

MATERIAL SAFETY DATA SHEET

Simply Elegant Inc.
1772 Crabb Lane
Huntington Beach, CA
92647
714-375-2575

SUBSTANCE IDENTIFICATION

Perfect Finish Thinner

CAS NUMBER: 123-86-4
RTECS NUMBER: AF7350000

SUBSTANCE: N-BUTYL ACETATE

TRADE NAMES/SYNONYMS:

BUTYL ACETATE; BUTYL ETHANOATE; 1-BUTYL ACETATE; ACETIC ACID N-BUTYL ESTER; ACETIC ACID, BUTYL ESTER; MC 1488; KODAK MICRO RESIST RINSE (KODAK); NPR 4040 RINSE (CHEMTECH INDUSTRIES); UN 1123; STCC 4904128; C6H1202; OHS15380

CHEMICAL FAMILY :
ESTER, CARBOXYLIC, ALIPHATIC

MOLECULAR FORMULA: C-H3-C-02-C4-H9

MILECULAR WEIGHT: 166.16

CERCLA RATINGS (SCALE 0-3): HEALTH=2 FIRE=3 REACTIVITY=0 PERSISTENCE=0
NFPA RATINGS (SCALE 0-4): HEALTH=1 FIRE=3 REACTIVITY=0

COMPONENTS AND CONTAMINANTS

COMPONENT: N-BUTYL ACETATE PERCENT: 100.0
CAS# 123-86-4

OTHER CONTAMINANTS: NONE

EXPOSURE LIMITHS:

N-BUTYL ACETATE:

150 PPM (710 MG/M3) OSHA TWA; 200 PPM (950 MG/M3) OSHA STEL
150 PPM (710 MG/M3) ACGIH TWA; 200 PPM (950 MG/M3) ACGIH STEL
(NOTICE OF INTENDED CHANGES 1992-93)
150 PPM (710 MG/M3) NIOSH RECOMMENDED TWA;
200 PPM (950 MG/M3) NIOSH RECOMMENDED STEL
200 PPN (950 MG/M3) DFG MAK TWA;
400 PPM (1900 MG/M3) DFG MAK 5 MINUTE PEAK, MOMENTARY VALUE, 8 TIMES/SHIFT

MEASUREMENT METHOD: CHARCOAL TUBE; CARBON DISULFIDE; GAS CHROMATOGRAPHY WITH FLAME IONIZATION DETECTION; (NIOSH VOL. III # 1450, ESTERS I).

5000 POUNDS CERCLA SECTIO 103 REPORTABLE QUANTITY

OSHA REVOKED THE FINAL RULE LIMITS OF JANUARY 19, 1989 IN RESPONSE TO THE 11TH CURCUIT COURT OF APPEALS DECISION (AFL-CIO V. OSHA) EFFECTIVE JUNE 30, 1993. SEE 29 CFR 1910. 1000 (58 FR 35338

PHYSICAL DATA

BOILING POINT: 261 F (127 C) MELTING POINT: -180 F (-78 C)
SPECIFIC GRAVITY: 0.8825 VOLATILITY: 100% VAPOR PRESSURE: 10 MM @ 20 C
EVAPORATION RATE: 5.8 (CCL4 = 1) SOLUBILITY IN WATER: 0.7%
ODOR THRESHOLD: 7-20 PPM VAPOR DENSITY: 4.0
SOLVENT SOLUBILITY: ALCOHOL, ETHER, BENZENE AND HYDROCARBONS.

FIRE AND EXPLOSION DATA

FIRE AND EXPLOSION HAZARD:
DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.

MODERATE EXPLOSION HAZARD WHEN EXPOSED TO HEAT OR FLAME.

VAPOR-AIR MIXTURES ARE EXPLOSIVE ABOVE FLASH POINT.

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK.

FLASH POINT: 72 F (22 C) (CC) UPPER EXPLOSIVE LIMIT: 7.6%

LOWER EXPLOSIVE LIMIT: 1.7% AUTOIGNITION TEMP: 797 F (425 C)

FLAMMABILITY CLASS (OSHA): IB

FIREFIGHTING MEDIA:
DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR ALCOHOL-RESISTANT FOAM
(1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5)

FOR LARGER FIRES, USE WATER SPRAY, FOG OR ALCOHOL-RESISTANT FOAM
(1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.0)

ALCOHOL FOAM
(NFPA 325M, FIRE HAZARD PROPERTIES OF FLAMMABLE LIQUIDS, GASSES, AND VOLATILE SOLIDS, 1991).

FIREFIGHTING:
MOVE CONTAINER FROM FIRE AREA IF YOU CAN DO IT WITHOUT RISK. APPLY COOLING WATER TO SIDES OF CONTAINERS THAT ARE EXPOSED TO FLAMES UNTIL WELL AFTER FIRE IS OUT. STAY AWAY FROM ENDS OF TANKS. FOR MASSIVE FIRE IN CARGO AREA, USE UNMANNED HOSE HOLDER OR MONITOR NOZZLES; IF THIS IS IMPOSSIBLE, WITHDRAW FROM AREA AND LET FIRE BURN. WITHDRAW IMMEDIATELY IN CASE OF RISING SOUND FROM VENTING SAFETY DEVICE OR ANY DISCOLORATION OF TANK DUE TO FIRE. ISOLATE FOR 1/2 MILE IN ALL DIRECTIONS IF TANK, RAIL CAR OR TANK TRUCK IS INVOLVED IN FIRE (1990 EMERGENCY RESPONSE GUIDEBOOK, DOT P 5800.5, GUIDE PAGE 26)

EXTINGUISH ONLY IF FLOW CAN BE STOPPED; USE WATER IN FLOODING AMOUNTS AS FOG, SOLID STREAMS MAY SPREAD FIRE. COOL CONTAINERS WITH FLOODING QUANTITIES OF WATER. AVOID BREATHING TOXIC VAPORS, KEEP UPWIND. WATER MAY BE INEFFECTIVE (NFPA 325M, FIRE HAZARD PROPERTIES OF FLAMMABLE LIQUIDS, GASSES, AND VOLATILE SOLIDS, 1991)

TRANSPORTATION DATA

DEPARTMENT OF TRANSPORTATION HAZARD CLASSIFICATION 49-CFR 172.101:
FLAMMABLE LIQUID

DEPARTMENT OF TRANSPORTATION LABELING REQUIREMENTS 49-CFR 172.101 AND SUBPART E:
FLAMMABLE LIQUID

DEPARTMENT OF TRANSPORTATION PACKAGING REQUIREMENTS: 49-CFR 173.119
EXCEPTIONS: 49-CFR 173.118

FINAL RULE ON HAZARDOUS MATERIAL REGULATIONS (HMR, 49 CFR PARTS 171-180),
DOCKET NUMBERS HM-181, HM-181A, HM-181B, HM-181C, HM-181D AND HM-204.
EFFECTIVE DATE OCTOBER 1, 1991. HOWEVER, COMPLIANCE WITH THE REGULATIONS IS AUTHORIZED ON AND
AFTER JANUARY 1, 1991. (55 FR 52402, 12/21/90)

EXCEPT FOR EXPLOSIVES, INHALATION HAZARDS, AND INFECTIOUS SUBSTANCES, THE EFFECTIVE DATE FOR
HAZARD COMMUNICATION REQUIREMENTS IS EXTENDED TO OCTOBER 1, 1993. (56 FR 47158, 09/18/91)

U.S. DEPARTMENT OF TRANSPORTATION SHIPPING NAME-ID NUMBER, 49 CFR 172.101: BUTL ACETATE-UN 1123

U.S. DEPARTMENT OF TRANSPORTATION HAZARD CLASS OR DIVISION, 49 CFR 172.101:
FLAMMABLE LIQUID

U.S. DEPARTMENT OF TRANSPORTATION PACKING GROUP, 49 CFR 172.101: PG II

U.S. DEPARTMENT OF TRANSPORTATION LABELING REQUIREMENTS, 49 CFR 172.101 AND SUBPART E:
FLAMMABLE LIQUID

U.S. DEPARTMENT OF TRANSPORTATION PACKAGING AUTHORIZATIONS:
EXCEPTIONS: 49 CFR 173.150
NON-BULK PACKAGING: 49 CFR 173.202
BULK PACKAGING: 49 CFR 173.242

U.S. DEPARTMENT OF TRANSPORTATION QUANTITY LIMITATIONS 49 CFR 172.101:
PASSENGER AIRCRAFT OR RAILCAR: 5 L
CARGO AIRCRAFT ONLY: 60 L

TOXICITY

N-BUTYL ACETATE:

IRRITATION DATA: 300 PPM EYE-HUMAN; 20 MG OPEN EYE-RABBIT SEVERE;
20 MG/24 HOURS EYE-RABBIT MODERATE; 500 MG/24 HOURS SKIN-RABBIT MODERATE;
500 MG/24 HOURS SKIN-RABBIT MILD.

TOXICITY DATA: 200 PPM INHALATION-HUMAN TCLO; 2000 PPM/4 HOURS INHALATION-RAT LC50; 160PPM
INHALATION-RAT LC50 (8EHQ-0387-0658); 6 GM/M3/2 HOURS INHALATION-MOUSE LC50; 67 GM/M3/4 HOURS
INHALATION-GUINEA PIG LCLO; 68 MG/M3/72 MINUTES INHALATION-CAT LCLO; >5 GM/KG SKIN-RABBIT
LD50 13100 MG/KG ORAL -RAT LD50, 7060 MG/KG ORAL MOUSE LD50, 4700 MG/KG ORAL -GUINEA PIG LD50, 3200
MG/KG ORAL RABBIT LD50, 1230 MG/KG INTRAPERITONEAL-MOUSE LD50, 1500 MG/KG INTRAPERITONEAL-
GUINEA PIG LDLO, 2648 MG/KG INTRAMUSCULAR-GUINEA PIG LDLO, 1592 MG/KG UNREPORTED-MAMMAL LD50,
REPRODUCTIVE EFFECTS DATA (RTECS).

CARCINOGEN STATUS: NONE

LOCAL EFFECTS: IRRITANT-INHALATION, SKIN, EYE.

ACUTE TOXICITY LEVEL: HIGHLY TOXIC BY INHALATION, SLIGHTLY TOXIC BY INGESTION AND DERMAL
ABSORPTION.

TARGET EFFECTS: CENTRAL NERVOUS SYSTEM DEPRESSANT.

AT INCREASED RISK FROM EXPOSURE: PERSONS WITH PRE-EXISTING KIDNEY, LIVER, OR RESPIRATORY
DISEASE.

