3 TWA
	N-hexane	110-54-3	PEL	500 ppm, 1,800 mg/m^3 TWA
	Cyclohexane	110-82-7	PEL	300 ppm, 1,050 mg/m^3 TWA
	Heptane	142-82-5	PEL	500 ppm, 2,000 mg/m^3 TWA
	Acetone	67-64-1	PEL	1,000 ppm, 2,400 mg/m^3 TWA
	Toluene	108-88-3	PEL	200 ppm TWA 300 ppm Ceiling 500 ppm Peak

S* - Potential exposure by cutaneous route.

Engineering Controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants. In the absence of good ventilation, persons subject to exposure should wear respiratory protection as described below. Provide an eyewash/shower station.

Section 8. Exposure Controls/Personal Protection

Environmental Exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual Protection Measures

Hygiene Measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, sprays, mists, vapors or gases. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or aerosols. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin Protection

Hand Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Chemical-resistant gloves.

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. For full contact, wear Neoprene or nitrile rubber gloves.

Section 8. Exposure Controls/Personal Protection

Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and Chemical Properties

Physical State: Liquid.

Color: Not specified.

Odor: Characteristic solvent odor.

pH: Not Available.

Boiling Point: 150 °F (65.5 °C).

Specific Gravity: 0.77 g/cm^3

Solubility in Water 0.2 %

Evaporation Rate 6.6 (Butyl Acetate = 1).

Vapor Pressure: 153 mm.

Vapor Density (AIR = 1): 3.3

VOC Content: 569 g/l (EPA Method 24).

Section 10. Stability and Reactivity

Reactivity: No specific test data related to reactivity is available for this product.

Chemical Stability: Stable at normal ambient temperature and pressure and under recommended storage conditions.

Conditions to Avoid: Avoid high temperatures, open flames, sparks, welding, smoking or other ignition sources. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Incompatible Materials: Strong acids and strong oxidizing agents.

Section 10. Stability and Reactivity

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products formed under fire conditions: irritating fumes, organic acid vapors, hydrogen chloride and carbon oxides (CO_X). In the event of a fire: see section 5.

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur. Hazardous reactions or instability may occur under certain conditions of storage or use.

Section 11. Toxicological Information

Information on Toxicological Effects

Acute Toxicity

Component	CAS No	Result	Species	Dose	Exposure
Acetone	67-64-1	LD50 Oral	Rat	5,800 mg/kg	-
		LD50 Dermal	Rabbit	20,000 mg/kg	
		LC50	Rat	76 mg/l - vapor	4 h
Toluene	108-88-3	LD50 Oral	Rat	5,580 mg/kg	-
		LD50 Dermal	Rabbit	> 5,000 mg/kg	
		LC50	Rat	25.7 mg/l	4 h
N-hexane	110-54-3	LD50 Oral	Rat	25,000 mg/kg	-
		LD50 Dermal	Rabbit	2,000 mg/kg	-
		LC50	Rat	171.6 mg/l	4 h
Hexanes, other isomers	*	LD50 Oral	Rat	> 5,000 mg/kg	-
		LD50 Dermal	Rabbit	> 2,000 mg/kg	-
		LC50 Inhalation Vapor	Mouse	70000 mg/l	2 h
Cyclohexane	110-82-7	LD50 Dermal	Rabbit	2,001 mg/kg	
		LC50	Rat	14 mg/l	4 h
Heptane	142-82-5	LD50 Oral	Rat	15,001 mg/kg	
		LC50	Rat	103 mg/l	4 h

* Various CAS #'s

Irritation/Corrosion

Component	CAS No	Test	Species	Result	Exposure
Acetone	67-64-1	Skin	Rabbit	Mild irritation	24 h
		Eye	Rabbit	Irritation	24 h

Section 11. Toxicological Information

Irritation/Corrosion (cont.)

Component	CAS No	Test	Species	Result	Exposure
Toluene	108-88-3	Skin	Rabbit	Irritating	4 h
		Eye	Rabbit	Slight irritation	-
N-hexane	110-54-3	Skin		Irritation	-
	110-54-3	Eye		Mild irritation	-
Cyclohexane	110-82-7	Skin		Irritation	-
	110-82-7	Eye		Mild irritation	-
Heptane	142-82-5	Skin		Irritation [1]	-
	142-82-5	Eye		Mild irritation	-

1 – Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of product.

Germ Cell Mutagenicity : Petroleum Distillate (CAS #: 64741-84-0)
Benzene (CAS #: 71-43-2)

Carcinogenity

IARC : Benzene (CAS #: 71-43-2): Group 1

NTP : Benzene (CAS #: 71-43-2): Known to be human carcinogen.

OSHA : Benzene (CAS #: 71-43-2): OSHA specifically regulated carcinogen.

CA Prop 65 : WARNING! This product can expose you to a chemical known to the State of California to cause cancer.
Benzene (CAS #: 71-43-2)

Reproductive Toxicity : Toluene (108-88-3) – Suspected of damaging the unborn child.

CA Prop 65 : WARNING! This product can expose you to chemicals known to the State of California to cause birth defects or other reproductive harm.
Benzene (CAS #: 71-43-2)
N-hexane (CAS #: 110-54-3)
Toluene (CAS #: 108-88-3)

Specific Target Organ Toxicity (Single Exposure) : High concentrations may cause narcotic effects and central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.

Specific Target Organ Toxicity (Repeated Exposure) : Product components cause damage to organs through prolonged or repeated exposure. Target organs: respiratory system, peripheral and Central Nervous System (CNS), blood, skin, liver and kidneys.

Aspiration Hazard : Product is a Category 1 Aspiration hazard. Product may be fatal if swallowed and enters airways.

Section 11. Toxicological Information

Information on the Likely Routes of Exposure : Common routes of exposure: inhalation, dermal (failure to use skin protection), eye (failure to use safety eyewear). Less common: ingestion (failure to employ recommended hygiene measures (e.g. smoking or eating after handling product without washing hands or using hand protection).

Additional Information : To the best of our knowledge, the chemical, physical and toxicological properties of this product have not been thoroughly investigated.

Section 12. Ecological Information

Ecotoxicity

Component	CAS No	Test	Species	Dose	Exposure
Acetone	67-64-1	LC50 Fish	Fathead Minnow	6,210 mg/l	96 h
	67-64-1	EC50	Water Flea	8,800 mg/l	48 h
Toluene	108-88-3	LC50 Fish	Coho salmon	5.5 mg/l	96 h
		EC50	Water Flea	3.78 mg/l	48 h
Methyl Acetate	79-20-9	LC50 Fish	Zebra Fish	250-350 mg/l	96 h
		EC50	Water Flea	700-1,000 mg/l	24 h
N-hexane	110-54-3	LC50 Fish	Fathead minnow	2.5 mg/l	96 h
		EC50	Water Flea	2.1 mg/l	24 h
Cyclohexane	110-82-7	EC50	Water Flea	3.78 mg/l	48 h
Heptane	142-82-5	LC50 Fish	Goldfish	4 mg/l	24 h
		EC50	Water Flea	1.5 mg/l	48 h

Bioaccumulative Potential

Component	Log P_{ow}	BCF	Potential
Toluene	-	90	Low
n-hexane	4	501.187	High
Heptane	4.66	552	High
Cyclohexane	3.44	167	Low

Mobility in Soil

Soil/water Partition Coefficient (K_{OC}) : Not available.

Other Adverse Effects : No known significant effects of critical hazards.

Section 13. Disposal Considerations

Waste Treatment Methods

Product : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Contaminated Packaging : Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

	DOT	IMDG	IATA
UN Number	UN 1133	UN 1133	UN 1133
UN Proper Shipping Name	ADHESIVES, containing flammable liquid	ADHESIVES, CONTAINING FLAMMABLE LIQUID	ADHESIVES, containing flammable liquid
Transport Hazard Classes	3	3	3
Packing Group	II	II	II
Environmental Hazards	Yes	Yes	Yes
Additional Information	-	EMS-No: F-E, S-E	-

Special Precautions for User : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory Information

TSCA (Toxic Substance Control Act)
All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory).

DSL Status
All components of this product are on the Canadian DSL list.

Section 15. Regulatory Information

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR122.21and 40 CFR 122.42).

Chemical Name	CWA – Reportable Quantities	CWA – Toxic Pollutants	CWA – Priority Pollutants	CWA – Hazardous Substances
Toluene (108-88-3)	1000 lbs.	X	X	X
Cyclohexane (110-82-7)	1000 lbs.	-	-	X

X - Listed

SARA 311/312 Hazards

Fire Hazard (Flammable liquid), Acute Health Hazard (Aspiration hazard, Skin corrosion or irritation; Serious eye damage or eye irritation; Specific Target Organ Toxicity, single exposure: respiratory tract irritation, narcotic effects; Specific Target Organ Toxicity, repeated exposure: damage to organs), Chronic Health Hazard (Carcinogenicity, Reproductive Toxicity).

SARA 313 Components

Compound	CAS-No.
Toluene	108-88-3
N-hexane	110-54-3
Cyclohexane	110-82-7

Pennsylvania Right to Know Components

Compound	CAS-No.
Toluene	108-88-3
Heptane [and isomers]	142-82-5
N-hexane	110-54-3
Cyclohexane	110-82-7

Massachusetts Right to Know Components

Compound	CAS-No.
Heptane [and isomers]	142-82-5
N-hexane	110-54-3
Cyclohexane	110-82-7

New Jersey Right to Know Components

Compound	CAS-No.
Toluene	108-88-3
Heptane [and isomers]	142-82-5
N-hexane	110-54-3
Cyclohexane	110-82-7

California Proposition 65 Components

WARNING! This product can expose you to a chemical known to the State of California to cause cancer.

Compound	%	CAS-No.
Benzene	< 0.1	71-43-2

Section 15. Regulatory Information

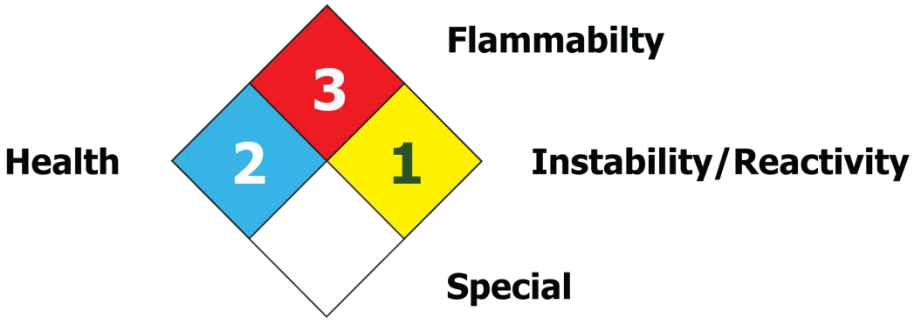
California Proposition 65 Components (cont.)

WARNING! This product can expose you to chemicals known to the State of California to cause birth defects or other reproductive harm.

Compound	%	CAS-No.
n-Hexane	< 7	110-54-3
Toluene	< 12.5	108-88-3
Benzene	< 0.1	71-43-2

Section 16. Other Information

National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

HMIS Rating

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	1

History

Date of issue / Date of Revision : 3/12/2023

Date of previous issue : 6/23/2022

References : Not available

Abbreviations and Acronyms

ACGIH: American Conference of Governmental Industrial Hygienists.
ATE: Acute Toxicity Estimate
CAS: Chemical Abstracts Service (division of the American Chemical Society).
DOT: US Department of Transportation.

Section 16. Other Information

Abbreviations and Acronyms (cont.)

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
HMIS: Hazardous Materials Identification System.
HNOC: Hazards Not Otherwise Classified.
IARC: International Agency for Research on Cancer.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA).
IDLH: Immediately Dangerous to Life or Health (US National Institute for Occupation Health and Safety (NIOSH)).
IMDG: International Maritime Code for Dangerous Goods.
NFPA: National Fire Protection Association.
NIOSH: National Institute of Occupational Safety and Health.
NTP: National Toxicology Program.
OECD: Organization for Economic Co-Operation and Development.
OEL: Occupational Exposure Limit.
OSHA: Occupational Safety and Health Administration.
PEL: Permissible Exposure Limits.
REL: Recommended Exposure Limits.
SARA: Superfund Amendments and Reauthorization Act.
STEL (ST): Short Term Exposure Limit (ACGIH/NIOSH)
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limit Values (ACGIH).
TWA: Time Weighted Average.
VOC: Volatile Organic Compound.

Disclaimer

The information herein is believed to be accurate and is presented in good faith; however, no warranties or representations are made by Forza regarding the accuracy or completeness of the information. Forza shall not be liable for any damages resulting from the handling, or from the contact with the above product.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.