Safety Data Sheet

according to OSHA Hazard Communication
29 CFR Part 1910.1200

SECTION 1. Identification

Product Code 951189999TS

Product Name: RelaTECH Transfer Solvent

Supplied by:
RelaDyne, LLC
8280 Montgomery Road,
Suite 101
Cincinnati, OH 45236
888-830-3156
www.reladyne.com

24 Hour Emergency:
INFOTRAC: 1-800-535-5053

Outside U.S. and Canada
Infotrac: 1-800-535-5053

NOTE: INFOTRAC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals

SECTION 2. Hazard(s) Identification

***** EMERGENCY OVERVIEW ***:** Flammable liquid and vapor. May be fatal if swallowed. Suspect cancer hazard.

GHS Classification
Eye Irrit. 2, Flam. Liq. 3, STOT RE 1, STOT SE 2, Skin Irrit. 2

Symbol(s) of Product

Signal Word
Danger

GHS HAZARD STATEMENTS

Flammable Liquid, category 3	H226	Flammable liquid and vapor.
Skin Irritation, category 2	H315	Causes skin irritation.
Eye Irritation, category 2	H319	Causes serious eye irritation.
STOT, single exposure, category 2	H371	May cause damage to organs.
STOT, repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.

GHS PRECAUTIONARY STATEMENTS

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 precautionary measures against static discharge.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P270	Do no eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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+P311	IF exposed or concerned: Call a POISON CENTER/doctor/physician
P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see first aid section on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use appropriate method to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3. Composition/Information on Ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Cyclohexanone	108-94-1	25-50	GHS02-GHS06	H226-302-311-319-332
Light aromatic solvent naphtha (petroleum)	64742-95-6	10-25	GHS02-GHS07-GHS08	H226-315-319-335-371-372
n-Butyl Acetate	123-86-4	10-25	GHS02-GHS07	H226-336
1-methoxy-2-acetoxypropane	108-65-6	10-25	GHS02-GHS07	H226-332
1,2,4 trimethylbenzene	95-63-6	10-25	GHS02-GHS07-GHS08	H226-315-319-332-335-371
Xylene	1330-20-7	2.5-10	GHS02-GHS07-GHS08	H226-315-319-332-335-351-373
Ethylbenzene	100-41-4	0.1-1.0	GHS02-GHS07-GHS08	H225-315-319-332-335-351-373

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

SECTION 4. First-Aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly. Remove contact lenses if worn.

FIRST AID - SKIN CONTACT: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately and clean shoes before reuse.

FIRST AID - INHALATION: Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention. To prevent aspiration, keep head below knees.

FIRST AID - INGESTION: Get medical attention immediately. Do not induce vomiting. Do not give liquids. Obtain emergency medical attention.

SECTION 5. Fire-Fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid and vapor. Can form explosive mixtures at temperatures at or above the flashpoint. May cause flash fire or explosion. Vapors can travel to a source of ignition and flash back. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Also, do not reuse container without commercial cleaning or reconditioning. Closed container may explode under extreme heat.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Avoid use of solid water streams. Use water with caution. Material will float and may ignite on surface of water. Water may be ineffective in fighting the fire. Water spray to cool containers or protect personnel. Use with caution. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Small fires: carbon dioxide or dry chemical. Large fire: alcohol-type aqueous film-forming foam or water spray.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog

SECTION 6. Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASE OR SPILLED: Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.)Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Ventilate spill area. Stay upwind of spill. A vapor supressing foam may be used to reduce vapors. Use water mist or spray to disperse vapors. Collect spilled materials for disposal. Use only non-combustible material for clean-up. Use clean, non-sparking tools to collect absorbed materials. Remove from surface by skimming or with suitable absorbents. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Recover by pumping (use an explosion proof or hand pump).

SECTION 7. Handling and Storage

HANDLING: Use only in a well ventilated area. Avoid breathing vapor, fumes or mist. Avoid contact with eyes, skin, and clothing. Potential peroxide former. If peroxide formation is suspected, do not open or move container. Material accumulates static charge (ignition source). When transferring, follow proper grounding procedures. Use spark-resistant tools. Do not load into compartments adjacent to heated cargo. Use explosion proof equipment. Always open containers slowly to allow any excess pressure to vent. After opening, purge container with nitrogen before reclosing. Follow all MSDS/label precautions even after containers are emptied because they may retain product residues.

STORAGE: Keep away from heat, sparks, and flame. Containers can build up pressure if exposed to heat (fire). Store containers in a cool, well ventilated place. Keep container closed when not in use. Storage under nitrogen atmosphere is recommended. Do not allow to evaporate to near dryness. Protect from direct sunlight. Material is a static accumulator which has the potential of forming ignitable vapor-air mixtures in storage tanks.

SECTION 8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Cyclohexanone	20 ppm	50 ppm	50 ppm	N.D.
Light aromatic solvent naphtha (petroleum)	N.D.	N.D.	N.D.	N.D.
n-Butyl Acetate	150 ppm	200 ppm	150 ppm	N.D.
1-methoxy-2-acetoxypropane	N.D.	N.D.	N.D.	N.D.
1,2,4 trimethylbenzene	25 ppm	N.D.	25 ppm	N.D.
Xylene	100 ppm	150 ppm	100 ppm	N.D.
Ethylbenzene	100ppm	125ppm	100ppm	N.D.

Personal Protection

RESPIRATORY PROTECTION: A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

SKIN PROTECTION: Wear impervious gloves to prevent contact with the skin. Wear long sleeves when contact is likely to occur. Wear protective gear as needed - apron, suit, boots.

EYE PROTECTION: Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).

OTHER PROTECTIVE EQUIPMENT: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

HYGENIC PRACTICES: Do not eat, drink, or smoke in areas where this material is used. Avoid breathing vapors. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling. Wash hands before eating.

SECTION 9. Physical and Chemical Properties

Appearance:	N.D.	**Physical State:**	Liquid
Odor:	TYPICAL	**Odor Threshold:**	N.D.
Density, g/cm3:	0.907	**pH:**	N.D.
Freeze Point, °F:	N.D.	**Viscosity:**	N.D.
Solubility in Water:	N.D.	**Explosive Limits, vol%:**	0.9 - 7.6
Boiling Range, °F:	257 - 340	**Flash Point, °F:**	105
Evaporation Rate:	N.D.	**Auto-ignition Temp., °F:**	N.D.
Vapor Density:	N.D.	**Vapor Pressure:**	N.D.

(See "Other information" Section for abbreviation legend)

SECTION 10. Stability and Reactivity

STABILITY: No Information

CONDITIONS TO AVOID: Avoid impact, friction, heat, sparks, flame and source of ignition. Minimize exposure to air. Avoid static discharge.

INCOMPATIBILITY: Keep separate from alkalies. Prevent contact with strong oxidizing agents. Keep away from strong bases. Keep away from acids. Avoid contact with concentrated sulfuric or nitric acid.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic gases/fumes are given off during burning or thermal decomposition. During combustion carbon monoxide may be formed. During combustion carbon dioxide may be formed.

HAZARDOUS POLYMERIZATION: No Information

SECTION 11. Toxicological Information

Information on Toxicological Effects

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. Breathing saturated vapors for a few minutes may be fatal. Saturated vapors can be encountered in confined spaces and/or under conditions of poor ventilation. Vapors can cause irritation of the respiratory tract. High concentrations can cause headache, nausea, weakness, lightheadedness, and stupor (CNS depression). May cause dizziness and drowsiness. Repeated or prolonged exposure may cause liver and kidney damage.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Contact with skin may cause mild irritation. Causes skin irritation. Harmful if absorbed through skin. Can be absorbed through skin and produce central nervous system effects. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). Personnel with pre-existing skin disorders should avoid contact with this product.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation. May cause corneal injury. Symptoms may include stinging, tearing, redness and swelling. Damage to eyes is reversible.

EFFECTS OF OVEREXPOSURE - INGESTION: May be fatal if swallowed. Harmful or fatal if liquid is aspirated into lungs. Irritating to mouth, throat, and stomach. Ingestion may cause gastrointestinal tract irritation. Overexposure may cause nausea, diarrhea, and/or vomiting. May cause nausea and diarrhea. May cause headache. May cause dizziness and drowsiness and/or stupor.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Suspect cancer hazard. Possible brain damage from overexposure. The International Agency for Research on Cancer has evaluated ethylbenzene and classified it as a possible human carcinogen (Group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. Overexposure may cause nervous system damage. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema. Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction. Overexposure may cause kidney damage. May cause liver disorder (e.g., edema, proteinuria) and damage. Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system, central nervous system, kidney, liver, skin, and/or eyes.

Primary Route(s) of Entry: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

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

CAS-No.	Name according to EEC	Oral LD50, mg/kg	Dermal LD50, mg/kg	Vapor LC50, mg/L
108-94-1	Cyclohexanone	>1,400	>948	>32,080
64742-95-6	Light aromatic solvent naphtha (petroleum)	>3,000	>3160	>20.0
123-86-4	n-Butyl Acetate	>14,130	>16,000	>20.0
108-65-6	1-methoxy-2-acetoxypropane	8532.0	>5,000	4345.0
95-63-6	1,2,4 trimethylbenzene	5000	>5000	18
1330-20-7	Xylene	>3523	>4200	>20.0
100-41-4	Ethylbenzene	3500	15433	>20.0

SECTION 12. Ecological Information

ECOLOGICAL INFORMATION: No Information

SECTION 13. Disposal Considerations

For more guidance and information contact our Waste Services Division at (262) 658-4000.

Always dispose of any waste in accordance with all local, state, and federal regulations.

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

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASE OR SPILLED: Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.)Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Ventilate spill area. Stay upwind of spill. A vapor supressing foam may be used to reduce vapors. Use water mist or spray to disperse vapors. Collect spilled materials for disposal. Use only non-combustible material for clean-up. Use clean, non-sparking tools to collect absorbed materials. Remove from surface by skimming or with suitable absorbents. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Recover by pumping (use an explosion proof or hand pump).

SECTION 14. Transport Information

DOT Proper Shipping Name:	Flammable liquids, n.o.s. (naphtha solvent, butyl acetates)	**Packing Group:**	III
DOT Hazard Class:	3	**Hazard SubClass:**	No Information
DOT UN/NA Number:	UN1993	**Resp. Guide Page:**	128

SECTION 15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

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

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313:

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

Chemical Name	CAS-No.
1,2,4 trimethylbenzene	95-63-6
Xylene	1330-20-7
Ethylbenzene	100-41-4
Cumene	98-82-8

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA components exist in this product.

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

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

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

PENNSYLVANIA RIGHT-TO-KNOW

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

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

CALIFORNIA PROPOSITION 65 CARCINOGENS

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

Chemical Name	CAS-No.
Ethylbenzene	100-41-4
Cumene	98-82-8

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

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

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class: No Information

SECTION 16. Other Information

Revision Date: 6/19/2018 **Supersedes Date:** New SDS

Datasheet produced by: EH&S - Regulatory Department

HMIS Ratings:

Health:	1	**Flammability:**	2	**Reactivity:**	0 - No Hazard	**Personal Protection:**	X

Volatile Organic Compounds, gr/ltr: 668

DISCLAIMER: THE VOLATILE ORGANIC COMPOUND (VOC) CONTENT REPORTED HEREIN, IF ANY, IS BASED ON A MATERIAL VOC CALCULATION. NOTE THAT SEVERAL METHODS ARE USED FOR CALCULATING VOC CONTENT AND THAT STANDARDS/ REQUIREMENTS REGARDING VOC CONTENT VARY BY LOCATION/JURISDICTION. ACCORDINGLY, EMCO MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, REGARDING THIS MATERIAL'S COMPLIANCE WITH VOC STANDARDS/ REQUIREMENTS APPLICABLE IN LOCATIONS/JURISDICTIONS WHERE THIS MATERIAL MAY BE SOLD OR USED.

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

H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H371	May cause damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.

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

GHS02

GHS06

GHS07

GHS08

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

The information on this SDS was obtained from sources which we believe to be reliable. However, the information provided is without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information and recommendations are offered for the user's consideration and examination and should be used to make an independent determination of the methods to safeguard workers and the environment. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For these reasons we do not assume responsibility and expressly disclaim any liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS may not be applicable. It is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.