

ADVANCED CHEMICAL DESIGN INC -- BOROTHENE SOLVENT

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MSDS Safety Information
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FSC: 6850
NIIN: 01-424-8166
MSDS Date: 05/07/1997
MSDS Num: CCMZG
Product ID: BOROTHENE SOLVENT
MFN: 01
Responsible Party
Cage: ADVCI
Name: ADVANCED CHEMICAL DESIGN INC
Address: 498 SOUTH BELVOIR BLVD
City: SOUTH EUCLI
D OH 44121
Info Phone Number: 216-382-2032 FAX # 216-291-5949
Emergency Phone Number: 216-382-2032/800-255-3924(CHEM-TEL)
Preparer's Name: RICH HENRY
Proprietary Ind: Y
Review Ind: Y
Published: Y

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Contractor Summary
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Cage: 05HH6
Name: ADVANCED CHEMICAL DESIGN INC
Address: UNKNOWN
Box: UNKNOW
City: UNKNOWN NK 00000
Phone: UNKNOWN
Cage: ADVCI
Name: ADVANCED CHEMICAL INDUSTRIES
Address: HW
Y 2 AND 52 WEST
City: MINOT ND 58701-5000
Phone: 701-852-5130
Cage: 0F2M5
Name: TULSTAR PRODUCTS INC
Address: 1722 S CARSON, SUITE 2907
City: TULSA OK 74119
Phone: 918-587-7878/FAX -3297 (DAVID COOK)

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Item Description Information
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Item Manager: S9G
Item Name: CLEANING COMPOUND,SOLVENT
Specification Number: UNKNOWN
Unit of Issue: CN
Quantitative Expression: 00000000005GL
UI Container Qty

: 1

Type of Container: CAN

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Ingredients
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Name: *** PROPRIETARY ***

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Health Hazards Data
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LD50 LC50 Mixture: TLV:200PPM.

Route Of Entry Inds - Inhalation: YES

Skin: YES

Ingestion: YES

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Effects of Expo

sure: INHAL:HI CONC IRRIT RESP TRACT.MAY CAUSE

HEAD,DIZZ,NAU,VOMIT,NARCOSIS IN CONFINED/POORLY VENTI AREA.SKIN:BRIEF CONTACT
MAY CAUSE SLIGHT IRRIT,PROL CONTACT MAY CAUSE MODERATE IRRIT,DERM.PROBLEM MAY
BE ACCENTUATED BY LIQ BECOMING TRAPPED AGAINST SKIN BY CONTAM
CLOTH/SHOES.EYE:CONTACT/HI VAP CONC MAY CAUSE IRRIT,(SUPPL)

Explanation Of Carcinogenicity: PER MSDS:CARCINOGENCITY:NTP/IARC/CA PROP 65:NOT
LISTED,

OSHA:NOT REGULATED.

Signs And Symptions Of Overexposure: IRRIT RESP
TRACT

,HEADACHE,DIZZINESS,NAUSEA,VOMITING,NARCOSIS.SLIGHT SKIN IRRIT,MODERATE
IRRIT,DERM.EYE IRRIT/PAIN.IRRIT OF MOUTH/GASTROINTESTINATL TRACT,ABDOMINAL
PAIN,VOMITING.

Medical Cond Aggravated By Exposure: NONE SPECIFIED BY MANUFACTURER.

First Aid: INHAL:REMOVE TO FRESH AIR.PROVIDE OXY IF BREATH DIFFI;ADMIN CPR IF
NOT BREATH.SEEK MED ATTN.SKIN:REMOVE CONTAM CLOTH.WSH AREA W/PLENTY OF
SOAP/WATER.IRRIT PERSIST SEEK MED ATTN.EYE:FLUSH W/WATER FOR 1 5MINS WHILE
HOLDING EYELIDS OPN.IRRIT PERSIST S

EEK MED ATTN.INGEST:IF CONSC HAVE HIM

DRINK LG AMTS OF WATER.DONT INDUCE VOMIT.DONT GIVE ANYTHING BY MOUTH IF
UNCONSC.SEEK IMMED MED ATTN.

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Handling and Disposal
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Spill Release Procedures: EVACUATE AREA.STOP LEAK W/O RISK.CONTAIN & COVER
W/VERMICULITE OR SAND.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods: DISPO OF IAW LOC/STATE/FED REGS.DONT FLUSH

TO SANITARY

SEWER/WATERWAY.REF TO RCRA REGS 40CFR260-281 FOR WASTE DISPO INSTRUCTIONS.

Handling And Storage Precautions: KEEP CNTNR TIGHTLY CLSD WHEN OT IN USE.PROTECT FROM EXTREME TEPS.ISOLATE INCOMPATIBLE MATLS.

Other Precautions: KEEP THIS MATL OUT OF REACH OF CHILDREN.MINIMIZE BODY CONTACT W/THIS PRODUCT.AVOID INHAL FUMES/VAPORS.

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Fire and Explosion Hazard Information
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Flash P

oint Text: NON-FLAMMAMBLE

Extinguishing Media: MATERIAL IS NON-FLAMMABLE.

Fire Fighting Procedures: FIRE FIGHTERS SHOULD WEAR NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS IN POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard: PRODUCT WILL DECOMPOSE AT TEMPERATURES ABOVE 400F RELEASING TOXIC FUMES OF CO, CO2, AND HYDROGEN BROMIDE.

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Control Measures
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Respiratory Protection: AT HIGH LEVELS OF CONCENTRATION USE SELF-CONTAINED BREATHING APPARATUS.

Ventilation: USE ADQUATE MECHANICAL/LOC EXHAU VENTI TO KEEP VAPOR/MIST LEVELS AS LOW AS POSSIBLE.

Protective Gloves: IMPERV TO CHEMS-VITON,POLYETHYLENE,NITRI

Eye Protection: SPLASH-PROOF CHEM SAF GOGG,FCSHIELD.

Other Protective Equipment: CONTACT LENS SHOULDN'T BE WORN WHEN WORK W/MATL.CLEAN BODY-COVER CLOTH,APRON,BOOTS NOT MADE OF NAT RUBB.SAF EYEBATH/SHOWR

Work Hygienic Practices: LAUNDER CONTAM CLOTH BEFORE REUSE.ELI MINATE BODY

CONTACT W/CHEM.DONT EAT/DRINK/SMOKE TIL AFT WORK WASHING.

Supplemental Safety and Health: HEALTH:PAIN.INEST:MAY RESULT IN IRRIT OF MOUTH & GI TRACT,ABDOMINAL PAIN,VOMIT IN ADDN TO EFFECTS SIMILAR TO THOSE CAUSED BY INHAL.

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Physical/Chemical Properties
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HCC: T4

B.P. Text: 154F,68C

M.P/F.P Text: -113F,-81C

Decomp Text: >400F,>204C

Vapor Pres: 117

Vapor Density:

6.0

Spec Gravity: 1.74

Evaporation Rate & Reference: FAST,NO REF GIVEN

Solubility in Water: NEGLIGIBLE

Appearance and Odor: CLEAR COLORLESS LIQUID, SWEET ODOR

Reactivity Data

Stability Indicator: YES

Stability Condition To Avoid: AVOID TEMPERATURE ABOVE 400F.

Materials To Avoid: AVOID STRONG OXIDIZERS & ACIDS.MAY ATTACK SOME PLASTICS,RUBBERS & COATINGS.THOROUGHLY TEST FOR ALL A PPLICATIONS BEF USE.

Hazardous Decomposition Products: THERMAL DECOMPOSITION MAY YIELD CO, CO2, HBR.

Hazardous Polymerization Indicator: NO

Toxicological Information

Ecological Information

MSDS Transport Information

Regulatory Information

Other Information

Transportation Information

Responsible Party Cage: ADVCI

Trans ID

NO: 136104

Product ID: BOROTHENE SOLVENT

MSDS Prepared Date: 05/07/1997

Review Date: 01/27/1998

MFN: 1

Tech Entry NOS Shipping Nm: HALOGENATED HYDROCARBON

Net Unit Weight: 79.2 LBS

Multiple KIT Number: 0

Review IND: Y

Unit Of Issue: CN

Container QTY: 1

Type Of Container: CAN

Additional Data: PER MSDS:TRANSPO INFO PROPER SHIPPING NAME:POISONOUS LIQ, HALOGENATED HYDROCARBON, 6.1, ID#:NONE, PK G GROUP III, LABE:KEEP AWAY FROM FOOD.QUANT LIMITATIONS:PASSENGER AIRCRAFT/RAIL CAR:60L(15.85GAL);CAR

GO
AIRCRAFT ONLY:220L(58.11GAL). PER CTFD:24-26 GAUGE.

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Detail DOT Information
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DOT PSN Code: QKO
Symbols: G
DOT Proper Shipping Name: TOXIC LIQUIDS, ORGANIC, N.O.S.
Hazard Class: 6.1
UN ID Num: UN2810
DOT Packaging Group: III
Label: KEEP AWAY FROM FOOD
Special Provision: T7
Packaging Exception: 153
Non Bulk Pack: 203
Bulk Pack: 241
Max Qty Pass: 60 L
Max Qty Cargo: 220 L
Vessel Stow
Req: A
Water/Ship/Other Req: 40

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Detail IMO Information
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IMO PSN Code: HWH
IMO Proper Shipping Name: HALOGENATED IRRITATING LIQUID, N.O.S. y
IMDG Page Number: 6157
UN Number: 1610
UN Hazard Class: 6.1
IMO Packaging Group: II/III
Subsidiary Risk Label: -
EMS Number: 6.1-02
MED First Aid Guide NUM: 740

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Detail IATA Information
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IATA PSN Code: YIF
IATA UN ID Num: 2810
IATA Proper Shipping Name: TOXIC LIQUID, ORGANIC, N.O.S. *
IATA UN Class: 6.1
IATA Label: TOXIC
UN Packing Group: III
Packing Note Passenger: 611
Max Quant Pass: 60L
Max Quant Cargo: 220L
Packaging Note Cargo: 618

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Detail AFI Information
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AFI PSN Code: NBL
AFI Symbols: *
AFI Proper Shipping Name: H

ALOGENATED IRRITATING LIQUID, N.O.S.

AFI Hazard Class: 6.1

AFI UN ID NUM: UN1610

AFI Packing Group: III

Special Provisions: P5

Back Pack Reference: A10.5

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HAZCOM Label

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Product ID: BOROTHENE SOLVENT

Cage: ADVCI

Company Name: ADVANCED CHEMICAL INDUSTRIES

Street: HWY 2 AND 52 WEST

City: MINOT ND

Zipcode: 58701-5000

Health Emergency Phone: 216-382-2032/800-255-3924(CHEM-TEL)

Label Required

IND: Y

Date Of Label Review: 01/21/1998

Status Code: C

MFG Label NO: NONE

Label Date: 01/21/1998

Year Procured: 1997

Origination Code: F

Chronic Hazard IND: Y

Eye Protection IND: YES

Skin Protection IND: YES

Signal Word: CAUTION

Respiratory Protection IND: YES

Health Hazard: Moderate

Contact Hazard: Slight

Fire Hazard: None

Reactivity Hazard: None

Hazard And Precautions: INHAL:HI CONC IRRIT RESP

TRACT,HEAD,DIZZ,NAU,VOMIT,NARCOSIS IN CONF/POORLY VENTI AREA.SKIN:BRIEF
CONTACT SLIGHT IRRIT,PRO

L CONTACT MODERATE IRRIT,DERM.PROBLEM ACCENTUATED BY

TRAPPED LIQ AGAINST SKIN B Y CONTAM CLOTH/SHOES.EYE:CONTACT/HI VAPCONC
IRRIT/PAIN.INGEST:IRRIT MOUTH/GI TRACT,ABD PAIN,VOMIT.TARGET

ORGANS:CNS/EYE/SKIN/GI TRACT.1ST AID:INHAL:MOVE TO FRESH AIR.DIFFI BREATH GIVE

OXY;NOT BREATH CP R.GET MED ATTN.SKIN:REMOVE CONTAM CLOTH.WASH AREA W/LOTS OF
SOAP/H2O.IRRIT PERSIST GET MED ATTN.EYE:FLUSH W/H2O 15MINS,HOLD OPN

EYELIDS.IRRIT PERSIST GET MED ATTN.INGEST:IF CONSC GIVE LG AMTS OF H2O T O
DR

INK.DONT INDUCE VOMIT.GET IMMED MED ATTN.

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