

THERMAL DYNAMICS CORP -- ARC TORCH COOLANT (CONCENTRATE), 100% ETHYLENE GLYCOL -- 6810-00N006886

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 ===== Product Identification =====
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Product ID:ARC TORCH COOLANT (CONCENTRATE), 100% ETHYLENE GLYCOL
 MSDS Date:10/01/1994
 FSC:6810
 NIIN:00N006886
 MSDS Number: CCXWK
 === Responsible Party ===
 Company Name:THERMAL DYNAMICS CORP
 Address:INDUSTRIAL PARK 2
 City:WEST LEBANON
 State:NH
 ZIP:03784
 Country:US
 Info Phone Num:603-298-5711
 Emergency Phone Num:800-424-9300 (CHEMTREC)
 CAGE:17514

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 ===== Contractor Identification =====
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Company Name:THERMAL DYNAMICS CORPORATION
 Address:82 BENNING STREET
 Box:10
 City:WEST LEBANON
 State:NH
 ZIP:03784-0010
 Country:US
 Phone:603-298-5711
 CAGE:17514

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 ===== Composition/Information on Ingredients =====
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Ingred Name:ETHYLENE GLYCOL (SARA 313) (CERCLA) LD50 (ORAL RAT): 5.89
 G/KG
 CAS:107-21-1
 RTECS #:KW2975000
 Fraction by Wt: >99%
 OSHA PEL:N/K
 ACGIH TLV:C 50 PPM, VAPOR
 EPA Rpt Qty:1 LB
 DOT Rpt Qty:1 LB

Ingred Name:ETHYLENE OXIDE (SARA 302/313) (CERCLA)
 CAS:75-21-8
 RTECS #:KX2450000
 Fraction by Wt: <0.1%
 OSHA PEL:1 PPM; SEE 1910.1047
 ACGIH TLV:1 PPM, A2
 EPA Rpt Qty:10 LBS
 DOT Rpt Qty:10 LBS

Ingred Name:EFTS OF OVEREXP: FEET HAS BEEN REPORTED, AS MAY HAPPEN
 DURING WELDING, IT MAY CAUSE "METAL FUME FEVER", W/SYMPS (ING 4)
 RTECS #:9999999ZZ

Ingred Name:ING 3: OF NASAL CONGESTION & BODY ACHES, SIMILAR TO
 INFLUENZA. ONSET OF SYMPS MAY BE DELAYED 4-12 HRS & INCL (ING 5)
 RTECS #:9999999ZZ

Ingred Name:ING 4: IRRIT OF NOSE, MOUTH & THROAT, COUGH, STOM PAIN,
 HDCH, NAUS, VOMIT, METALLIC TASTE IN MOUTH, CHILLS, (ING 6)
 RTECS #:9999999ZZ

Ingred Name:ING 5: FEVER, PAINS IN MUSCLES & JOINTS, THIRST,
 BRONCH/PNEUMONIA & BLUISH TINT TO SKIN. THESE SYMPS GO AWAY IN (ING
 7)
 RTECS #:9999999ZZ

Ingred Name:ING 6: 24-48 HRS & LEAVE NO PERM EFTS. INHAL OF COPPER
 DUSTS/FUMES HAS CAUSED DMG TO RED BLOOD CELLS IN ANIMALS. (ING 8)
 RTECS #:9999999ZZ

Ingred Name:ING 7: COPPER HAS BEEN USED IN INTRAUTERINE DEVICES TO PVNT
 PREGNANCY. OTHER REPRO EFTS ARE UNKNOWN. COPPER IS (ING 9)
 RTECS #:9999999ZZ

Ingred Name:ING 8: NOT NORM A SENSITIZER, ALTHOUGH ALLERGIES TO COPPER
 HAVE BEEN REPORTED. EXPOS TO OTHER LUNG IRRITANTS, (ING 10)
 RTECS #:9999999ZZ

Ingred Name:ING 9: SUCH AS DUST OR TOBACCO SMOKE, MAY INCREASE LUNG
 IRRITATION FROM THIS MATERIAL.
 RTECS #:9999999ZZ

Ingred Name:OTHER PREC: WHICH WILL RSLT IN ETHYLENE OXIDE CONCS OF
 GREATER THAN THE TWA (8-HR) OF 0.05 PPM IN THE BREATHING (ING 12)
 RTECS #:9999999ZZ

Ingred Name:ING 11: ZONE OF THE WORKPLACE FOR APPROPRIATE APPLICATIONS.
 RTECS #:9999999ZZ

===== Hazards Identification =====

LD50 LC50 Mixture:SEE INGREDIENT 1.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE: UNDER NORM HNDLG CNDTNS, THE
 SOLID ALLOY PRESENTS NO SIGNIFICANT HLTH HAZS; HOWEVER, PROCESSING
 OF ALLOY INTO A DUST/FUME BY GRINDING, BUFFING, FORGING, WELDING,
 ETC, MAY RSLT IN EXPOS TO AIRBO RNE METAL PARTICLES WHICH MAY BE
 INHALED/CONT EYES/SKIN. INHAL: EXPOS TO COPPER DUST & FUME CAUSES
 (EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT.

Effects of Overexposure:HLTH HAZ: IRRIT OF UPPER RESP TRACT, METALLIC
 TASTE IN MOUTH, & NAUS. SKIN: NONE UNDER NORM CNDTNS. EYES: CONT
 W/DUST/FUMES MAY CAUSE IRRIT. INGEST: UNLIKELY TO OCCUR; EFTS NOT
 KNOWN, BUT UNLIKELY TO CAUSE SERIOUS ILLNESS. CHRONIC: ALTHOUGH
 INDUS DERM HAS NOT BEEN REPORTED, KERATINIZATION OF HANDS & SOLES
 OF (ING 3)

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

===== First Aid Measures =====

First Aid:INHALATION: REMOVE TO FRESH AIR. IF BREATHING DIFFICULTY DOES
 NOT IMPROVE RAPIDLY, GET PATIENT TO MD. SKIN: WASH SKIN W/MILD SOAP
 & WATER. RINSE THORO. SEE MD IF IRRITATION PERSISTS. EYES: FLUSH
 W/PLE NTY OF WATER FOR AT LEAST 15 MINUTES. GET MED ATTENTION
 IMMED. INGESTION: DO NOT INDUCE VOMITING. GIVE VICTIM ONE/TWO

GLASSES OF WATER & GET MEDICAL ATTENTION/TRANSPORT TO HOSPITAL AS SOON AS POSS.

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Fire Fighting Measures
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Extinguishing Media:ON FIRES INVOLVING FINE METALLIC DUSTS, USE A POWDER (DRY CHEM) EXTING/SMOTHER W/INERT SOLID SUCH AS SAND. (SUP DAT)

Fire Fighting Procedures:WEAR NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT .

Unusual Fire/Explosion Hazard:NORM NOT A FIRE HAZ. HOWEVER, DUST OF THIS MAY BE IGNITED IF EXPOSED TO AN EXTREMELY STRONG IGNIT SOURCE. IF IGNITED, MAY GIVE OFF FUMES OF COPPER (SUP DAT)

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Accidental Release Measures
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Spill Release Procedures:REMOVE SOURCES OF IGNITION. SOAK UP SPILL WITH INERT ABSORBENT SUCH AS VERMICULITE, THEN PLACE CONTAMINATED MATERIAL INTO A DISPOSAL CONTAINER AND SEAL. RINSE AREA OF SPILL WITH DETERGENT AND WATER.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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Handling and Storage
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Handling and Storage Precautions:AVOID SWALLOWING; DO NOT EAT, DRINK/SMOKE IN AREAS WHERE THIS PROD IS BEING HANDLED/STORED. PRACTICE REASONABLE CAUTION & PERS CLEANLINESS.

Other Precautions:AVOID SKIN & EYE CONT. STORE IN COOL, DRY AREA. TRACE QTYS OF ETHYLENE OXIDE MAY BE PRESENT IN THIS PROD. WHILE THESE TRACE QTYS COULD ACCUM IN HEADSPACE AREAS OF STOR & TRANSPORT VESSELS, THEY ARE NO T EXPECTED TO CREATE A CNDTN (ING 11)

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Exposure Controls/Personal Protection
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Respiratory Protection:ATMOSPHERIC LEVELS SHOULD BE KEPT BELOW CEILING VALUE. WHEN RESPIRATORY PROTECTION IS REQUIRED FOR CERTAIN OPERATIONS, WEAR A NIOSH APPROVED ORGANIC VAPOR CARTRIDGE-TYPE RESPIRATOR.

Ventilation:GOOD GENERAL VENT SHOULD BE SUFFICIENT FOR MOST CNDTNS. LOC EXHST VENT MAY BE NEC WHERE PROD IS SPRAYED/HEATED.

Protective Gloves:NATURAL RUBBER/NITRILE/POLYETHYLENE.

Eye Protection:ANSI APPRVD CHEM WORKERS GOGGLES .

Other Protective Equipment:EMERGENCY EYEWASH AND DELUGE SHOWER MEETING ANSI DESIGN CRITERIA .

Work Hygienic Practices:NONE SPECIFIED BY MANUFACTURER.

Supplemental Safety and Health

EXTING MEDIA: NEVER USE WATER AS AN EXTING AGENT. WATER REACTS VIOLENTLY W/MOLTEN METAL. HAZ DECOMP PROD: (HIGHLY FLAMM & POTENTIALLY EXPLO) ON EXPOS TO ACIDS. WELDING MAY PRDCE TOX GASES SUCH AS OZON E & OXIDES OF NITROGEN. EXPLO HAZ: OXIDES/COPPER VAPS.

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Physical/Chemical Properties
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Boiling Pt:B.P. Text:398F,203C

Vapor Pres:0.12 @ 20C

Vapor Density:2.14

Spec Gravity:1.1155

pH:NEUT

Solubility in Water:COMPLETELY SOLUBLE

Appearance and Odor:COLORLESS LIQUID, PRACTICALLY ODORLESS

Percent Volatiles by Volume:100

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

INCOMPATIBLE WITH STRONG OXIDIZERS, ACIDS AND BASES, ACETYLENE
COMPOUNDS; ETHYLENE OXIDE, SULPHURIC ACID.

Stability Condition to Avoid:EXTREMELY HIGH TEMPERATURES OR CONTACT
WITH INCOMPATIBLES. LIQUID COPPER EXPLODES ON CONTACT WITH WATER.

Hazardous Decomposition Products:PROD MAY GIVE OFF COPPER OXIDES WHEN
HEATED DURING USE (SEE "HAZ COMBUST PRODS"); MAY GIVE OFF HYDROGEN
GAS (SUP DAT)

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH FEDERAL,
PROVINCIAL AND LOCAL REGULATIONS. DISPOSE OF IN ACCORDANCE WITH
LOCAL, STATE AND FEDERAL REGULATIONS .

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