

Common Name: SAFETEX CYTOLOGY FIXATIVE FSP1
Manufacturer: ANDWIN SCIENTIFIC
Revision: (No Data Listed)

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

PRODUCT NAME: SAFETEX CYTOLOGY FIXATIVE FSP1

ANDWIN SCIENTIFIC
6636 VARIEL AVE
CANOGA PARK, CA 91303 (818) 999-2828
IN CASE OF EMERGENCY CONTACT ANDWIN AT (800) 497-3113

CHEMICAL NAME: SOLUTION OF: 95% ISOPROPANOL
3% DISTILLED WATER
2% POLYETHYLENE GLYCOL 1450

FORMULA: 95% (CH₃)₂CHOH
3% H₂O
2% HO-(CH₂CH₂O)_n-H

MOLECULAR WEIGHT: 1510.10

SYNONYMS: 95% 2-PROPANOL, SEC-PROPYL ALCOHOL, ISOPROPANOL
3% DISTILLED WATER
2% POLYETHYLENE GLYCOL 1450

CAS# AND NAME: 95% ISOPROPYL ALCOHOL (67-63-0)
3% DISTILLED WATER (007732-18-5)
2% POLY(OXY-1,2-ETHANEDIYL), A-HYDRO-W-HYDROXY-

2. PHYSICAL DATA

BOILING POINT: 86 DEGREES C (187 DEGREES F)

SPECIFIC GRAVITY (H₂O=1): 0.79

FREEZING POINT: -85C (-121F)

VAPOR PRESSURE AT 20 DEG. C: 30 MMHG (ESTIMATED BASED ON ISOPROPYL ALCOHOL)

VAPOR DENSITY (AIR =1): 2.0 (ESTIMATED BASED ON ISOPROPYL ALCOHOL)

EVAPORATION RATE
(BUTYL ACETATE =1): 2.5 (ESTIMATED BASED ON ISOPROPYL ALCOHOL)

SOLUBILITY IN WATER BY WT.: INFINITIVE IN WATER

APPEARANCE: CLEAR, COLORLESS LIQUID

ODOR: RUBBING ALCOHOL

PHYSICAL STATE: LIQUID

PRECAUTIONARY MEASURES

WARNING! FLAMMABLE LIQUID, HARMFUL IF SWALLOWED OR INHALED, AFFECTS CENTRAL NERVOUS SYSTEM, CAUSES IRRITATION.

KEEP AWAY FROM HEAT, SPARKS AND FLAME. KEEP CONTAINER CLOSED. USE WITH ADEQUATE VENTILATION. AVOID BREATHING VAPOR. WASH THOROUGHLY AFTER HANDLING.

AVOID CONTACT WITH EYES, SKIN AND CLOTHING.

EMERGENCY FIRST AID

IF SWALLOWED, GIVE WATER TO DRINK. INDUCE VOMITING IF MEDICAL HELP IS NOT IMMEDIATELY AVAILABLE. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IN CASE OF CONTACT, IMMEDIATELY FLUSH SKIN OR EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IN ALL CASES CALL A PHYSICIAN. SEE SECTION 6.

DOT HAZARD CLASS: FLAMMABLE LIQUID

NFPA RATINGS: HEALTH: 1
FLAMMABILITY: 3
REACTIVITY: 0

FIRE AND EXPLOSION: FLAMMABLE LIQUID FLASH POINT: 12 c (53F), (CLOSED CUP).
AUTO IGNITION TEMPERATURE: 399 C (750F). FLAMMABLE LIMITS IN AIR, % BY VOLUME:

LEL: 2.0; EUL: 12.0

SECTION 3

EXPLOSION: ABOVE FLASH POINT, VAPOR-AIR MIXTURES ARE EXPLOSIVE WITHIN FLAMMABLE LIMITS NOTED ABOVE. CONTACT WITH STRONG OXIDIZERS MAY CAUSE FIRE OR EXPLOSION.

FIRE EXTINGUISHING: MEDIA: WATER SPRAY, DRY CHEMICAL, ALCOHOL FOAM, OR CARBON DIOXIDE. WATER SPRAY MAY BE USED TO KEEP FIRE EXPOSED CONTAINERS COOL.

SPECIAL INFORMATION: IN THE EVENT OF A FIRE, WEAR FULL PROTECTIVE CLOTHING AND

NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE PIECE OPERATED

IN THE PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MADE. WATER MAY BE USED TO FLUSH SPILLS AWAY FROM EXPOSURES AND TO DILUTE SPILLS TO NON-FLAMMABLE MIXTURES. VAPORS CAN FLOW ALONG SURFACES TO DISTANT IGNITION SOURCE AND FLASH BACK.

SECTION 4

REACTIVITY DATA: STABLE UNDER ORDINARY CONDITIONS OF USE AND STORAGE. HEAT AND SUNLIGHT CAN CONTRIBUTE TO INSTABILITY.

HAZARDOUS-DECOMPOSITION PRODUCTS: TOXIC GASES AND VAPORS SUCH AS CARBON MONOXIDE MAY BE RELEASED IN A FIRE INVOLVING ISOPROPYL ALCOHOL.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

INCOMPATIBILITIES: HEAT, FLAME STRONG OXIDIZERS, ACETALDEHYDE, CHLORINE, ETHYLENE OXIDE, HYDROGEN-PALLADIUM COMBINATION, HYDROGEN PEROXIDE-SULFURIC ACID

COMBINATION, POTASSIUM TERT-BUTOXIDE, HYPOCHLOROUS ACID, ISOCYANATES, NITROFORM, PHOSGENE, OLEUM AND PERCHLORIC ACID.

SECTION 5

LEAK/SPILL DISPOSAL INFORMATION:

REMOVE ALL SOURCES OF IGNITION. VENTILATE AREA OF LEAK OR SPILL. CLEAN-UP PERSONNEL REQUIRE PROTECTIVE CLOTHING AND RESPIRATORY PROTECTION FROM VAPORS. SMALL SPILLS MAY BE ABSORBED ON PAPER TOWELS AND EVAPORATED IN A FUME HOOD. ALLOW ENOUGH TIME FOR FUMES TO CLEAR HOOD, THEN IGNITE PAPER IN A SUITABLE LOCATION AWAY FROM COMBUSTIBLE MATERIALS. CONTAIN AND RECOVER LIQUID FOR RECLAMATION WHEN POSSIBLE. LARGER SPILLS AND LOT SIZES CAN BE COLLECTED AS HAZARDOUS WASTE AND ATOMIZED IN A SUITABLE RCRA APPROVED COMBUSTION CHAMBER, OR ABSORBED WITH VERMICULITE, DRY SAND, EARTH OR SIMILAR MATERIAL FOR DISPOSAL AS HAZARDOUS WASTE IN A RCRA APPROVED FACILITY.

ENSURE COMPLIANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

SECTION 6

HEALTH HAZARD INFORMATION:

A. EXPOSURE/HEALTH EFFECTS

INHALATION: MAY CAUSE IRRITATION OF THE NOSE AND THROAT. EXPOSURE TO HIGH CONCENTRATIONS HAS A NARCOTIC EFFECT, PRODUCING SYMPTOMS OF DROWSINESS, HEADACHE, STAGGERING, UNCONSCIOUSNESS AND POSSIBLY DEATH.

INGESTION: MAY CAUSE DROWSINESS, UNCONSCIOUSNESS, AND DEATH.

GASTROINTESTINAL

PAIN, CRAMPS, NAUSEA, VOMITING, AND DIARRHEA MAY ALSO RESULT. THE SINGLE LETHAL DOSE FOR HUMAN ADULT=ABOUT 250 mls (SAX SIXTH EDITION).

SKIN CONTACT: HAS A DEFATTING ACTION OF THE SKIN THAT CAN CAUSE IRRITATION. MAY CAUSE IRRITATION WITH A STINGING EFFECT AND BURNING SENSATION.

EYE CONTACT: VAPORS MAY IRRITATE THE EYES. SPLASHES MAY CAUSE SEVERE IRRITATION, DRYING, CRACKING, OR CONTACT DERMATITIS MAY DEVELOP.

CHRONIC EXPOSURE: PROLONGED CONTACT WITH SKIN MAY CAUSE MILD IRRITATION,

DRYING, CRACKING, OR CONTACT DERMATITIS MAY DEVELOP.

AGGRAVATION OF PRE-EXISTING CONDITIONS: PERSONS WITH PRE-EXISTING SKIN DISORDERS OR EYE PROBLEMS OR IMPAIRED RESPIRATORY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THE SUBSTANCE.

B. FIRST AID

INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN.

INGESTION: GIVE WATER TO DRINK. INDUCE VOMITING IF MEDICAL HELP IS NOT IMMEDIATELY AVAILABLE. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

GET MEDICAL ATTENTION IMMEDIATELY.

SKIN EXPOSURE: REMOVE ANY CONTAMINATED CLOTHING. WASH SKIN WITH SOAP OR MILD

DETERGENT AND WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS.

EYE EXPOSURE: WASH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, LIFTING LOWER AND UPPER EYELIDS OCCASIONALLY. GET MEDICAL ATTENTION IMMEDIATELY.

C. TOXICITY: (RTECS, 1986)

ORAL RAT LD50: 5840 MG/KG. SKIN RABBIT LD50: 13 GM/KG. INHALATION RAT LC50: 16000 PPM/8H. MUTATION REFERENCES CITED AQUATIC TOXICITY RATING.

TLM96: 1000-10 PPM

SECTION 7

OCCUPATIONAL CONTROL MEASURES

AIRBORNE EXPOSURE LIMITS:-OSHA PERMISSIBLE EXPOSURE LIMIT (PEL): 400 PPM (TWA), 500 PPM (STEL)-ACGIH THRESHOLD LIMIT VALUE (TLV): 400 PPM (TWA), 500 PPM (STEL)

VENTILATION SYSTEM: A SYSTEM OF LOCAL AND/OR GENERAL EXHAUST IS RECOMMENDED TO

PREFERRED KEEP EMPLOYEE EXPOSURES BELOW THE AIRBORNE EXPOSURE LIMITS. LOCAL EXHAUST VENTILATION IS GENERALLY

RECOMMENDED BECAUSE IT CAN SOURCE, PREVENTING DISPERSION OF IT INTO THE GENERAL WORK AREA. PLEASE REFER TO THE ACGIH DOCUMENT, "INDUSTRIAL VENTILATION A MANUAL OF

PRACTICES", MOST RECENT EDITION, FOR DETAILS.

PERSONAL RESPIRATORS: IF THE TLV IS EXCEEDED A FULL FACE PIECE CHEMICAL (NIOSH APPROVED) CARTRIDGE RESPIRATOR MAY BE WORN, IN GENERAL, UP TO THE

MAXIMUM USE CONCENTRATION SPECIFIED BY THE RESPIRATOR

PIECE SUPPLIER. ALTERNATIVELY, A SUPPLIED AIR FULL FACE
RESPIRATOR OR AIRLINED HOOD MAY BE WORN.

SKIN PROTECTION: WEAR IMPERVIOUS PROTECTIVE CLOTHING, INCLUDING BOOTS,
GLOVES,
LAB COAT, APRON OR COVERALLS TO PREVENT SKIN CONTACT.

EYE PROTECTION: USE CHEMICAL SAFETY GOGGLES AND/OR A FULL FACE SHIELD WHERE
SPLASHING IS POSSIBLE. CONTACT LENSES SHOULD NOT BE WORN
WHEN WORKING WITH THIS MATERIAL. MAINTAIN EYE WASH FOUNTAIN
AND QUICK-DRENCH FACILITIES IN WORK AREA.

SECTION 8

STORAGE AND SPECIAL INFORMATION

PROTECT AGAINST PHYSICAL DAMAGE. STORE IN A COOL, DRY WELL-VENTILATED
LOCATION, AWAY FROM ANY AREA WHERE THE FIRE HAZARD MAY BE ACUTE. OUTSIDE OF
DETACHED STORAGE IS PREFERRED. SEPARATE FROM OXIDIZING MATERIALS.

CONTAINERS

SHOULD BE BONDED AND GROUNDED FOR TRANSFERS TO AVOID STATIC SPARKS. STORAGE
AND USE AREAS SHOULD BE NO SMOKING AREAS. USE NON-SPARKING TYPE TOOLS AND
EQUIPMENT.

ADDENDUM TO MATERIAL SAFETY DATA SHEET REGULATORY STATUS

THIS ADDENDUM MUST NOT BE DETACHED FROM THE MSDS IDENTIFIES SARA 313
SUBSTANCE(S) ANY COPYING OR REDISTRIBUTION OF THE MSDS MUST INCLUDE A COPY OF
THIS ADDENDUM.

HAZARD CATEGORIES FOR SARA SECTION 311/312 REPORTING

ACUTE	CHRONIC	FIRE	PRESSURE	REACTIVE
X	X	X		
PRODUCT OR COMPONENTS OF PRODUCT:	SARA EHS SEC.302 RQ TPQ	SARA SEC. 313 CHEMICALS NAME CHEMICAL LIST CATEGORY	CERCLA SEC.103 RQ lbs	RCRA SEC. 261.33
PROPYLENE GLYCOL (0000-57-55-6)	NO	NO	YES NO	NO NO
ISOPROPYL ALCOHOL (67-63-0)	NO	NO	YES NO	NO NO

SARA SECTION 302 EHS RQ:
REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, LISTED AT 40 CFR 355.

SARA SECTION 302 EHS TPQ:
THRESHOLD PLANNING QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE. AN ASTERISK
(*)
FOLLOWING A THRESHOLD PLANNING QUANTITY SIGNIFIES THAT IF THE MATERIAL IS A
SOLID AND HAS A PARTICLE SIZE EQUAL TO OR LARGER THAN 100 MICROMETERS, THE
THRESHOLD PLANNING QUANTITY = 10,000 LBS.

SARA SECTION 313 CHEMICALS:
TOXIC SUBSTANCES SUBJECT TO ANNUAL RELEASE REPORTING REQUIREMENTS LISTED AT
40
CFR 372.65

CERCLA SEC. 103:
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT
(SUPERFUND) RELEASES TO AIR, LAND OR WATER OF THESE HAZARDOUS SUBSTANCES
WHICH
EXCEED THE REPORTABLE QUANTITY (RQ) MUST BE REPORTED TO THE NATIONAL RESPONSE
CENTER, (800-424-8802) LISTED AT 40 CFR 302.4

RCRA:
RESOURCE CONSERVATION AND RECLAMATION ACT. COMMERCIAL CHEMICAL PRODUCT
WASTES
DESIGNATED AS ACUTE HAZARDS AND TOXIC UNDER 40 CFR 261.33