



A Milacron Company

Dear Customer:

Enclosed is the **REVISED** Material Safety Data Sheet for our product:

D-M-E HTC30C or HTC06S

The products we distribute are not normally hazardous in their natural state. However, steel does contain elements deemed by OSHA to be hazardous when released by manufacturing, such as brazing, burning, grinding, sawing or welding, ect. Failure to control dust and fumes can result in chronic health problems.

We believe the information, supplied by the Manufacturer, on the enclosed MSDS to be accurate; however, D-M-E makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability for the information so presented.

Should you require additional information, please call or write the Manufacturer listed on the MSDS.

Sincerely yours,

D-M-E Company
Director of Operations
Ken Jasina

Revised: May 2005

D-M-E Company HTC30C

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Copper Thermagrease
Supplier: Pipcar Ltd Limited
Address: Unit 4B Valley Industries, Hadlow Rd,
Tonbridge, Kent TN11 0AH. UK.

Phone Number: +44 (0)1732 851807
Fax Number: +44 (0)1732 850255

2. COMPOSITION/INFORMATION ON THE COMPONENTS

Preparation & Components: Hazardous Components, EEC Classification, no constituents need to be specified.

3. HAZARD IDENTIFICATION

Main Hazards: Not classified as hazardous.
Health Effects – Skin: Repeated and/or prolonged contact may lead to dermatitis.

4. FIRST AID MEASURES

First Aid – Eyes: Wash out eye with plenty of water. Obtain medical attention if soreness or redness persists.
First Aid – Skin: Wash skin with soap and water.
First Aid – Ingestion: Do not induce vomiting. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Use foam, dry chemical or carbon dioxide. Do not use water jet. This product may give rise to hazardous fumes in a fire. Wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Material can create slippery conditions underfoot. Transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Handling: No special precautions necessary.
Storage: Storage temperature should be controlled to between 32 and 105 °F.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Control Measures: No specific measures necessary
Hand Protection: Use a good quality barrier cream.
Eye Protection: No specific measures necessary.
Body Protection: Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Paste.
Colour: Orange. - Brown.
Odour: Odourless.
Flash Point (PMCC): (Exceeds 400 °F)
Solubility in Water: (Insoluble. lbs/ft³)
Auto-flammability: Above 400 °F

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.
Conditions to Avoid: No specific measures necessary.
Materials to Avoid: Strong oxidising agents.
Hazardous Decomposition Product: Combustion will generate: metal fumes. smoke possibly thick and choking, resulting in zero visibility.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: Low order of acute toxicity.

12. ECOLOGICAL INFORMATION

Mobility: The product is insoluble in water. The product is poorly absorbed onto soils or sediments.
Persistence & Degradability: The product is expected to be resistant to biodegradation.
Bio-accumulation: Product is not expected to bio-accumulate.

13. DISPOSAL

Product Disposal: Incineration or landfill. Dispose of in accordance with all applicable local and national regulations.

Container Disposal: No specific measures necessary.

14. TRANSPORT INFORMATION

UN Class: Not classified.
ADR/RID - Class: Not classified.
MDG - Class: Not classified.
ATA - Class: Not classified.

15. REGULATORY INFORMATION

R phrases: None.
S phrases: None.

16. OTHER INFORMATION

Product Use: For industrial use only.

17. NATIONAL LEGISLATION

EC Legislation: EC Directive 91/155/EEC defining the laying down and detailed arrangements for the system of specific information relating to dangerous preparations. EC Directive 88/397/EEC relating to the classification, packaging and labelling of dangerous preparations.

D-M-E Company HTC60S

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Silver Thermagrease (Heat Transfer Paste)
Supplier: Pipcar Ltd Limited
Address: Unit 4B Valley Industries, Hadlow Rd,
Tonbridge, Kent TN11 0AH. UK.

Phone Number: +44 (0)1732 851807
Fax Number: +44 (0)1732 850255

... 2. COMPOSITION/INFORMATION ON THE COMPONENTS

**Preparation &
Components (CAS No.):**

Silver (Metallic) 7440-22-4
Boron Nitride 10043-11-5
Zinc Oxide 1314-13-2
Aluminum Oxide 1344-28-1
Polyol Ester Non-hazardous

3. HAZARD IDENTIFICATION

Emergency

Overview: Grey grease. This product is nonflammable. Liquid will irritate eyes.

Potential Health Effects:

Eyes: This product is an eye and mucus membrane irritant.

Skin: Not expected to be a skin irritant. Repeated and prolonged skin contact could cause minor skin irritation.

Ingestion: Silver ingestion may result in generalized argyria.

Inhalation: No specific information available.

Pre-Existing Medical

Conditions Aggravated

By Exposure: Eyes

4. FIRST AID MEASURES

Eyes: Immediately flush with large amounts of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined by a Doctor

- Skin:** Remove contaminated clothing and wash skin with soap and water. Get medical attention if irritation develops/persists. Wash clothes separately before reuse.
- Ingestion:** If appreciable quantities are swallowed, seek medical advice.
- Inhalation:** Not likely route of exposure. If inhaled and irritation occurs, remove to fresh air. If irritation persists, call a Doctor.

5. FIRE FIGHTING MEASURES

- Flash Point:** > 600^oF (Seta flash) LEL/UEL: NA (% by volume in air)
- Extinguishing Media:** Use carbon dioxide or dry chemicals for small fires, aqueous foam or water for large fires involving this material.
- Fire Fighting Instructions:** Remove all ignition sources. Closed containers may rupture due to build-up of pressure when exposed to extreme heat. Fight fire from a safe distance. Use foam, dry chemical or carbon dioxide. Do not use water jet. This product may give rise to hazardous fumes in a fire. Wear self-contained breathing apparatus. (Pressure demand, OSHA/NIOSH approved or equivalent) and full protective gear. This product may give rise to hazardous fumes in a fire.

6. ACCIDENTAL RELEASE MEASURES

- Large Spills:** Remove all sources of ignition (sparks, open flames, etc.). Wear self-contained breathing apparatus and appropriate personal protective equipment. Ventilate area and contain spill with sand or other absorbent material. Collect spill by scooping up liquids and absorbent material and place in a sealed metal container for proper disposal. Do not flush to sewer. Prevent material from entering storm sewers, ditches that lead to waterways and ground.
- Small Spills:** Absorb spill with absorbent material, then place in a sealed metal container for proper disposal.

7. HANDLING AND STORAGE

Overheating may cause container to rupture. Use explosion proof electrical equipment. Containers must be kept closed and ventilation provided to prevent vapor concentration build-up.

Store in a cool dry place. Do not breathe vapor or get liquid in eyes, or on skin and clothing. Keep away from heat or sources of ignition.

Check all containers for leaks. Wear protective clothing as in section above. Avoid prolonged breathing of vapors or contact with skin. Ensure that all equipment is grounded to prevent static discharge. Containers of this material may be hazardous when emptied due to solid or vapor residue. All hazard precautions given in this data sheet must be observed for empty containers.

KEEP OUT OF REACH OF CHILDREN.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure

Guidelines:

**CHEMICAL NAME ACGIH TLV OSHA PEL ACGIH
STEL**

Silver 0.1 mg/m³ 0.01mg/m³ NA

Boron Nitride 10 mg/m³ 10 mg/m³ NA

Zinc Oxide 10 mg/m³ (dust) 15 mg/m³ (dust) 10
mg/m³

Aluminum Oxide 10 mg/m³ (dust) 10 mg/m³ (dust)
NA

Polyol Ester NA NA NA

NFPA and HMIS Codes:

Health 1 1

Flammability 1 1

Reactivity 0 0

Personal Protection - B

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Grey Grease Solubility in Water: <1.0%
Odor: None Specific Gravity: 4.05-4.15
pH: NA Evaporation Rate: Slower
Vapor Pressure: NA (Butyl acetate=1)
(Air 1): Boiling Range: NA
Vapor Density: NA (Water =1)
(Air = 1)
Percent Volatile: < 0.2%

10. STABILITY AND REACTIVITY

Stability: This product is stable.
Conditions to Avoid: Contamination with incompatible materials.
Incompatibility: Avoid strong oxidizing agents, strong acids and alkalis.
Products of Decomposition: Carbon monoxide, carbon dioxide, silicon dioxide, oxides of nitrogen, and incompletely burned hydrocarbons which may include minute traces of formaldehyde. Reacts with acids and alkalis to form combustible hydrogen gas.
Hazardous Polymerization: May not occur.
Conditions to avoid: NA

11. TOXICOLOGICAL INFORMATION

Cancer Information: No ingredients listed as human carcinogens by NTP or IARC

12. ECOLOGICAL INFORMATION

Environmental Impact Information: Avoid runoff into storm sewers and ditches that lead to waterways. Water runoff can cause environmental damage.
Reporting: US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is **1-800-424-8802**

13. DISPOSAL

Disposal: Dispose of in accordance with all federal, state and local regulations. Water runoff can cause environmental damage.

14. TRANSPORT INFORMATION

Air and Ground Shipments: Not Regulated

15. REGULATORY INFORMATION

Section 313 Supplier

Notification: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).
Product contains no Section 313 listed chemicals. This information should be included on all MSDSs copied and distributed for this material.

Toxic Substances Control Act (TSCA):

All ingredients of this product are listed on the TSCA Inventory.

16. OTHER INFORMATION

Product Use: For industrial use only.
Do not puncture or incinerate containers.
Normal ventilation for standard manufacturing practices is usually adequate. Local exhaust should be used when large amounts are released.

WHMIS: I Ingredient disclosure list: None

Status: Noncontrolled
To the best of our knowledge, the information contained herein is accurate. However, all materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results which cannot be anticipated.
Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist.