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CHEMICAL PRODUCT AND COMPANY INFORMATION

REVISION DATE: 04/03/1995  
UN NUMBER- NA1993

PRIMARY APPLICATION- FUEL INJECTOR/CARBURETOR CLEANER

MANUFACTURER- SUN COMPANY, INC.  
TEN PENN CENTER  
1801 MARKET STREET  
PHILADELPHIA PA 19103-1699

SYNONYMS.....: FUEL INJECTOR/CARBURETOR CLEANER  
CAS REGISTRY NO: SEE SEC. 2  
CAS NAME.....: NO CLASSIFICATION - MIXTURE  
CHEMICAL FAMILY: BLEND  
INFORMATION  
SUPPLIER... MARIA DAYRIT  
PHONE.....: (215) 246-8201

EMERGENCY PHONE NUMBERS (AFTER NORMAL BUSINESS HOURS)  
SUN CO.. 1-800-964-8861  
CHEMTREC. 1-800-424-9300

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2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT/CAS NO.	LO%	HI%	OSHA		ACGIH		SUN/MFR		UNIT
			TWA	STEL	TWA	STEL	TWA	STEL	
LIMITS FOR THE PRODUCT:									
NO SPECIFIC LIMIT									
ISOPROPYL ALCOHOL 67-63-0	85.00	95.00	400	500	400	500			PPM
STODDARD SOLVENT 8052-41-3	3.00	6.00	100		100				PPM
XYLENE 1330-20-7	.00	5.00	100	150	100	150			PPM
ETHYL BENZENE 100-41-4	.00	1.00	100	125	100	125			PPM
FATTY AMIDE 68513-05-3	.00	5.00			NO SPECIFIC LIMIT				
TALLOW AMINE, ETHYOXYLATED 61791-26-2	.00	5.00			NO SPECIFIC LIMIT				
C12-C14 TERTIARY-ALKYL PRIMARY AMINES 68955-53-3	.00	1.00			NO SPECIFIC LIMIT				

ADDITIONAL EXPOSURE LIMITS ----- GOVERNMENT REGULATION  
OTHER LIMIT- SEE SECTION 2

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW -----

DANGER! FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED. HIGH VAPOR CONCENTRATIONS MAY CAUSE DIZZINESS. MAY CAUSE ALLERGIC SKIN REACTION. CAUSES SKIN AND EYE IRRITATION. HARMFUL OR FATAL IF SWALLOWED. PULMONARY ASPIRATION HAZARD-CAN ENTER LUNGS AND CAUSE DAMAGE.

APPEARANCE-- BROWNISH LIQUID                    ODOR-- MILD ALCOHOL

POTENTIAL HEALTH EFFECTS -----

PRIMARY ROUTES OF ENTRY- INHALATION( X ) SKIN( X ) EYE( X ) INGESTION( X )

INHALATION -----

EXCESSIVE EXPOSURES MAY CAUSE IRRITATION TO EYES, NOSE, THROAT, LUNGS; RESPIRATORY TRACT; CENTRAL NERVOUS SYSTEM (BRAIN) EFFECTS; HEADACHES, NAUSEA; DIZZINESS, LOSS OF BALANCE AND COORDINATION; UNCONSCIOUSNESS, COMA; RESPIRATORY FAILURE AND DEATH.

SKIN -----

SKIN ABSORPTION OF MATERIAL MAY PRODUCE SYSTEMIC TOXICITY. MAY CAUSE MODERATE IRRITATION WITH PROLONGED OR REPEATED CONTACT. REMOVES NATURAL OILS & FATS FROM SKIN. SENSITIZING MATERIAL (CAUSES ALLERGIC REACTION).

EYE -----

CONTACT WITH THE EYE MAY CAUSE REDNESS, TEARING, BLURRED VISION. MODERATE IRRITATION.

INGESTION -----

HARMFUL OR FATAL IF SWALLOWED. PULMONARY ASPIRATION HAZARD IF SWALLOWED AND/OR VOMITING OCCURS - CAN ENTER LUNGS AND CAUSE DAMAGE.

CARCINOGEN LISTED BY- IARC(NO)    NTP(NO)    OSHA(NO)    ACGIH(NO)    OTHER(NO)

PRE-EXISTING MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE- DISORDERS OR DISEASES OF THE SKIN, EYE, RESPIRATORY, PULMONARY AND LUNG (E.G. ASTHMA-LIKE CONDITIONS).

4. FIRST AID MEASURES

INHALATION -----

MOVE PERSON TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, OBTAIN MEDICAL ASSISTANCE.

SKIN -----

WASH WITH SOAP AND WATER UNTIL NO ODOR REMAINS. IF REDNESS OR SWELLING DEVELOPS, OBTAIN MEDICAL ASSISTANCE. IMMEDIATELY REMOVE SOAKED CLOTHING. WASH CLOTHING BEFORE REUSE. DESTROY CONTAMINATED SHOES.

EYE -----

FLUSH WITH WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, OBTAIN MEDICAL ASSISTANCE.

INGESTION -----

DO NOT INDUCE VOMITING! DO NOT GIVE LIQUIDS! OBTAIN EMERGENCY MEDICAL ATTENTION. SMALL AMOUNTS WHICH ACCIDENTALLY ENTER MOUTH SHOULD BE RINSED OUT UNTIL TASTE OF IT IS GONE.

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5. FIRE FIGHTING MEASURES

FLASH POINT: 53 TCC (DEG. F); 12 TCC (DEG. C)
AUTOIGNITION TEMP.: NOT DETERMINED (DEG. F); NOT DETERMINED (DEG. C)

---FLAMMABLE LIMITS IN AIR---
LOWER EXPLOSIVE LIMIT (LEL): 2 % VOLUME
UPPER EXPLOSIVE LIMIT (UEL): 12.7 % VOLUME

FIRE AND EXPLOSION HAZARDS -----
FLAMMABLE LIQUID (FLASH POINT LESS THAN 100F)

EXTINGUISHING-MEDIA -----
WATER SPRAY. REGULAR FOAM. DRY CHEMICAL. CARBON DIOXIDE.

SPECIAL FIRE FIGHTING INSTRUCTIONS -----
USE WATER SPRAY. COOL TANK/ CONTAINER. WEAR SELF-CONTAINED BREATHING
APPARATUS. WEAR STRUCTURAL FIREFIGHTERS PROTECTIVE CLOTHING.

NFPA/HMIS CLASSIFICATION HAZARD RATING
HEALTH - 2 / 2 0=LEAST 1=SLIGHT
FIRE - 3 / 3 2=MODERATE 3=HIGH
REACTIVITY - 0 / 0 4=EXTREME
PERSONAL PROTECTION INDEX - X

SPECIFIC HAZARD: FLAMMABLE

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6. ACCIDENTAL RELEASE MEASURES

PREVENT IGNITION; STOP LEAK; VENTILATE AREA. CONTAIN SPILL. USE WATER
SPRAY TO DISPERSE VAPORS. KEEP UPWIND OF LEAK. USE PERSONAL PROTECTIVE
EQUIPMENT STATED IN SECTION 8. ADVISE EPA; STATE AGENCY IF REQUIRED.
ABSORB ON INERT MATERIAL. SHOVEL, SWEEP OR VACUUM SPILL.

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7. HANDLING AND STORAGE

KEEP AWAY FROM HEAT, SPARKS AND FLAME. KEEP IN COOL, DRY PLACE. KEEP
CONTAINER TIGHTLY CLOSED. KEEP IN WELL VENTILATED SPACE. NFPA CLASS IB
STORAGE. CONSULT NFPA AND OSHA CODES. AVOID PROLONGED BREATHING OF MIST
OR VAPOR. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. AVOID CONTACT
WITH EYES. WASH THOROUGHLY AFTER HANDLING.

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## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

CONSULT WITH A HEALTH/SAFETY PROFESSIONAL FOR SPECIFIC SELECTION.

### VENTILATION -----

USE ONLY WITH ADEQUATE VENTILATION. VENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIMIT. EXPLOSION PROOF VENTILATION EQUIPMENT REQUIRED.

### PERSONAL PROTECTIVE EQUIPMENT -----

#### EYE -----

SPLASH PROOF CHEMICAL GOGGLES OR FULL FACE SHIELD RECOMMENDED TO PROTECT AGAINST SPLASH OF PRODUCT.

#### GLOVES -----

PROTECTIVE GLOVES RECOMMENDED TO PROTECT AGAINST CONTACT WITH PRODUCT.

#### RESPIRATOR -----

CONCENTRATION-IN-AIR DETERMINES PROTECTION NEEDED. USE ONLY NIOSH CERTIFIED RESPIRATORY PROTECTION. HALF-MASK AIR PURIFYING RESPIRATOR WITH ORGANIC VAPOR CARTRIDGES IS ACCEPTABLE TO 10 TIMES THE EXPOSURE LIMIT. FULL-FACE AIR PURIFYING RESPIRATOR WITH ORGANIC VAPOR CARTRIDGES IS ACCEPTABLE TO 50 TIMES THE EXPOSURE LIMIT NOT TO EXCEED THE CARTRIDGE LIMIT OF 1000 PPM. PROTECTION BY AIR PURIFYING RESPIRATORS IS LIMITED. USE A POSITIVE PRESSURE-DEMAND FULL-FACE SUPPLIED AIR RESPIRATOR OR SCBA FOR EXPOSURES ABOVE 50X THE EXPOSURE LIMIT. IF EXPOSURE IS ABOVE IDLH (IMMEDIATELY DANGEROUS TO LIFE & HEALTH) OR THERE IS THE POSSIBILITY OF AN UNCONTROLLED RELEASE OR EXPOSURE LEVELS ARE UNKNOWN THEN USE A POSITIVE PRESSURE-DEMAND FULL-FACE SUPPLIED AIR RESPIRATOR WITH ESCAPE BOTTLE OR SCBA.

#### OTHER -----

IF CONTACT IS UNAVOIDABLE, WEAR CHEMICAL RESISTANT CLOTHING. SAFETY SHOWER AND EYE WASH AVAILABILITY RECOMMENDED. LAUNDRER SOILED CLOTHES. FOR NON-FIRE EMERGENCIES, POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) & STRUCTURAL FIREFIGHTERS' PROTECTIVE CLOTHING WILL PROVIDE LIMITED PROTECTION.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT.....: 181 (DEG. F) \_\_\_\_\_ 83 (DEG. C)  
 MELTING POINT.....: N/A (DEG. F) \_\_\_\_\_ N/A (DEG. C)  
 SPECIFIC GRAVITY....: 0.80 (WATER=1)  
 PACKING DENSITY.....: N/A (KG/M3)  
 VAPOR PRESSURE.....: 33 (MM HG @ 20 DEG C)  
 VAPOR DENSITY.....: 2.07 (AIR=1)  
 SOLUBILITY IN WATER.: < 10 (% BY VOLUME)  
 PH INFORMATION.....: N/A AT CONC. N/A G/L H2O  
 % VOLATILES BY VOL.: 100  
 EVAPORATION RATE....: NOT DETERMINED (ETHYL ETHER=1)  
 OCTANOL/WATER COEFF.: N.D.  
 APPEARANCE.....: BROWNISH LIQUID  
 ODOR.....: MILD ALCOHOL  
 ODOR THRESHOLD.....: N.D. (PPM)  
 VISCOSITY.....: N.D. SUS @ N.D DEG F ... N.D. CST @ N.D DEG C  
 MOLECULAR WEIGHT....: N.D. (G/MOLE)

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10. STABILITY AND REACTIVITY

STABILITY -----  
 STABLE.  
 CONDITIONS TO AVOID-  
 HEAT, SPARKS AND OPEN FLAMES.  
 INCOMPATIBLE MATERIALS -----  
 STRONG OXIDIZING AGENTS  
 HAZARDOUS DECOMPOSITION -----  
 COMBUSTION MAY PRODUCE CARBON MONOXIDE AND OTHER ASPHYXIANTS  
 POLYMERIZATION -----  
 WILL NOT OCCUR.

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11. TOXICOLOGICAL INFORMATION

FOR THE PRODUCT -----  
 INHALATION: OVEREXPOSURE MAY CAUSE EYE, NOSE, THROAT, AND RESPIRATORY TRACT IRRITATION, CENTRAL NERVOUS SYSTEM (BRAIN) EFFECTS, DIZZINESS, COMA, OR DEATH. SKIN: MILD TOXICITY. PROLONGED/REPEATED CONTACT MAY CAUSE MODERATE IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. EYE: CONTACT MAY CAUSE MODERATE IRRITATION, REDNESS, TEARING. INGESTION: HARMFUL OR FATAL IF SWALLOWED AND/OR VOMITING OCCURS BECAUSE IT CAN ENTER THE LUNGS AND CAUSE DAMAGE--PULMONARY ASPIRATION HAZARD.

ISOPROPYL ALCOHOL (COMPONENT)  
 INHALATION: OVEREXPOSURE MAY CAUSE EYE, NOSE, THROAT, AND RESPIRATORY TRACT IRRITATION, CENTRAL NERVOUS SYSTEM (BRAIN) EFFECTS, DIZZINESS, COMA. SKIN: PRACTICALLY NON-TOXIC IF ABSORBED. LD50 (RABBIT) 12.8 G/KG. PROLONGED/REPEATED CONTACT MAY CAUSE MODERATE IRRITATION & DERMATITIS. EYE: CONTACT MAY CAUSE SEVERE IRRITATION & CORNEAL INJURY. ORAL: MODERATELY TOXIC. LD50 (RAT) 5.045 G/KG. HARMFUL/FATAL IF SWALLOWED. INGESTION MAY CAUSE GASTROINTESTINAL TRACT IRRITATION, CNS EFFECTS. THE SINGLELETHAL DOSE FOR HUMAN ADULT IS ABOUT 250 ML ALTHOUGH AS LITTLE AS 100 ML CAN BE FATAL; REPORTS OF SERIOUS ILLNESS FROM AS LITTLE AS 10 ML; BIRTH DEFECTS & REPRODUCTIVE EFFECTS FOUND IN ANIMALS

STODDARD SOLVENT (COMPONENT)  
 INHALATION: OVEREXPOSURE TO MIST OR VAPOR MAY CAUSE IRRITATION TO EYE, NOSE, THROAT, RESPIRATORY TRACT, CNS (BRAIN) EFFECTS, DIZZINESS. GROSS OVEREXPOSURE MAY CAUSE TREMOR, CONVULSIONS, UNCONSCIOUSNESS, RESPIRATORY FAILURE, DEATH. SKIN: PROLONGED/REPEATED CONTACT MAY CAUSE IRRITATION & DERMATITIS. EYE: MINIMALLY IRRITATING ON CONTACT. INGESTION: LOW ACUTE TOXICITY. PULMONARY ASPIRATION HAZARD - HARMFUL OR FATAL IF SWALLOWED AND/OR VOMITING OCCURS BECAUSE IT CAN ENTER THE LUNGS AND CAUSE DAMAGE.

XYLENE (COMPONENT)  
 INHALATION: VAPOR HARMFUL! OVEREXPOSURE TO HIGH CONCENTRATIONS CAN CAUSE EYE, NOSE, THROAT, LUNG IRRITATION; CNS (BRAIN) EFFECTS, DIZZINESS, DIFFICULTY IN BREATHING, UNCONSCIOUSNESS, COMA AND DEATH. REPORTS OF HEART IRREGULARITIES FROM MASSIVE EXPOSURES. PROLONGED OVEREXPOSURES CAN CAUSE BRAIN, LIVER, KIDNEY EFFECTS/DAMAGE. SKIN: CAN BE ABSORBED. REPEATED/PROLONGED CONTACT IS IRRITATING. EYES:

IRRITANT. ORAL: HARMFUL OR FATAL IF SWALLOWED. PULMONARY ASPIRATION HAZARD-CAN ENTER LUNGS AND CAUSE DAMAGE. IN RATS, PROLONGED BREATHING OF 500 PPM-FETAL EFFECTS BUT NO BIRTH DEFECTS; NO EFFECTS AT 400 PPM. HIGH ORAL DOSE WAS TOXIC TO PREGNANT MICE; CLEFT PALATE IN FETUSES.

ETHYL BENZENE (COMPONENT)

INHALATION: OVEREXPOSURE TO HIGH CONCENTRATIONS CAN CAUSE EYE, NOSE, THROAT & RESPIRATORY IRRITATION, CENTRAL NERVOUS SYSTEM (BRAIN) EFFECTS, DIZZINESS, LOSS OF BALANCE & COORDINATION, UNCONSCIOUSNESS, RESPIRATORY FAILURE & DEATH. PROLONGED BREATHING CAN CAUSE LIVER AND KIDNEY EFFECTS. SKIN: LOW ACUTE TOXICITY. ABSORBABLE THROUGH SKIN. MODERATE IRRITATION. EYE: MODERATE IRRITANT. ORAL: HARMFUL OR FATAL IF SWALLOWED. PULMONARY ASPIRATION HAZARD IF SWALLOWED AND/OR VOMITING OCCURS-CAN ENTER LUNGS AND CAUSE DAMAGE. PROLONGED OVEREXPOSURE OF 1000 PPM CAUSED MATERNAL AND FETAL TOXICITY.

FATTY AMIDE (COMPONENT)

NO DATA AVAILABLE FOR ANY ROUTE OF EXPOSURE.

TALLOW AMINE, ETHYOXYLATED (COMPONENT)

NO DATA AVAILABLE FOR ANY ROUTE OF EXPOSURE.

C12-C14 TERTIARY-ALKYL PRIMARY AMINES (COMPONENT)

INHALATION: MIST OR VAPORS GENERATED FROM HEATING MAY CAUSE EYES, NOSE THROAT & RESPIRATORY IRRITATION. SKIN: HARMFUL IF ABSORBED. CORROSIVE. MAY CAUSE BURNS AND ALLERGIC REACTION. EYE: SEVERE IRRITATION. MAY CAUSE PERMANENT DAMAGE. ORAL: HARMFUL IF SWALLOWED. MAY BE FATAL IN LARGE AMOUNTS. THIS PRODUCT CONTAINS A COMPONENT WHICH CAUSED GENETIC MUTATION IN BACTERIAL STUDIES.

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12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY -----

NO DATA AVAILABLE.

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13. DISPOSAL CONSIDERATIONS

FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT FLUSH TO DRAIN/ STORM SEWER. CONTRACT TO AUTHORIZED DISPOSAL SERVICE.

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14. TRANSPORTATION INFORMATION

DOT-
PROPER SHIPPING NAME- FLAMMABLE LIQUID, N.O.S. (CONTAINS ISOPROPYL ALCOHOL)
HAZARD CLASS- 3 (FLAMMABLE LIQUID)
IDENTIFICATION NUMBER- UN1993
LABEL REQUIRED- PG III, FLAMMABLE LIQUID

IMDG- PROPER SHIPPING NAME- NO DATA AVAILABLE

IATA- PROPER SHIPPING NAME- NO DATA AVAILABLE

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15. REGULATORY INFORMATION

SARA 302 THRESHOLD PLANNING QUANTITY. N/A

SARA 304 REPORTABLE QUANTITY ..... 37520 POUNDS

SARA 311 CATEGORIES- IMMEDIATE (ACUTE) HEALTH EFFECTS.. Y
DELAYED (CHRONIC) HEALTH EFFECTS.. N
FIRE HAZARD ..... Y
SUDDEN RELEASE OF PRESSURE HAZARD. N
REACTIVITY HAZARD ..... N

WHEN A PRODUCT AND/OR COMPONENT IS LISTED BELOW, THE REGULATORY LIST ON WHICH IT APPEARS IS INDICATED.

ISOPROPYL ALCOHOL - FL MA MN NJ PA 01 04 05
STODDARD SOLVENT - MA NJ PA RI
XYLENE - FL IL MA ME MN NJ PA RI 01 07
ETHYL BENZENE - FL MA MN NJ PA 01 07

- 01=SARA 313 02=SARA 302/304 03=IARC CARCINOGEN
04=OSHA CARCINOGEN 05=ACGIH CARCINOGEN 06=NTP CARCINOGEN
07=CERCLA 302.4 08=WHMIS CONTROLLED PROD.
10=OTHER CARCINOGEN
PA=PENNSYLVANIA RTK NJ=NEW JERSEY RTK CA=CALIFORNIA PROP 65
MA=MASSACHUSETTS RTK MI=MICHIGAN 406 MN=MINNESOTA RTK
FL=FLORIDA RI=RHODE ISLAND IL=ILLINOIS
NY=NEW YORK WV=WEST VIRGINIA CT=CONNECTICUT
LA=LOUISIANA ME=MAINE OH=OHIO

THIS PRODUCT OR ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE U.S. TSCA INVENTORY.

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16. OTHER INFORMATION

KEEP AWAY FROM CHILDREN.