

MATERIAL SAFETY DATA SHEET**Product Name** DCT ULTRA HEAVY DUTY DEGREASER**MSDS Date** April 20, 2011**Revision No.** 01

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SECTION 1 **PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT

Product Name DCT Ultra Heavy Duty Degreaser
Product ID Number 130620
Product Description Multipurpose Cleaner

COMPANY IDENTIFICATION

Supplier Diversified Chemical Technologies, Inc.
15477 Woodrow Wilson
Detroit, MI 48238
(313) 867-5444

Product Technical Information (313) 867-5444**24 Hour Emergency Phone Number (Health & Safety; Transportation) CHEMTREC - (800) 424-9300**

SECTION 2 **COMPOSITION / INFORMATION ON INGREDIENTS**

| Hazardous Ingredients | CAS Number | OSHA PEL | ACGIH TLV | OTHER | % WT |
|----------------------------|------------|-----------|-------------------------|-------|--------|
| Tetrapotassium diphosphate | 7320-34-5 | | | | 1 – 5 |
| Sodium tripolyphosphate | 7758-29-4 | | 5 mg/m3 | | 1 – 10 |
| TS 1077 – Trade Secret | | 15 mg/m3 | 10 mg/m3 total dust | | |
| | | 5 mg/mn3 | 5 mg/m3 respirable dust | | 1 – 5 |
| TS 1068 – Trade Secret | | | | | 1 – 5 |
| TS 1026 – Trade Secret | | | | | 1 - 5 |
| TS 1063 – Trade Secret | | 1 ppm | EtO | | 1 – 5 |
| TS 1017 – Trade Secret | | | 2 mg/m3 | | 5 – 15 |
| Potassium hydroxide 45% | 1310-58-3 | 2 mg/m3 | 2 mg/m3 C | | 1 – 10 |
| TS 1012 – Trade Secret | | 2 mg/m3 C | 2 mg/m3 C | | 1 – 5 |

SECTION 3 **HAZARDS IDENTIFICATION**

******EMERGENCY OVERVIEW********CORROSIVE LIQUID****Harmful if swallowed.**

Can cause chemical burns to eyes, skin and/or respiratory tract upon direct contact.
Can be irritating to eyes, skin and/or respiratory tract if contact is frequent or prolonged.

PRIMARY ROUTES OF EXPOSURE Eyes, Skin, Inhalation, Ingestion**TARGET ORGANS** Eyes, Skin, Respiratory System**POTENTIAL HEALTH EFFECTS**

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SECTION 3
HAZARDS IDENTIFICATION
continued

Acute Effects

| | |
|-------------------|---|
| Inhalation | Can cause chemical burns upon direct contact. Can cause irritation to respiratory tract upon prolonged, repeated exposures. |
| Eye | Can cause chemical burns upon direct contact. Can cause irritation to eyes upon prolonged, repeated exposures. |
| Skin | Can cause chemical burns upon direct contact. Can cause irritation to skin upon prolonged, repeated exposures. |
| Ingestion | Harmful if swallowed. |

Chronic Effects

Product has not been tested as a whole to determine its long-term effects. The product does contain ingredients that potentially may affect the following target organs as a result from repeated excessive exposures: Eyes, Skin

Carcinogenicity

None

IARC: N/AP

NTP: N/AP

OSHA: N/AP

Medical Conditions Aggravated by Long-Term Exposure

Possible pre-existing dermatitis; dry skin conditions

SECTION 4
FIRST AID MEASURES

INHALATION

Remove to fresh air. Rest in half-upright position. Get prompt medical attention if necessary.

EYE CONTACT

Remove contact lenses. Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention if chemical burns exist or irritation persists.

SKIN CONTACT

Remove contaminated clothing. Flush skin with plenty of water for at least 15 minutes. Get immediate medical attention if chemical burns exist or irritation persists.

INGESTION

Do not induce vomiting. Wash out mouth with water and obtain medical attention. If conscious, milk or water to drink may be beneficial. Treat symptomatically. Get immediate medical attention. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN

Treat symptomatically. It is advisable not to induce vomiting due to the risk of aspiration and it is not usually necessary unless a large amount has been ingested or it has been contaminated with another product. Gastric lavage under supervised medical conditions can be carried out if necessary.

SECTION 5
FIRE FIGHTING MEASURES

Flash Point none

Flash Point Method PMCC

Auto Ignition Temperature N/D

Flammable Limits
LEL N/D

UEL N/D

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SECTION 5 **FIRE FIGHTING MEASURES** **continued**

Appropriate Extinguishing Media Dry Chemical, Foam, CO2**Unusual Fire or Explosion Hazards** Contaminated water runoff may cause environmental damage. Dike and collect water used to fight fire.**Fire Fighting Instructions** Firefighters should wear self-contained breathing apparatus (SCBA) and protection for skin. Stay away from ends of containers during a fire; containers may explode due to pressure build-up inside if heated. Do not spray water directly into storage containers due to boil over danger. Water may be used to cool nearby containers and surfaces.**Hazardous Combustion Products** Irritating fumes, toxic gases and acrid smoke. Combustion can produce a variety of compounds including oxides of carbon; oxides of potassium; water vapor; unburned hydrocarbons; partially oxidized organic compounds and other unidentified organic and inorganic compounds.

SECTION 6 **ACCIDENTAL RELEASE MEASURES**

NOTIFICATION PROCEDURES In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. National Response Center [24-HR Reporting (800) 424-8802]**GENERAL** Stop leak if you can do so without risk. Contain spillage and prevent entry into sewer drains and watercourses. Retain all contaminated water for removal and treatment.**SAFETY PRECAUTIONS** Use suitable protective clothing appropriate to spill size and risk of exposure. Refer to Section 8 for further details. Use extreme caution because affected area(s) may be slippery. For industrial use only. Keep out of reach of children.**SPILL OR LEAK PROCEDURES** Neutralize spilled material with weak solution of citric acid if possible. Confine spillage and absorb spilled material with noncombustible, inert absorbent such as sand, clay, or vermiculite and place into DOT-approved containers for later disposal.

SECTION 7 **HANDLING AND STORAGE**

HANDLING Corrosive Liquid
Avoid contact with skin, eyes, and clothing. Wear suitable protective equipment (see Section 8).
Avoid breathing mist or vapor – use only in a well-ventilated area.
Unvented containers may develop pressure – use with caution.
Wash skin thoroughly after handling.
Eyewash stations and safety showers should be easily accessible to area where product is used.

| | |
|--------------------------------------|-----------|
| Loading/Unloading Temperature | [Ambient] |
| Transport Temperature | [Ambient] |
| Transport Pressure | [Ambient] |
| Static Accumulator | N/D |

STORAGE Store in dry conditions protected from frost and elevated temperatures – covered storage is recommended.

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SECTION 7**HANDLING AND STORAGE****continued**

Keep containers closed when not in use.
Store away from incompatible materials (see Section 10).
Long-term storage temperatures should not exceed 120° F.
Keep away from sparks, heat and flame.
Do not store in reactive metal containers (i.e. aluminum, tin, zinc, galvanized steel or their alloys)

SECTION 8**EXPOSURE CONTROLS / PERSONAL PROTECTION**

ENGINEERING CONTROLS

The level of ventilation necessary will vary depending upon potential exposure conditions. Control measures to consider:

Ventilation

Adequate ventilation should be provided so that exposure limits are not exceeded (see Section 2 for exposure limits). If heavy misting is present, local exhaust ventilation should be considered in addition to general mechanical ventilation.

ADMINISTRATIVE CONTROLS

The level of protection necessary will vary depending upon potential exposure conditions. Control measures to consider:

PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal use.

Respiratory Protection

If vapors or mists are present and if engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, a NIOSH/MSHA approved respirator may be appropriate. Respirator selection, use and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: **Air-Purifying Half-Face Respirator with Organic Vapor/Mists Cartridges**

Hand Protection

Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include: **Chemical-resistant Neoprene or PVC**

Eye Protection

If contact is likely, safety goggles are recommended. If splashing is likely, safety goggles with splash shield are recommended

Skin and Body Protection

Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: Long-sleeved shirt, pants and chemical-resistant apron at a minimum. If prolonged or repeated contact is likely, chemical-resistant clothing including boots are recommended.

Other Protective Equipment

Emergency eyewash/safety shower in the immediate area

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SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION continued

Specific Hygiene Measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing separate from home laundry and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping. Do not store work clothing and protective equipment in the same locker as personal clothing.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------------|----------------|
| Appearance | Clear purple |
| Physical State | Liquid |
| Odor | mild fragrance |
| pH | 12.2 – 12.6 |
| Vapor Pressure | N/AV |
| Vapor Density | N/AV |
| Boiling Point | N/AV |
| Melting Point | N/P |
| Specific Gravity (water = 1) | 1.14 – 1.16 |
| Evaporation Rate (water = 1) | N/AV |
| Volatile Organic Compounds (%) | N/D |
| Solubility | Complete |
| Viscosity (cps) | N/D |

SECTION 10 STABILITY / REACTIVITY

Chemical Stability

Material is stable and unlikely to react in a hazardous manner during recommended storage conditions and normal conditions of use.

Conditions to Avoid Extreme temperatures**Reactivity / Incompatibility** Strong oxidizing agents, strong acids, light reactive metals (aluminum, zinc, tin, galvanized steel, and their alloys)**Hazardous Decomposition**

Material does not decompose at ambient temperature. Thermal decomposition can produce a variety of compounds, the nature of which will largely depend on the conditions bringing about decomposition. Incomplete combustion or thermal decomposition may be expected to generate such materials as: acrid smoke and irritating fumes; particulate matter and unburned, hydrocarbons; oxides of carbon; oxides of potassium; water vapor; oxidized organic compounds; and other unidentified organic and inorganic compounds.

Hazardous Polymerization Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Product Toxicological Data

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| SECTION 11 | TOXICOLOGICAL INFORMATION | continued |
|-------------------|----------------------------------|------------------|

| | |
|-------------------------------------|-----|
| LD50 (Oral) | N/D |
| LC50 (Inhalation) | N/D |
| Dermal Toxicity Data (Skin) | N/D |
| Skin and Eye Irritation Data | N/D |
| Mutation Data | N/D |
| Reproductive Effects Data | N/D |

Ingredient Toxicological Data

| | |
|-------------------------------------|------|
| LD50 (Oral) | N/AV |
| LC50 (Inhalation) | N/AV |
| Dermal Toxicity Data (Skin) | N/AV |
| Skin and Eye Irritation Data | N/AV |
| Mutation Data | N/AV |
| Reproductive Effects Data | N/AV |

| | |
|-------------------|-------------------------------|
| SECTION 12 | ECOLOGICAL INFORMATION |
|-------------------|-------------------------------|

Product Ecological Information N/AV**Ingredient Ecological Information** N/AV

| | |
|-------------------|--------------------------------|
| SECTION 13 | DISPOSAL CONSIDERATIONS |
|-------------------|--------------------------------|

EPA Waste ID Number

Take pH of wastewater solution to determine whether waste material is RCRA-hazardous (D002) or not. Waste product is RCRA-hazardous (D002) if pH is ≥ 12.5 . However, if this product is altered, it is the responsibility of the user to determine whether the material meets the criteria for hazardous waste at the time of disposal.

Waste Disposal

Neutralization/wastewater treatment is preferred method of disposal. Dispose of contaminated water in a contained waste treatment system. Follow all applicable federal, state, local and provincial regulations. It is the end-user's responsibility to determine the regulatory status of waste at the time of disposal.

Empty Containers

Empty containers may still contain RCRA-regulated residuals; therefore, clean empty containers of any residue per 40CFR261.7 guidelines and either recycle containers or dispose of in normal trash.

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SECTION 14 TRANSPORT INFORMATION

LAND (DOT)

| | |
|---------------------------------|---|
| DOT Proper Shipping Name | Corrosive Liquids, n.o.s. (contains potassium hydroxide and other proprietary alkaline ingredients), 8, UN 1760, PG III |
| DOT Hazard Class | 8 |
| DOT Subsidiary Risk | N/AP |
| DOT ID Number | UN 1760 |
| DOT Packaging Group | III |

SEA (IMDG)

| | |
|----------------------------------|---|
| IMDG Proper Shipping Name | Corrosive Liquids, n.o.s. (contains potassium hydroxide and other proprietary alkaline ingredients), 8, UN 1760, PG III |
| IMDG Hazard Class | 8 |
| IMDG Subsidiary Risk | N/AP |
| IMDG ID Number | UN 1760 |
| IMDG Packaging Group | III |

AIR (IATA)

| | |
|----------------------------------|---|
| IATA Proper Shipping Name | Corrosive Liquids, n.o.s. (contains potassium hydroxide and other proprietary alkaline ingredients), 8, UN 1760, PG III |
| IATA Hazard Class | 8 |
| IATA Subsidiary Risk | N/AP |
| IATA ID Number | UN 1760 |
| IATA Packaging Group | III |

| | |
|-------------------------------|---|
| Additional Information | DOT Shipping Description for Quantities equal to, or less than one gallon: Corrosive Liquids, n.o.s. (contains potassium hydroxide and other proprietary alkaline ingredients), 8, UN 1760, PG III, Ltd Qty DOT Label for Quantities equal to, or less than one gallon: none required |
|-------------------------------|---|

SECTION 15 REGULATORY INFORMATION

U.S. Federal Regulations

| | |
|--|--|
| SARA Title III Section 311/312 Categorization (40 CFR 370) | Acute – Immediate Hazard |
| SARA Title III Section 313 Categorization (40 CFR 372) | <i>This product contains a chemical(s)</i> |
| subject to the reporting requirements of Section 313 of Title III of SARA: None | |
| 302 (EHS) TPQ (40 CFR 355) | None |
| 304 CERCLA RQ (302.4) | None |
| 304 EHS RQ (40 CFR 116.4) | None |

State Regulations

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| SECTION 15 | REGULATORY INFORMATION | continued |
|-------------------|-------------------------------|------------------|

California Prop. 65 N/AP
 Identification of Prop. 65 Ingredient(s) N/AP

OSHA CLASSIFICATION DANGER
WHMIS CLASSIFICATION D2B (Stylized T) and E (Corrosive Material)
This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

National Inventories

| | |
|------------------------|-------|
| TSCA | Yes |
| CEPA (DSL/NDSL) | Yes |
| AICS | N /AV |
| IECSC | N /AV |
| EINECS | N /AV |
| ENCS | N /AV |
| KECI | N /AV |
| PICCS | N /AV |

Additional Information NONE

| | |
|-------------------|--------------------------|
| SECTION 16 | OTHER INFORMATION |
|-------------------|--------------------------|

| | | |
|-----------------------------|--|-----------------------------|
| N/D = Not Determined | N/A = Not Applicable | N/AV = Not Available |
| NFPA RATING | Health (Blue): 2 Flammability (Red): 0 Reactivity (Yellow): 0 Specific Hazard(s) (White): COR/ALK | |
| HMIS RATING | Health (Blue): 2 Flammability (Red): 0 Reactivity (Yellow): 0 Personal Protective Equipment: C or D | |

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS

Revision Changes Transposed to 16-Section (EU) format

USER RESPONSIBILITY Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

Prepared By
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