## CARBOLINE CO -- URETHANE CONVERTER 553, (0899B1NL) -- 8010-00N040379

```
======== Product Identification ============
Product ID: URETHANE CONVERTER 553, (0899B1NL)
MSDS Date: 01/12/1996
FSC:8010
NIIN:00N040379
MSDS Number: CGRTG
=== Responsible Party ===
Company Name: CARBOLINE CO
Address:350 HANLEY INDUSTRIAL CT
City:ST LOUIS
State:MO
ZIP:63144-1599
Country: US
Info Phone Num: 314-644-1000
Emergency Phone Num: 412-681-6669; 800-424-9300 (CHEMTREC)
CAGE: 06634
=== Contractor Identification ===
Company Name: CARBOLINE CO
Address:350 S HANLEY INDUSTRIAL CT
Box:City:ST. LOUIS
State:MO
ZIP:63144-1599
Country: US
Phone: 314-644-1000
CAGE: 06634
Company Name: CARBOLINE CO TOCH DIV
Address:350 HANLEY INDUSTRIAL CT W
Box:City:ST. LOUIS
State:MO
ZIP:63144-1510
Country: US
Phone: 314-644-1000
CAGE:16793
====== Composition/Information on Ingredients ========
Ingred Name: ISOCYANIC ACID, HEXAMETHYLENE ESTER, POLYMERS; (POLYMERIC
    (HDI))
CAS:28182-81-2
RTECS #:NQ9170000
Fraction by Wt: <75%
OSHA PEL: 0.005 PPM (MFR)
ACGIH TLV:0.02 PPM STEL (MFR)
Ingred Name: ACETIC ACID, BUTYL ESTER; (BUTYL ACETATE) (CERCLA)
CAS:123-86-4
RTECS #:AF7350000
Fraction by Wt: <15%
OSHA PEL:150 PPM
ACGIH TLV:150 PPM;200 STEL
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS
Ingred Name: XYLENE (SARA 313) (CERCLA). LD50: (ORAL, RAT) 4300 MG/KG.
CAS:1330-20-7
RTECS #:ZE2100000
```

```
Fraction by Wt: <10%
OSHA PEL:100 PPM
ACGIH TLV:100 PPM; 150 STEL
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS
Ingred Name:BENZENE, ETHYL-; (ETHYL BENZENE) (SARA 313)
CAS:100-41-4
RTECS #:DA0700000
Fraction by Wt: <5%
OSHA PEL:100 PPM
ACGIH TLV:100 PPM; 125 STEL
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS
Ingred Name: HEXANE, 1,6-DIISOCYANATO-; (HEXAMETHYLENE DIISOCYANATE)
   (HDI ISOCYANATE) (CERCLA)
CAS:822-06-0
RTECS #:MO1740000
Fraction by Wt: <2%
Other REC Limits: 0.02 PPM STEL (MFR)
OSHA PEL:0.005 PPM (MFR)
ACGIH TLV:0.005 PPM
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB
Ingred Name: PIGMENT; (COLOR PIGMENT MIXTURE MAY CONTAIN INGS 7 - 10 IN
   VARYING AMOUNTS DEPENDING ON COLOR OF PRODUCT)
OSHA PEL:N/K
ACGIH TLV:N/K
Ingred Name:MAGNETITE
CAS:1309-38-2
RTECS #: OM4800000
OSHA PEL:N/K
ACGIH TLV:N/K
Ingred Name:TITANIUM OXIDE; (TITANIUM DIOXIDE)
CAS:13463-67-7
RTECS #:XR2275000
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST
Ingred Name: CARBON BLACK
CAS:1333-86-4
RTECS #:FF5800000
OSHA PEL:3.5 MG/M3
ACGIH TLV: 3.5 MG/M3
Ingred Name: OTHER INGREDIENTS; (OTHER PARTICULATES NOT OTHERWISE
   REGULATED)
OSHA PEL:N/K
ACGIH TLV:N/K
====== Hazards Identification ============
LD50 LC50 Mixture: SEE INGREDIENT 3.
Routes of Entry: Inhalation: YES Skin: YES Ingestion: YES
Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO
Health Hazards Acute and Chronic: INHALATION: CONTAINS HDI POLYISOCYANATE
```

- WHICH MAY CAUSE ALLERGIC RESPIRATORY REACTION, EFFECTS MAY BE PERMANENT. HARMFUL IF INHALED, MAY AFFECT BRAIN OR NERVOUS SYSTEM, CAUSING DIZZINESS, HEADACHE OR N AUSEA. MAY CAUSE NOSE AND THROAT IRRITATION. MAY CAUSE LUNG IRRITATION. CONTACT: MAY CAUSE EYE AND SKIN (EFTS OF OVEREXP)
- Explanation of Carcinogenicity: CARBON BLACK: IARC MONOGRAPHS, VOL 65, PG 24-27, 1995: GROUP 2B.
- Effects of Overexposure: HLTH HAZ: IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. NOTICE: REPORTS HAVE ASSOCIATED REPEATED & PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS W/PERMANENT BRAIN & NERVOUS SYSTEM DAMAGE.
- Medical Cond Aggravated by Exposure: IF SENSITIZED TO ISOCYANATES OR OTHER CHEMICALS, DO NOT USE. SEE MD IF A MEDICAL CONDITION EXISTS.

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

First Aid:WHEN EXPOSED ALWAYS GET MEDICAL ATTENTION. EYES:FLUSH W/WATER FOR AT LEAST 15 MINUTES. SKIN:WASH W/SOAP & WATER. REMOVE CONTAMINATED CLOTHING & CLEAN BEFORE REUSE. INHAL:REMOVE TO FRESH AIR. PROVIDE O XYGEN IF BREATHING IS DIFFICULT. USE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION. INGEST:DO NOT INDUCE VOMITING! ALWAYS GET MEDICAL ATTENTION.

========= Fire Fighting Measures ===============

Flash Point Method:SCC Flash Point:91.0F,32.8C

Lower Limits:1% Upper Limits:7.6%

Extinguishing Media: DRY CHEMICAL, FOAM, CARBON DIOXIDE, WATER FOG.

- Fire Fighting Procedures: USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT . EVACUATE HAZARD AREA OF UNPROTECTED PERS. COOL SURROUNDING CNTNRS W/WATER IN CASE OF FIRE EXPOS.
- Unusual Fire/Explosion Hazard:FLAMM LIQ. VAPS ARE HVR/AIR & WILL ACCUM. VAPS WILL FORM EXPLO CONCS W/AIR. VAPS TRAVEL LONG DISTS & WILL FLASHBACK. USE MECH VENT WHEN NEC TO KEEP PERCENT VAP BELOW LEL.

======== Accidental Release Measures ==========

Spill Release Procedures: ELIM ALL IGNIT SOURCES. HNDLG EQUIP MUST BE GROUNDED TO PVNT SPARKING. EVACUATE AREA OF UNPROT PERS. WEAR APPROP PERSONAL PROT CLTHG & EQUIP. FOLLOW SAFE HNDLG & USE GUIDELINES IN SAFE HNDLG & USE INF O SECTION. CONTAIN & SOAK UP RESIDUAL W/ABSORB (CLAY/SAND). TAKE UP ABSORB MATL & SEAL TIGHTLY FOR PROPER DISP.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

======== Handling and Storage =============

- Handling and Storage Precautions: KEEP AWAY FROM HEAT, SPARKS, OPEN FLAME & STRONG OXIDIZING AGENTS. KEEP CONTAINERS CLOSED. STORE IN COOL, DRY PLACE W/ADEQUATE VENTILATION.
- Other Precautions:IF POURING OR TRANSFERRING MATERIALS, GROUND ALL CONTAINERS & TOOLS. DO NOT WELD, HEAT, CUT OR DRILL ON FULL OR EMPTY CONTAINERS. FOR INDUSTRIAL USE ONLY.

===== Exposure Controls/Personal Protection ========

Respiratory Protection: USE ONLY W/VENTILATION TO KEEP LEVELS BELOW EXPOSURE GUIDELINES. USER SHOULD TEST & MONITOR EXPOSURE LEVELS TO

INSURE ALL PERSONNEL ARE BELOW GUIDELINES. IF NOT SURE OR IF NOT ABLE TO MONITOR, USE NIO SH APPROVED SUPPLIED AIR RESPIRATOR.

Ventilation: USE EXPLOSION-PROOF VENTILATION WHEN REQUIRED TO KEEP BELOW HEALTH EXPOSURE GUIDELINES & LOWER EXPLOSION LIMIT (LEL).

Protective Gloves: IMPERVIOUS GLOVES.

Eye Protection: ANSI APPROVED CHEM WORKERS GOGGS .

Other Protective Equipment: ANSI APPRVD EYE WASH FOUNTAIN & DELUGE SHOWER . RECOMMEND IMPERVIOUS CLTHG TO AVOID SKIN CONT. USE OF HAND CLEANER IS REC.

Work Hygienic Practices: WASH W/SOAP & WATER BEFORE EATING, DRINKING, APPLYING COSMETICS/USING TOILET FACILITES. IF MATL PENETRATES SKIN, CHANGE GLOVES & CLTHG. LAUNDER CONTAM CLTHG BEFORE REUSE. LEATHER SHOES CAN (SUPDAT)

Supplemental Safety and Health

HYGIENE PRACT: ABSORB & PASS THRU HAZ MATLS. CHECK SHOES CAREFULLY AFTER SOAKING BEFORE REUSE.

======== Physical/Chemical Properties ===========

Boiling Pt:B.P. Text:>259F,>126C

Vapor Density: HVR/AIR

Spec Gravity:1.07

 $\label{thm:condition} \mbox{ Rate & Reference: SLOWER THAN ETHER }$ 

Appearance and Odor: NONE SPECIFIED BY MANUFACTURER.

Percent Volatiles by Volume:29

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

Stability Indicator/Materials to Avoid:YES AVOID CONTACT W/STRONG OXIDIZING AGENTS.

Stability Condition to Avoid: HEAT, SPARKS & OPEN FLAMES.

Hazardous Decomposition Products: CARBON MONOXIDE, NITROGEN OXIDES & UNIDENTIFIED ORG CMPDS. CONSIDER ALL SMOKE & FUMES FROM BURNING MATL AS VERY HAZ. WELDING, CUTTING/ABRASIVE GRINDING CAN CREATE SMOKE & FUMES. DO NOT BREATHE.

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

Waste Disposal Methods:DISPOSE OF I/A/W LOCAL, STATE & FEDERAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.