Techno Adhesives Co. SAFETY DATA SHEET

	Section 1. Identification
Product Name: Product Code: Product Type:	Techno Adhesives #107 107 Liquid
Product Manufacturer:	Techno Adhesives Company 12113 Mosteller Road Cincinnati, OH 45241 (800) 432-0107
In case of an emergency:	United States: (800) 633-8253 International: (801) 629-0667 – Professional Emergency Response Services, Acct #9137
Sec	tion 2. Hazards Identification
Emergency Overview	
Appearance/Odor:	Medium thin liquid; green, black, red or clear color, solvent odor.
Classification:	FLAMMABLE LIQUID; HIGHLY FLAMMABLE – Category 2, H225 ASPIRATION HAZARD – Category 1, H304 SKIN IRRITATION; - Category 3, H315 EYE IRRITATION - Category 2B, H320 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] – Category 3, H336 REPRODUCTIVE TOXICITY – Category 2, H361 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE); ORAL – Category 2, H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE); ORAL – Category 2, H373 ACUTE AQUATIC TOXICITY - Category 2, H401 CHRONIC AQUATIC TOXICITY - Category 4, H411
Signal word :	DANGER
Hazard statements:	 H225: Highly flammable liquid and vapor. H304: May be fatal if swallowed and enters airway. H315: Causes skin irritation. H320: Causes eye irritation. H336: May cause drowsiness or dizziness. H361: Suspected of damaging male fertility with prolonged

exposure. H373: May cause damage to organs (central nervous system (CNS)) through prolonged or repeated exposure. Inhalation.

H373: May cause damage to organs (central nervous system (CNS)) through prolonged or repeated exposure. Oral.

Section 2. Hazards Identification

Hazard statements (cont.):

H401: Toxic to aquatic life. H411: Toxic to aquatic life with long lasting effects.

Hazard pictograms:



<u>Precautionary statements</u> Prevention:

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 smokina. 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 precautionary measures against static discharge. P260: Do not breathe fumes/vapors. P264: Wash hands and exposed skin thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment. P280: Wear eye protection/face protection. Wear protective aloves. P281: Use personal protective equipment as required. P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position 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. P312: Call a POISON CENTER or doctor/physician if you feel unwell. P331: Do NOT induce vomiting. P332 + P313: If skin irritation occurs: Get medical advice/attention.

Response:

	Section 2. Hazards Identification		
Response (cont.):	P337 +P313: If eye irritation persists: Get medical advice/attention. P362: Take off contaminated clothing and wash before reuse. P370 + P378: In case of fire: Use 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 regulations.		
GHS label elements			
General:	Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.		
OSHA/HCS status:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).		
Hazards not otherwise	Nene known		
classified:	None known.		

Section 3. Composition/Information on Ingredients

Mixture

Not available

Not applicable.

Substance/Mixture:		
Other means of identification :		
CAS Number/Other Identifiers		
CAS Number :		

Component%CAS NumberCyclohexane23.0110-82-7Petroleum Distillate (low boiling point naphtha (petroleum))45.064741-84-0

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 (and isomers)	15-40	*
Heptane	10-30	142-82-5

Section 3. Composition/Information on Ingredients

Component information for Petroleum Distillate (CAS 64741-84-0) (cont.)

Component	%	CAS Number
Methylcyclopentane	10-30	96-37-7
Cyclohexane	1-5	110-82-7

*=Various

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

Eye Contact:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Get medical attention.
Skin Contact:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. Dispose of leather goods which are contaminated with the product.
Inhalation:	Remove victim 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. Get medical attention if adverse health effects persist or are severe. 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.
Ingestion:	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. 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.

Section 4. First Aid Measures

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

Eye Contact:	Causes eye irritation. Symptoms may include pain, watering and/or redness.	
Inhalation:	Vapors that are inhaled may be irritating and CNS-depressant. Symptoms may include: nausea, headaches, dizziness, vertigo, chest pain, unconsciousness to coma and death upon extended and severe exposure.	
Skin Contact:	Causes skin irritation. Prolonged contact may lead to dryness of skin and dermatitis.	
Ingestion:	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.	
Indication of Immed	ate Medical Attention and Special Treatment Needed, If Necessary	
Notes to Physician:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	
Specific Treatments:	No specific treatment.	
Protection of First Responders:	No action taken shall be taken involving any personal risk without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.	

See toxicological information (Section 11)

Section 5. Fire Fighting Measures			
Lower Explosive Limit (LEL)	1.0% (V)		
Upper Explosive Limit (UEL)	7.0% (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.		
Product of Combustion:	Decomposition products may include carbon monoxide and carbon dioxide.		
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. 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. Avoid breathing vapor or mist. 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 nonemergency 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	
Small Spill:	Stop leak if without risk. Use spark-proof tools and explosion- proof equipment. Move containers from spill area. Absorb with an inert absorbent material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Wash the spill area clean with water and detergent, observing environmental requirements.
Large Spill:	Stop leak if without risk. Use spark-proof tools and explosion- proof equipment. Move containers from spill area. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Wash the spill area clean with water and detergent, observing environmental requirements. Note: see Section 13 for waste disposal.

Section 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. Do not get in eves or on skin or clothing. Do not breathe vapor or mist. Do not swallow. 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. 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

Safe Storage Conditions:

Hygiene:

General Occupational

Keep away from flame, sparks, 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. 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.

areas. See also Section 8 for additional information on hygiene

measures.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits:

List	Components	CAS-No.	Туре	Value
OSHA Z1	Naphtha; low boiling point	64741-84-0	PEL	100 ppm 400 mg/m ³
	N-hexane	110-54-3	PEL	500 ppm 1,800 mg/m ³
	Cyclohexane	110-82-7	PEL	300 ppm 1,050 mg/m ³
	Heptane (and isomers)	142-82-5	PEL	500 ppm 2,000 mg/m ³
ACGIH	Naphtha; low boiling point	64741-84-0	TWA	400 ppm
	N-hexane	110-54-3	TWA	50 ppm
	Hexane, and other isomers	-	TWA	500 ppm
		-	STEL	1000 ppm
	Methylcyclopentane	96-37-7	TWA	500 ppm
	Cyclohexane	110-82-7	TWA	100 ppm
	Heptane	142-82-5	TWA	400 ppm
		142-82-5	STEL	500 ppm

Engineering Controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin ProtectionHand 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.

Section 8. Exposure Controls/Personal Protection

Hand Protection (cont.):	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.
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:	Green, black, red or clear.
Odor:	Characteristic solvent odor.
pH:	Not Available.
Melting Point:	Not Applicable.
Boiling Point:	140°F
Specific Gravity:	.78 g/cm ³
Solubility in Water	Not available.
Evaporation Rate	2.6 (Butyl Acetate = 1)
VOC Content:	524 g/l (EPA Method 24)
Vapor Pressure:	120 mm @ 68°F
Vapor Density (AIR = 1):	3.0

Section 10. Stability and Reactivity

Reactivity:

No specific test data related to reactivity is available for this product or its ingredients.

Section 10. Stability and Reactivity

Chemical Stability:

Conditions to Avoid:

Incompatible Materials:

Hazardous Decomposition Products:

Stable.

No specific data. No specific data.

Ho Specific dddi

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Possibility of Hazardous Reactions:

Under normal conditions of storage and use, hazardous reactions will not occur.

Section 11. Toxicological Information

Information on Toxicological Effects

Acute Toxicity	
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Component	CAS No	Result	Species	Dose	Exposure
N-hexane	110-54-3	LD50 Oral	Rat	25,000 mg/kg	-
	110-54-3	LD50 Dermal	Rabbit	2,000 mg/kg	-
	110-54-3	LC50	Rat	171.6 mg/l	4 h
Cyclohexane	110-82-7	LD50 Dermal	Rabbit	2,001 mg/kg	
	110-82-7	LC50	Rat	14 mg/l	4 h
Heptane	142-82-5	LD50 Oral	Rat	15,001 mg/kg	
	142-82-5	LC50	Rat	103 mg/l	4 h

Sensitization

Component	CAS No	Test	Species	Result	Exposure
N-hexane	110-54-3	Skin		Irritation	-
	110-54-3	Eye		Mild irritation	-
	108-88-3	Eye		Mild irritation	-
Cyclohexane	110-82-7	Skin		Irritation	-
	110-82-7	Eye		Mild irritation	-
Heptane	142-82-5	Skin		Irritation (prolonged skin contact may produce dermatitis due to degreasing properties of compound)	_
	142-82-5	Eye		Mild irritation	-

Section 11. Toxicological Information

Carcinogenity

- : Not available
- **Reproductive Toxicity** : N-hexane: In laboratory studies, prolonged exposure to elevated concentrations of n-hexane was associated with decreased sperm count and degenerative changes in the testicles of rats.
- Teratogenicity
- : Not available

Specific Target Organ Toxicity (single exposure)

Component	Category	Route of exposure	Target Organs
n-hexane	3	Not applicable	Narcotic effects
Hexane, other isomers	3	Not applicable	Narcotic effects
Heptane	3	Not applicable	Narcotic effects
Methylcyclopentane	3	Not applicable	Narcotic effects
Cyclohexane	3	Not applicable	Narcotic effects

Specific Target Organ Toxicity (repeated exposure) : Central nervous system (CNS).

Aspiration Hazard

Component	Result
n-hexane	ASPIRATION HAZARD – Category 1
Hexane, other isomers	ASPIRATION HAZARD – Category 1
Heptane	ASPIRATION HAZARD – Category 1
Methylcyclopentane	ASPIRATION HAZARD – Category 1
Cyclohexane	ASPIRATION HAZARD – Category 1

Information on the likely routes of exposure

: Oral, Dermal, Inhalation

Section 12. Ecological Information

Ecotoxicity

Component	CAS No	Test	Species	Dose	Exposure
N-hexane	110-54-3	LC50 Fish	Fathead minnow	2.5 mg/l	96 h
	110-54-3	EC50	Water Flea	2.1 mg/l	24 h
Cyclohexane	110-82-7	LC50	Fathead minnow	4.53 mg/l	96h
	110-82-7	EC50	Water Flea	0.9 mg/l	48 h
Heptane	142-82-5	LC50 Fish	Goldfish	4 mg/l	24 h
	142-82-5	EC50	Water Flea	1.5 mg/l	48 h

Section 12. Ecological Information

Bioaccumulative Potential

Component	LogPow	BCF	Potential
n-hexane	4	501.187	High
Heptane	4.66	552	High
Methylcyclopentane	3.37	-	Low
Cyclohexane	3.44	167	Low

Mobility in Soil

Soil/water Partition Coefficient (K_{oc}) Other Adverse Effects : Not available.

: No known significant effects of critical hazards.

Section 13. Disposal Considerations

Other Adverse Effects

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. 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 Classification	IMDG	ΙΑΤΑ
UN Number	1133	1133	1133
UN Proper Shipping Name	ADHESIVES,	ADHESIVES,	ADHESIVES,
	containing flammable	containing flammable	containing flammable
	liquid	liquid	liquid
Transport Hazard Classes	3	3	3
Packing Group	II	II	II
Environmental Hazards	YES	YES	YES
Additional Information	-	-	-

Section 14. Transport Information

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

U.S. Federal Regulations	: United States Inventory (TSCA 8b): All components are listed or exempted.
DSL Status	: All components of this product are on the Canadian DSL list.
SARA 311/312 Hazards	: Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA III	US EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65 – Supplier Notification Required
Components	CAS-No.
Cyclohexane	110-82-7
N-hexane	110-54-3
PENN RTK	US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)
Components	CAS-No.
Heptane [and isomers]	142-82-5
Pentane	109-66-0
Methylcyclopentane	96-37-7
N-hexane	110-54-3
Cyclohexane	110-82-7
MASS RTK	US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)
Components	CAS-No.
Heptane [and isomers]	142-82-5
Pentane	109-66-0
Methylcyclopentane	96-37-7
N-hexane	110-54-3
Cyclohexane	110-82-7

Section 15. Regulatory Information

NJ RTK

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Components	CAS-No.
Heptane [and isomers]	142-82-5
Pentane	109-66-0
Methylcyclopentane	96-37-7
N-hexane	110-54-3
Cyclohexane	110-82-7
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Label for Supply



Section 16. Other Information

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



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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.

Section 16. Other Information

History

Date of printing	: 4/20/16
Date of issue/Date of Revision	: 4/20/16
Date of previous issue	: None
References	: Not available

Disclaimer

The information herein is believed to be accurate and is presented in good faith; however, no warranties or representations are made by Techno Adhesives Co. regarding the accuracy or completeness of the information. Techno Adhesives Co. 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.