



**MATERIAL SAFETY DATA SHEET**  
**Tennant 665 Heavy Duty Cleaner/Degreaser**

TENNANT  
 701 North Lilac Drive  
 P.O. Box 1452  
 Minneapolis, MN 55440-1452

**EMERGENCY PHONE NUMBERS:**

CHEMTREC: (800) 424-9300 (24 hrs) District of Columbia: (202) 483-7616 (24 hrs)  
 CANADA: CANUTEC (613) 996-6666 (24 hrs) MSDS Requests: (800) 553-8033

**PREPARATION INFO:**

By: Kevin Hobbie  
 (763) 540-1471 (days)  
 (651) 649-0406 (nights)

This Material Safety Data Sheet (MSDS) has been prepared in compliance with the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein.

<b>Issue Date:</b> March 27, 2003	<b>HAZARD RATING</b>	<b>NFPA</b>	<b>HMS</b>	<b>NFPA</b>	<b>HMS</b>	4 = Extreme	3 = High	0 = Insignificant	
<b>Supersedes:</b>	Health	1	1	Reactivity	0	0	2 = Moderate	1 = Slight	COR = Corrosive
<b>Printed:</b> 4/10/03	Fire	1	1	Special	0	X			X = Ask supervisor for guidance.

\*\*\*\*\* I. IDENTIFICATION \*\*\*\*\*

**PRODUCT NAME:** Tennant 665 Heavy Duty Cleaner/Degreaser  
**US DEPT OF TRANSPORTATION (GROUND):** UN#: None **PACKAGING GROUP:** Not Applicable  
 Allocated  
**PART NUMBER:** **HAZARD CLASSIFICATION:** Non Regulated  
**CHEMICAL FAMILY:** Amphoteric Detergent **SHIPPING NAME:** Not Applicable  
**MATERIAL USE:** Commercial Detergent

\*\*\*\*\* II. PHYSICAL DATA \*\*\*\*\*

<b>BOILING POINT:</b> 212°F / 100°C	<b>FREEZE POINT:</b> 32°F. / 0°C.
<b>DENSITY:</b> 1.0 kg/L	<b>% VOLATILE:</b> 62 by wt
<b>SOLUBILITY IN WATER:</b> Complete	<b>VAPOR PRESSURE:</b> Not Available mm Hg at 20 °C.
<b>ODOR THRESHOLD:</b> Not Available	<b>pH:</b> 7.0
<b>PHYSICAL FORM:</b> Liquid	<b>VAPOR DENSITY:</b> Heavier <b>THAN AIR</b>
<b>APPEARANCE AND ODOR:</b> Dk. Blue/Soapy	<b>COEFFICIENT WATER/OIL DISTRIBUTION:</b> Not Available
<b>EVAPORATION RATE:</b> Faster	<b>VOC g/L (lb/gal):</b> 0 (0.00)
<b>MECHANICAL IMPACT:</b> Not Available	<b>STATIC DISCHARGE:</b> Not Available

\*\*\*\*\* III. INGREDIENTS \*\*\*\*\*

All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory. Hazardous ingredients, defined as Controlled Products by Canadian WHMIS, are identified by (H2D) after the chemical ingredient. This product has been classified in accordance with the hazard criteria of the CPR (Controlled Products Regulations) and the MSDS contains all of the information required by the CPR.

<u>CHEMICAL</u>	<u>CAS #</u>	<u>% W</u>	<u>OSHA PEL</u> <u>ppm</u>	<u>ACGIH TLV</u> <u>TWA ppm</u>	<u>ACGIH TLV</u> <u>STEL ppm</u>	<u>LD50</u>	<u>LC50</u> <u>INHALATION</u>
Proprietary Surfactant	*	35-45	Not Available	Not Available	Not Available	>5000 mg/kg (oral rat)	Not Available

\*New Jersey Trade Secret Number 0718

**SARA Title III Section 313 Information:**

Components present in this product at a level which could require reporting under this statute are:  
 None

**California Proposition 65 Information:**

This product contains the following chemicals that have been designated as cancer and/or reproductive hazards under California Proposition 65.  
 None

\*\*\*\*\* IV. FIRE AND EXPLOSIVE HAZARD DATA \*\*\*\*\*

**FLAMMABLE:** No **FLASH POINT:** Not Available / Not Available Setflash  
**FLAMMABLE LIMITS:** % LEL: Not Available % UEL: Not Available **AUTOIGNITION TEMPERATURE:** Not Available / Not Available  
**EXTINGUISHING MEDIA:** Not Applicable  
**SPECIAL FIRE FIGHTING PROCEDURES:** None. Will not burn.  
**UNUSUAL FIRE EXPLOSION HAZARD:** None.

\*\*\*\*\* V. REACTIVITY DATA \*\*\*\*\*

**STABILITY:** Stable **HAZARDOUS POLYMERIZATION (May Occur/Will Not Occur):** Will Not  
**CONDITIONS TO AVOID:** Cold temperatures--product damaged upon freezing.  
**INCOMPATIBILITY (materials to avoid):** Strong oxidizing agents.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce carbon monoxide and/or nitric oxide.

\*\*\*\*\* VI. HEALTH HAZARD DATA \*\*\*\*\*

**EFFECTS OF OVEREXPOSURE:** **THRESHOLD LIMIT VALUE - See Section III for individual ingredients.**  
**PRIMARY ROUTES OF ENTRY:** Inhalation & Skin Contact  
**SKIN CONTACT/ABSORPTION:** Contains materials that may cause irritation upon repeated/prolonged contact.  
**EYE CONTACT:** Contains materials which may cause eye irritation. During application of this product, contact lenses should NOT be worn.  
**INGESTION (Swallowing):** May cause gastrointestinal irritation.  
**INHALATION (Breathing):** None expected.  
**SUPPLEMENTAL HEALTH INFORMATION:**  
Ingredients are NOT carcinogenic, based on IARC and NTP lists.

\*\*\*\*\* VII. EMERGENCY AND FIRST AID PROCEDURES \*\*\*\*\*

**SKIN CONTACT:** Remove contaminated clothing. Wash thoroughly with soap and water. Obtain medical attention if irritation persists. Wash clothing before reuse.  
**EYE CONTACT:** Flush immediately with water for 15 minutes; CALL A PHYSICIAN.  
**INGESTION (Swallowing):** CALL A PHYSICIAN OR POISON CONTROL CENTER.  
**INHALATION (Breathing):** Remove to fresh air. If breathing difficulty persists or occurs later, consult a physician.

\*\*\*\*\* VIII. PREVENTIVE MEASURES \*\*\*\*\*

**SPILL OR LEAK PROCEDURES:** **STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**  
Keep spectators away. Floor may be slippery; use care to avoid falling. Dike and contain the spill with inert material (sand, earth, fuller's earth, etc.) and if appropriate, transfer the liquid and solid diking material to separate containers for recovery or disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Wash clothing before reuse. Keep spill out of all sewers and open bodies of water.  
**WASTE DISPOSAL METHOD:** Dispose of in accordance with federal, state and local regulations.  
**SPECIAL PROTECTION INFORMATION: RESPIRATORY PROTECTION and VENTILATION:**  
Use with adequate ventilation.  
Local exhaust.  
**PROTECTIVE GLOVES (specify type):** Impervious gloves; i.e., rubber **EYE PROTECTION (specify type)** Chemical splash goggles  
**SKIN PROTECTION:** Impervious gloves; i.e., rubber  
**SPECIAL PRECAUTIONS: PRECAUTIONS TO BE TAKEN IN HANDLING OR STORAGE:**  
KEEP FROM FREEZING.  
**OTHER PRECAUTIONS:** Do not take internally. Avoid prolonged contact with skin; contaminated clothing should be removed immediately. Avoid free fall of liquid in excess of a few inches.