

PERFECT DATA CORP -- TF SOLUTION/CLEANING SOLUTION; "FREON" -- 6850-00-681-5688

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Product Identification
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Product ID:TF SOLUTION/CLEANING SOLUTION; "FREON"

MSDS Date:04/01/1991

FSC:6850

NIIN:00-681-5688

MSDS Number: BQGPD

=== Responsible Party ===

Company Name:PERFECT DATA CORP

Address:1825 SURVEYOR AVE

City:SIMI VALLEY

State:CA

ZIP:93063

Country:US

Info Phone Num:805-581-4000

Emergency

Phone Num:805-581-4000

CAGE:PERFE

=== Contractor Identification ===

Company Name:PERFECT DATA CORP

Address:110 WEST EARY STREET

Box:City:SIMI VALLEY

State:CA

ZIP:93065-1889

Country:US

Phone:805-521-4000

CAGE:PERFE

Company Name:PERFECTDATA CORP

Address:110 WEST EASY STREET

Box:City:SIMI VALLEY

State:CA

ZIP:93065-1689

Country:US

Phone:805-581-4000

CAGE:60902

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Composition/Information on Ingredients
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Ingred Name:1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE (FREON 113) (SARA

III)
CAS:76-13-1
RTECS #:KJ4000000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1000PPM/1250STEL
ACGIH TLV:1000PPM/1250STEL9293
Ozone Depleting Chemical:1

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===== Hazards Identification =====
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LD50 LC50 Mixture:TLV: 100 PPM
Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:EYE CONTACT: LIQUID AND NIST MAY IRRITATE THE EYES. SKIN CONTACT: NO IRRITATION IS LIKELY AFTER BRIEF CONATCT BUT MAY BE IRRITATING AFTER PROLONGED CONTACT. SWALLOWED: SWALLOWING LARGE QUANTITIES MAY CAUSE NAUSEA AND VOMITING.
Explanation of Carcinogenicity:NOT RELEVANT
Effects of Overexposure:BREATHING HIGH CONCENTRATIONS MAY CAUSE LIGHT HEADEDNESS, GIDDINESS, SHORTNESS OF BREATH & MAY LEAD TO NARCOSIS, CARDIAC IRREGULARITIES, UNCONSCIOUSNESS/DEATH. VAPORS ARE HEAVIER THAN AIR & CAN CAUSE SUFFOCATION BY REDUCING O2 AVAILABLE FOR BREATHING.
Medical Cond Aggrava
ted by Exposure:CARDIOVASCULAR DISEASE MAY BE AGGRAVATED.

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===== First Aid Measures =====
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First Aid:INHALE:REMOVE TO FRESH AIR. GIVE CPR IF NOT BRTHG. SEE DOCTOR. EYE:FLUSH W/LOTS OF RUNNING WATER FOR AT LEAST 15 MIN, LIFTING UPPER & LOWER LIDS OCCASIONALLY. SEE DOCTOR. SKIN:WASH W/LOTS OF SOAP & WA TER. REMOVE CONTAMINATED CLOTHES & SHOES; WASH BEFORE REUSE. SEE DOCTOR. INGEST:DO NOT INDUCE VOMIT. IF CONSCIOUS, GIVE LOTS OF WATER/MI
LK. SEE DOCTOR.

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===== Fire Fighting Measures =====
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Flash Point:NONE
Autoignition Temp:Autoignition Temp Text:NONE
Extinguishing Media:NON COMBUSTIBLE. USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.
Fire Fighting Procedures:SELF-CONTAINED BREATHING APPARATUS MAY BE REQUIRED IF DRUMS RUPTURE & CONTENTS ARE SPILLED UNDER FIRE CONDITIONS. COOL CONTAINERS WITH WATER SPRAY.
Unusual Fire/Explosion Hazard:EXTINGUISH ALL NEARBY SOURCES OF IGN

ITION, SINCE VAPORS DECOMPOSE TO HAZARDOUS PRODUCTS UNDER HIGH TEMPERATURES.

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

Spill Release Procedures:WEAR NIOSH/MSHA APPROVD PROTECTIVE EQUIPMENT INCLUDING RUBBER BOOTS, RUBBER GLOVES, RUBBER APRON & SCBA IN PRESSURE DEMAND MODE. IF SPILL/LEAK IS SMALL, FULL FACE PIECE AIR PURIFYING CARTRIDGE RESPIRA TOR EQUIPPED FOR ORGANIC VAPOR MAY BE USED.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN COOL, DRY, WELL VENT PLACE. STORE AWAY FROM ALL OTHER CHEMICALS & POTENTIAL SOURCES OF CONTAMINATION. KEEP CONTAINER CLOSED WHEN NOT IN USE.

Other Precautions:NO SMOKING IN AREA OF USE. DO NOT USE IN GENERAL VICINITY OF ARC WELDING, OPEN FLAMES/HOT SURF. HEAT AND/OR UV RADIA MAY CAUSE FORMATION OF CHLORIDES, FLUORIDES AND/OR PHOSGENE . DO NOT USE PRES S TO EMPTY CONTR. DO NOT G ET IN (ING 11)

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

Respiratory Protection:WEAR A NIOSH/MSHA APPROVED SCBA IN PRESSURE DEMAND MODE, OR A NIOSH/MSHA APPROVED SUPPLIED AIR RESPIRATOR IF USE CONDITIONS GENERATE VAPORS OR MISTS.

Ventilation:LOCAL MECHANICAL EXHAUST VENTILATION CAPABLE OF MAINTAINING EMISSION AT POINT OF USE BELOW PEL.

Protective Gloves:RUBBER GLOVES.

Eye Protection:CHEMICAL WORKERS GOGGLES .

Other Protective Equipment:LONG-SLEEVE SHIRT, T ROUSERS, SAFETY SHOES AND RUBBER APRON.

Work Hygienic Practices:AN EYEWASH AND SAFETY SHOWER SHOULD BE NEARBY AND READY FOR USE. WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health
NONE

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

HCC:N1

Boiling Pt:B.P. Text:118F,48C

Melt/Freeze Pt:M.P/F.P Text:31.0F,-0.6C

Vapor Pres:334

Vapor Density:2.9

Spec Gravity:1.57

Evaporation Rate & Reference:>1 (CCL4 = 1)

Solubility in Water:NIL

Appearance and Odor:COLOR

LESS LIQUID WITH SLIGHT ETHEREAL ODOR

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

ALKALIS, OXIDIZING MATLS, WATER & MOIST AIR. ALSO ALKALINE EARTH METALS
& POWDER ALUMINUM/ZINC.

Stability Condition to Avoid:OPEN FLAMES, WELDING ARCS/OTHER HIGH TEMP
SOURCES WHICH MAY INDUCE THERMAL DECOMPOSITION.

Hazardous Decomposition Products:MAY LIBERATE CARBON MONOXIDE, CARBON
DIOXIDE, HYDROGEN CH
LORIDE, CHLORINE OR HYDROGEN FLUORIDE.

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

Waste Disposal Methods:DISPOSE OF CONTAMINATED PRODUCT AND MATERIAL
USED IN CLEANING UP SPILLS OR LEAKS IN A MANNER APPROVED FOR THIS
MATERIAL. CONSULT APPROPRIATE LOCAL, STATE AND FEDERAL REGULATORY
AGENCIES TO BE CERTAIN OF PROPER DISPOSAL PROCEDURES.

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