

SAFETY DATA SHEET



1. Identification

Product identifier RelaTECH Hyvolt II
Other means of identification Not available.
Recommended use Transformer Oil
Recommended restrictions None known.
Manufacturer/Importer/Supplier/Distributor information
Manufacturer
Manufactured For: RelaDyne, LLC
Address: 8280 Montgomery Road,
Suite 101
Cincinnati, OH 45236
Telephone: www.reladyne.com
888-830-3156
Emergency Contacts 800-535-5053 INFOTRAC

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Aspiration hazard Category 1
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements



Signal word Danger
Hazard statement May be fatal if swallowed and enters airways.
Prevention Do not breathe gas/mist/vapors/spray.
Response IF exposed or concerned: Get medical advice/attention.
Storage Store in accordance with local/regional/national/international regulation.
Disposal Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. See section 13 of this SDS for disposal instructions.
Hazard(s) not otherwise classified (HNOC) None known.
Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC		64742-53-6	59.7 - 99.9
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC		64742-55-8	0 - 40
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC		64742-56-9	0 - 20

Chemical name	Common name and synonyms	CAS number	%
2,6-DI-TERT-BUTYL-P-CRESOL [BUTYLATED HYDROXYTOLUENE (BHT)]		128-37-0	< 0.3

4. First-aid measures

Inhalation	Move to fresh air. Oxygen or artificial respiration if needed. IF exposed or concerned: Get medical advice/attention.
Skin contact	Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If skin irritation or an allergic skin reaction develops, get medical attention.
Eye contact	Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Defatting of the skin.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Contact physician if discomfort continues.

5. Fire-fighting measures

Suitable extinguishing media	Halon. Dry chemicals. Foam. Carbon dioxide (CO ₂). Water spray or fog. Do not use water jet as an extinguisher, as this will spread the fire.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	No unusual fire or explosion hazards noted.
Special protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire-fighting equipment/instructions	Cool containers exposed to flames with water until well after the fire is out. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Use pressurized air mask if product is involved in a fire.
General fire hazards	No unusual fire or explosion hazards noted. Flammability Class: Combustible IIIB

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation.
Methods and materials for containment and cleaning up	Large Spills: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth or absorbent material then place into containers. Following product recovery, flush area with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewer, basements or confined areas. Avoid discharge to the aquatic environment. Contact local authorities in case of spillage to drain/aquatic environment. Avoid discharge into drains, water courses or onto the ground. If this material is spilled into navigable waters and creates a visible sheen, it is reportable to the National Response Center.

7. Handling and storage

Precautions for safe handling	DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands after handling and before eating. Do not get this material in contact with eyes. Avoid contact with skin. Avoid prolonged exposure. All handling to take place in well-ventilated area. Shower after work. Remove and wash contaminated clothing promptly.
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Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Store in a well-ventilated place. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC (CAS 64742-53-6)	PEL	5 mg/m3	Mist.
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC (CAS 64742-55-8)	PEL	5 mg/m3	Mist.
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS 64742-56-9)	PEL	5 mg/m3	Mist.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
2,6-DI-TERT-BUTYL-P-CRESOL [BUTYLATED HYDROXYTOLUENE (BHT)] (CAS 128-37-0)	TWA	2 mg/m3	Inhalable fraction and vapor.
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC (CAS 64742-55-8)	TWA	5 mg/m3	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Material	Type	Value	Form
HyVolt II (CAS Mixture)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Components	Type	Value	Form
2,6-DI-TERT-BUTYL-P-CRESOL [BUTYLATED HYDROXYTOLUENE (BHT)] (CAS 128-37-0)	TWA	10 mg/m3	
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC (CAS 64742-53-6)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT PARAFFINIC (CAS 64742-55-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED LIGHT PARAFFINIC (CAS 64742-56-9)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls	Adequate ventilation should be provided whenever the material is heated or mists are generated. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Goggles/face shield are recommended.
Hand protection	Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.
Other	Chemical/oil resistant clothing is recommended. Launder contaminated clothing before reuse.
Respiratory protection	Under normal conditions, respirator is not normally required. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Thermal hazards	Not available.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9. Physical and chemical properties

Appearance	Clear & bright
Physical state	Liquid.
Form	Liquid.
Color	Water White to Pale
Odor	Mild Petroleum Odor
Odor threshold	Not available.
pH	Not applicable
Melting point/freezing point	< -40 °F (< -40 °C) ASTM D 5949
Initial boiling point and boiling range	> 460 °F (> 237.78 °C) ASTM D 2887/ ISO 3294
Flash point	>= 293.0 °F (>= 145.0 °C) Cleveland Open Cup ASTM D 92/ ISO 2592
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	0.89 (59 °F (15 °C) ASTM D 4052/ ISO 12185)
Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not established.
Auto-ignition temperature	> 599 °F (> 315 °C) ASTM E 659
Decomposition temperature	Not available.
Viscosity	9.3 cSt (104 °F (40 °C) ASTM D 445)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, flames and sparks. Avoid temperatures exceeding the flash point.
Incompatible materials	Strong oxidizing agents.

Hazardous decomposition products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information**Information on likely routes of exposure**

- Ingestion** May cause gastrointestinal discomfort if swallowed. Do not induce vomiting. Vomiting may increase risk of product aspiration. May be fatal if swallowed and enters airways.
- Inhalation** May be fatal if swallowed and enters airways.
- Skin contact** Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
- Eye contact** May be irritating to eyes.

Symptoms related to the physical, chemical and toxicological characteristics

Defatting of the skin. Coughing. Shortness of breath. Discomfort in the chest.

Information on toxicological effects

Acute toxicity Not applicable.

Components	Species	Test Results
2,6-DI-TERT-BUTYL-P-CRESOL [BUTYLATED HYDROXYTOLUENE (BHT)] (CAS 128-37-0)		
Acute		
<i>Oral</i>		
LD50	Guinea pig	10700 mg/kg
	Mouse	1040 mg/kg
	Rat	890 mg/kg

Not available. * Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation May cause defatting of the skin, but is neither an irritant nor a sensitizer.

Serious eye damage/eye irritation Not classified. May cause minor irritation on eye contact.

Respiratory or skin sensitization

Respiratory sensitization Not classified.

Skin sensitization Not classified. May cause defatting of the skin, but is neither an irritant nor a sensitizer.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Nota L - Meets EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346. Not classified.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity Contains no ingredient listed as toxic to reproduction

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard May be fatal if swallowed and enters airways.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

Further information Risk of chemical pneumonia after aspiration.

12. Ecological information

Ecotoxicity Not expected to be harmful to aquatic organisms.

Product	Species	Test Results
HyVolt II (CAS Mixture)		
Crustacea	EC50 Daphnia	863.8272 mg/l, 48 hours estimated

Components	Species	Test Results
2,6-DI-TERT-BUTYL-P-CRESOL [BUTYLATED HYDROXYTOLUENE (BHT)] (CAS 128-37-0)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia pulex)
		1.44 mg/l, 48 hours

Not available. * Estimates for product may be based on additional component data not shown.

Persistence and degradability	Not inherently biodegradable.
Bioaccumulative potential	Bioaccumulation is unlikely to be significant because of the low water solubility of this product.
Mobility in soil	Not available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	When this product as supplied is to be discarded as waste, it does not meet the definition of a RCRA waste under 40 CFR 261. Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.
Hazardous waste code	Not applicable.
Waste from residues / unused products	Dispose of in accordance with local regulations. Avoid discharge into water courses or onto the ground.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Not Listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 01-13-2014

Revision date 06-22-2018

Version # 02, RLD 3

References
ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
Chemical Abstracts Service Registry Handbook
CRC: Handbook of Chemistry and Physics
ILO Safety Cards
International Labour Organization
International Maritime Organization Marine Pollutants List
NFPA Hazardous Chemical Data Sheets
NIOSH Pocket Guide
Registry of Toxic Effects of Chemical Substances (RTECS)
US DOT Hazardous Materials Regulations

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Information

Physical & Chemical Properties: Multiple Properties
Physical and chemical properties: Appearance
Toxicological Information: Toxicological Data
Toxicological information: Skin contact
Toxicological information: Corrosivity
Regulatory Information: Risk Phrases - Labeling
GHS: Classification