

## IBM CORPORATION -- IBM,CLEANER,TAPE UNIT PN:8493001-1 -- 7040-00-151-9956

===== Product Identification =====

Product ID:IBM,CLEANER,TAPE UNIT PN:8493001-1  
MSDS Date:04/16/1993  
FSC:7040  
NIIN:00-151-9956  
MSDS Number: BDCRZ  
=== Responsible Party ===  
Company Name:IBM CORPORATION  
Address:OLD ORCHARD ROAD  
City:ARMONK  
State:NY  
ZIP:10504-1709  
Country:US  
Info Phone Num:1-800-IBM-4333  
Emergency Phone Num:800-426-4333/FAX 214-280-3903  
CAGE:30874

===== Contractor Identification =====

Company Name:IBM CORPORATION  
Address:OLD ORCHARD ROAD  
City:ARMONK  
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===== Composition/Information on Ingredients =====

Ingred Name:1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113) (SARA  
313)  
CAS:76-13-1  
RTECS #:KJ4000000  
Fraction by Wt: 64.7%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1000 PPM  
ACGIH TLV:1000PPM/1250STEL; 96  
Ozone Depleting Chemical:1

Ingred Name:ISOPROPYL ALCOHOL (SARA 313)  
CAS:67-63-0  
RTECS #:NT8050000  
Fraction by Wt: 35%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:400 PPM  
ACGIH TLV:400 PPM/500STEL;9596

Ingred Name:NITROMETHANE (INHIBITOR)  
CAS:75-52-5  
RTECS #:PA9800000  
Fraction by Wt: 0.3%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:100 PPM  
ACGIH TLV:20 PPM; 9596

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and

Chronic:INHAL:LIGHTHEADEDNESS,GIDDINESS,SHORTNESS OF BREATH,DROWS,UNCONSC.IRREGULAR HEARTBEAT @HI CONC.VAPORIZATION OF EXCESSIVE AMTS OF PROD CAN DEplete/REPLACE OXY NECESSARYFOR BREATH.EYE:MILD IRRIT.SKIN:MA Y CAUSE IRRIT,RASH.INGEST:NAU,VOMIT,DROWS,INCOORDINATION,UNCONSC,CESSATION OF BREATHING.

Explanation of Carcinogenicity:PER MSDS:NO SUBSTANCES ON MSDS HAVE BEEN FOUND TO BE CARC OR PORTENTIAL CARC AS LISTED BY NATP/IARC/OSHA.

Effects of Overexposure:CHRONIC:INHAL:CHRONIC DRUNKENNESS,DROWS,INCOORDINATION,UNCONSC,CESSATION OF BREATHING DURING VAPOR EXPO.

Medical Cond Aggravated by Exposure:MAY IRRITATE PEOPLE W/SKIN PROBLEMS,ASTHMA,LUNG,HEART PROBLEMS,SUSCEPTIBLE INDIVIDUALS MAY HAVE AN ALLERGIC REACTION.

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First Aid Measures  
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First Aid:INHAL:REMOVE FRM ARE OF EXPO TO FRESH AIR.ASSESS AIRWAY,BREATH,CIRCULATION,LEVEL OF CONSC.IF NECESSARY PROVIDE CARDIOPULMONARY SUPPORT .SEEK IMMED MED ATTN.EYE:FLUSH W/COPIOUS AMTS OF WATER FOR 15MINS .SKIN:WASH AREA W/SOAP/WATER.REMOVE CONTAM CLOTH.INGEST:DONT INDUCE VOMIT.DONT GIVE ANYTHING TO UNCONSC PERSON.

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Fire Fighting Measures  
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Flash Point:NDA  
Lower Limits:N/DATA AVAI  
Upper Limits:N/DATA AVAI  
Extinguishing Media:CARBON DIOXIDE, FOAM, DRY CHEMICAL.  
Fire Fighting Procedures:USE NIOSH APPROV SELF-CONTAINED BREATHING APPARATUS & PROTECTIVE CLOTHING.  
Unusual Fire/Explosion Hazard:COOL CNTNRS & KEEP IN OPN AREA.ADDN OF EXCESS H2O(<9%)WILL EXTRACT ALCOHOL & MAY FORM FLAMM SUPERNATANT LIQ LAYER.NOTE:PROD AS SHIPPED IS NON-FLAMM.(SUPPLEMENT)

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Accidental Release Measures  
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Spill Release Procedures:CONTAIN FOR TREATMENT/DISPOSAL,VENTILATE AREA,COVER W/ABSORBENT MATL & COLLECT.  
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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Handling and Storage  
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Handling and Storage Precautions:KEEP CNTNRS TIGHTLY CLOSED.AVOID EXCESSIVE HEAT DURING STORAGE,UNOPENED(IFACTORY SEALED)CNTNRS ARE NOT FLAMM.HOWEVER DUE TO EVAPORATION UPON(OTH PRECA)  
Other Precautions:HNDLG/STORAGE:OPENING MIXTURE MAY BECOME FLAMM.RAGS OR MATLS SATURATED W/CLEANER MAY PRESENT A FIRE HAZ.KEEP OUT OF REACH OF CHILDREN.

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Exposure Controls/Personal Protection  
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Respiratory Protection:FOR EXCESSIVE EXPOSURE:RESPIRATORY PROTECTION:ORGANIC VAPOR.  
Ventilation:LOCAL EXHAUST  
Protective Gloves:IMPERMEABLE GLOVES  
Eye Protection:CHEMICAL SAFETY GOGGLES  
Other Protective Equipment:WHEN WORKING W/LG AMTS USE APRON & FACE SHIELD.  
Work Hygienic Practices:DONT WEAR CONTAM CLOTH AGAIN TIL PROPERLY LAUNDERED.

## Supplemental Safety and Health

FIRE/EXPLO:MIST/SPRAY IS FLAMM.FLASH PT REDUCED TO 32C (90F) AFT 45%  
EVAPORATION:ISOPROPANOL BECOMES FLAMM. PER MSDS:OBSOLET ITEM;PART  
NO LONGER AVAI.

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

HCC:N1

Boiling Pt:B.P. Text:120F,49C

Melt/Freeze Pt:M.P/F.P Text:-94F,-70C

Decomp Temp:Decomp Text:500F,260C

Vapor Pres:284

Vapor Density:2.2

Spec Gravity:1.15

pH:NDA

Evaporation Rate &amp; Reference:3.7, NO REF GIVEN

Solubility in Water:35, APPRECIABLE

Appearance and Odor:CLEAR,COLORLESS LIQUID, MILD ALCOHOLIC ODOR

Percent Volatiles by Volume:100

Corrosion Rate:NP

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

Stability Indicator/Materials to Avoid:YES

W/ALKALI OR ALKALINE EARTH METALS;POWDERED AL,ZINC,BERYLLIUM,ETC.CAN  
REACT W/STRONG OXIDIZING MATLS.Stability Condition to Avoid:AVOID OPEN FLAMES OR TEMPERATURES ABOVE  
51.6C (125F).

Hazardous Decomposition Products:HAZ DECOMPO TEM 260C

PRODUCTS:HYDROCHLORIC AND FHYDROFLUORIC ACIDS.POSSIBLE CARBONYL  
HALIDES.

## ===== Disposal Considerations =====

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

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