

35 Old Dock Road, Yaphank, NY 11980 Phone: (631) 345-6509 Fax: (631) 775-4023 www.timtronics.com Package For/Supply By:



33 Bridge Street, Pelham, NH 03076 Phone: (603) 635-2800 Fax: (603) 635-1900 www.wakefield.com

MATERIAL SAFETY DATA SHEET

I. Product and Supplier Information

Product Name: TIM- 517 MSDS Number: 517

(Thermal Joint

Wakefield 120 Compound) Publication Date: January, 2007

Product Synonyms: Silicone Thermal Compound Replaces: August, 2005

Chemical Family or Formula: Complex mixture

Supplier: Timtronics Phone: 631-345-6509

35 Old Dock Rd. Fax: 631-775-4023
Yaphank, NY 11980-9702 Website: www.timtronics.com
Product Information: 631-345-6509 Email: info@timtronics.com

Transportation Emergency: 631-345-6509

Note: The purpose of this MSDS is to provide safe handling, shipping and disposal information for users of the product. It is not intended to, nor does it, provide complete or extensive toxicological data on the product or its components. Users who require this information are referred to primary suppliers of the ingredients of interest.

II. Composition and Information on Ingredients

Component Name	CAS#	Concentration
Silicone Fluid	Proprietary information	10-30%

Zinc Oxide* 1314-13-2 50-90%

This is not a hazardous material as defined in OSHA Hazardous Communication Standard.

III. Hazards Identification

OSHA Hazard Classification:

No warning statements required.

Routes of Entry: Inhalation, skin contact, ingestion

Chemical Interactions: Avoid contact with all oxidizing agents.

^{*} Material in non-air born form



35 Old Dock Road, Yaphank, NY 11980 Phone: (631) 345-6509 Fax: (631) 775-4023

www.timtronics.com

Package For/Supply By:



33 Bridge Street, Pelham, NH 03076 Phone: (603) 635-2800 Fax: (603) 635-1900 www.wakefield.com

MATERIAL SAFETY DATA SHEET

IV. First Aid

Inhalation:

Remove individual to fresh air. If not breathing, give artificial respiration or oxygen as appropriate. Keep patient warm. Seek immediate medical advice.

Not an expected route of entry. Overexposure may cause irritation of the mucous membranes and respiratory tract. Skin Contact:

Flush skin thoroughly with soap and water. Rinse thoroughly. Seek medical advice if contact was extensive. Prolonged direct skin contact may cause dermatitis or irritation.

Eyes:

Immediately flush eyes with plenty of water while holding eyelids apart. Seek immediate medical advice.

Overexposure to direct eye contact may cause redness, irritation, discomfort or tearing.

Ingestion:

May produce laxative effect.

Seek immediate medical advice. Never give anything by mouth to an unconscious person.

Symptoms may include: Headache, dizziness, nausea, intestinal disorders and unconsciousness.

Not an expected route of exposure. Ingestion may cause abdominal pains, cramping, nausea or vomiting.

Notes To Physician: Treat symptomatically.

V. Fire Fighting Measures

Flammability Summary:

Heavy Grease Flash Point: > 400 F

Fire/Explosion Hazards:

This material is not considered a potential fire and explosion hazard under normal operating conditions.

Extinguishing Media:

Foam, dry chemical or CO2. Water spray may be used to cool containers.

Do not allow contaminated water to enter sewers or waterways.

Fire Fighting Instructions:

In case of fire, use normal fire fighting equipment including a NIOSH approved self-contained breathing breathing apparatus (SCBA). Use water to cool containers.

Hazardous Combustion Products:

Oxides of carbon.



35 Old Dock Road, Yaphank, NY 11980 Phone: (631) 345-6509 Fax: (631) 775-4023

www.timtronics.com

Package For/Supply By:



33 Bridge Street, Pelham, NH 03076 Phone: (603) 635-2800 Fax: (603) 635-1900 www.wakefield.com

MATERIAL SAFETY DATA SHEET

VI. Accidental Release Measures

Personal Protection for Emergency Situations:

Evacuate the area of all unnecessary personnel. Eliminate any ignition sources until the area is determined to be free from explosion and fire hazards. Contain the release and eliminate its source if this can be done safely. Wear protective clothing. Keep unprotected persons away from spill.

Spill Mitigation Procedures

Air Release:

Low volatility makes this hazard unlikely.

Provide adequate ventilation. Keep away from ignition sources.

Water Release:

Contain all liquid for treatment and/or disposal as a (potential) hazardous waste.

Notify all downstream users of possible contamination. Keep away from ignition sources.

Do not flush to sewer! US regulations (CERCLA) require reporting spills and releases to soil,

water and air in excess of stipulated quantities. US Coast Guard National Response Center is 800-424-8802.

Land Release:

Create a dike or trench to contain materials. Absorb spill with inert material (e.g., dry sand, clay, earth or commercial absorbent), then place in a chemical waste container. Decontaminate all clothing and the spill area using a detergent and flush with large amounts of water. Contain all contaminated water for disposal and/or treatment.

Additional Spill Information:

Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dispose of spill residues per guidelines under Section XIII, Disposal Considerations.

VII. Handling and Storage

Handling:

Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash with soap and water. Avoid breathing vapor or mist.

Storage

Keep container tightly closed. Store in a cool area away from ignition sources and oxidizers.

No special precautions need be taken if product is handled according to directions.



35 Old Dock Road, Yaphank, NY 11980 Phone: (631) 345-6509 Fax: (631) 775-4023

www.timtronics.com

Package For/Supply By:



33 Bridge Street, Pelham, NH 03076 Phone: (603) 635-2800 Fax: (603) 635-1900 www.wakefield.com

MATERIAL SAFETY DATA SHEET

VIII. Exposure Controls and Personal Protection

Ventilation:

Local exhaust ventilation or other engineering controls are normally NOT necessary when handling or using this product. General exhaust ventilation is usually sufficient for general worker safety and comfort.

Explosion proof motors and fans are not required for unheated handling.

Respirator Type(s):

Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.

Skin: Wear impervious gloves (butyl rubber, Viton, e.g.) to avoid skin contact. Follow good industrial hygiene practices. Eyes: Use chemical safety glasses with side shields, safety goggles and/or a full face shield where splashing is possible. Protective Clothing Type: Impervious

IX. Physical and Chemical Data

Physical State: Heavy grease Explosive limits:

No data. Low volatility makes

Color: White ambient explosive vapor concentrations

Odor: Nil impossible.

Molecular Weight: Not applicable to mixtures Vapor Density (Air = 1): No data

pH (@ 25 Deg. C): Not applicable Vapor Pressure: (@ 20 Deg. C): < 1
Octanol/Water Coeff: No data Evaporation Rate (Estimated): < 1
Solubility in Water: negligible Flash Point, (Estimated) > 400F

Bulk Density: Not applicable Volatiles % by vol.: negligible Specific Gravity (68 Deg.F): 2.2 Approximate Boiling Point (deg.F): > 400

Drop Point: None



35 Old Dock Road, Yaphank, NY 11980 Phone: (631) 345-6509 Fax: (631) 775-4023

www.timtronics.com

Package For/Supply By:



33 Bridge Street, Pelham, NH 03076 Phone: (603) 635-2800 Fax: (603) 635-1900 www.wakefield.com

MATERIAL SAFETY DATA SHEET

X. Stability and Reactivity

Stability and Reactivity Summary: Stable under normal conditions.

Reactive Properties:

Sensitivity to mechanical shock: None

Hazardous Polymerization: Will not occur

High temperatures, ignition sources, oxidizing

Conditions to Avoid: materials.

Chemical Incompatibility: Oxidizers.
Incompatible materials: No data

Hazardous Decomposition Products: Silicone Dioxide, CO, CO2, Formaldehyde.

Decomposition Temperature: No data

No

Product May Be Unstable At Temperatures Above: data

XI. Toxicological Information

Component Animal Toxicology

Oral LD50 value: No data
Dermal LD50 value: No data
Inhalation LC50 value: No data
Product Animal Toxicity: No data

Skin Irritation:

This material is expected to be slightly irritating to the skin and mucous membranes.

Eye Irritation:

This material is expected to be irritating.

Reproductive and Developmental Toxicity:

No reproductive or developmental risk to humans is expected from exposure to this product.

Component Data:

All data refer to finished product

Mutagenicity:

Not known or reported to be mutagenic.

Carcinogenicity:

This chemical is not known or reported to be carcinogenic by any reference source including IARC, EPA OSHA, NTP, or ACGIH.



35 Old Dock Road, Yaphank, NY 11980 Phone: (631) 345-6509 Fax: (631) 775-4023

www.timtronics.com

Package For/Supply By:



33 Bridge Street, Pelham, NH 03076 Phone: (603) 635-2800 Fax: (603) 635-1900 www.wakefield.com

MATERIAL SAFETY DATA SHEET

XII. Ecological Information

Ecological Toxicity Values:

Do not allow this material to be released to the environment without appropriate governmental permits.

Environmental fate: No information found Environmental Toxicity: No information found

XIII. Disposal Considerations

Consult current local, state and national regulations to ensure proper disposal.

Waste Disposal Summary:

Product as made does not qualify as an "Unlisted Hazardous Waste" for disposal situations.

Disposal Methods:

Dispose of in accordance with local, state and federal regulations for hazardous waste.

XIV. Transportation Information

Proper Shipping Name, Hazard Class, UN/NA Number Packing Group, Emergency Response Guide Number

Not regulated

Labels required per 49 CFR 172.101: None

Size for "Limited quantity" per 49 CFR 173.150-.155: Not applicable

Reportable Quantity ("RQ") per 49 CFR172.101: None

Air (IATA/ICAO): Passenger & Cargo:

Eff. Jan 1, 2001 Cargo only:

Special Provisions:

Not applicable

Not applicable

Emergency response Group Code: Not applicable



35 Old Dock Road, Yaphank, NY 11980 Phone: (631) 345-6509 Fax: (631) 775-4023

www.timtronics.com

Package For/Supply By:



33 Bridge Street, Pelham, NH 03076 Phone: (603) 635-2800 Fax: (603) 635-1900 www.wakefield.com

MATERIAL SAFETY DATA SHEET

XV. Regulatory Information

UNITED STATES:

Toxic Substances Control Act (TSCA):

All chemicals substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical substances.

Superfund Amendments and Reauthorization Act (SARA) Title III Section 313(40 CFR 372) – Toxic Chemicals: Zinc Oxide CAS# 1314-13-2

Safety Phrases:

Keep container tightly closed in a well ventilated area, away from sources of ignition. No smoking.

Do not breathe gas, fumes, vapor or spray from this product.

Do not empty into drains.

State Right-to-Know Regulations Status of Ingredients

Pennsylvania: No information New Jersey: No information Massachusetts: No information

Hazard Category Classifications and Ratings

Hazard Categories: Health Fire Press Reactivity

HMIS Hazard Ratings: Health 1 Fire 1 Instability 0 Other B (Goggles, gloves)

NFPA 704 Hazard Ratings: Health 1 Flammability 1 Reactivity 0 Special NA Hazard Ratings: Least: 0 Slight: 1 Moderate: 2 High: 3 Extreme: 4

XVI. Additional Information

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARDCOMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. WE BELIEVE THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF ITS PUBLICATION DATE, BUT MAKE NO WARRANTY THAT IT IS. IF THIS MSDS IS MORE THAN TWO YEARS OLD YOU SHOULD CONTACT THE SUPPLIER TO MAKE CERTAIN THAT THE INFORMATION IS CURRENT.

The information is furnished without warranty or implied, except that is accurate to the best of our knowledge. The data on this sheet relates only to the specific material designated here in. TIMTRONICS assumes no legal responsibility for use or reliance upon these data.