



# FOOD121

**SCHOOLS**  
715 S.E. 6th Ave.  
LESBORO, OR 97123

MATERIAL SAFETY DATA SHEET

FS 0019

0-KEM, INC.  
402 SUSANA RD.  
RANCHO DOMINGUEZ, CA 90221  
EMERGENCY TEL. NO. 310-632-7124

MATERIAL SAFETY DATA SHEET  
ESSENTIALLY SIMILAR TO FORM OSHA 174

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**SECTION I IDENTIFICATION OF PRODUCT**      FL342      Spin Clean  
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IDENTITY: APPEAR SPIN BONNET CLEANER  
NUMBER: 342  
DATE PREPARED: 8-21-92  
REVISION: 3

HAZARD RATING:  
4 = EXTREME      1 = SLIGHT  
3 = HIGH      0 = INSIGNIFICANT  
2 = MODERATE      \* = SEE SECTION IV

TOXICITY: 1  
FIRE: 2  
REACTIVITY: 0  
SPECIAL: B

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**SECTION II HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**  
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HAZARDOUS COMPONENTS (SPECIFIC CHEMICAL  
IDENTITY-COMMON NAME(S)):  
ISOPROPYL ALCOHOL  
(ISOPROPANOL ANHYDROUS 99X)  
CAS NUMBER: 67-63-0  
OSHA PEL: 400PPM  
ACGIH TLV: 400PPM  
OTHER LIMITS RECOMMENDED: STEL 500PPM  
X (OPTIONAL):

2-BUTOXYETHANOL  
(ETHYLENE GLYCOL-N-BUTYL ETHER)  
CAS NUMBER: 111-76-2  
OSHA PEL: S-25PPM  
ACGIH TLV: S-25PPM  
OTHER LIMITS RECOMMENDED: STEL (75) PPM  
X (OPTIONAL):

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**SECTION III PHYSICAL/CHEMICAL CHARACTERISTICS**  
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BOILING POINT: 165F TO 340F  
VAPOR PRESSURE (MM HG ): 23  
VAPOR DENSITY (AIR = 1): >1  
SOLUBILITY IN WATER: COMPLETE

SPECIFIC GRAVITY (H2O=1): 0.989  
MELTING POINT: NA  
EVAPORATION RATE  
(BUTYL ACETATE = 1): <1

APPEARANCE: LIGHT BLUE LIQUID  
DOOR: LEMCN/ORANGE DOOR

PH 9 77 F: 9 0

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SECTION IV FIRE AND EXPLOSION HAZARD DATA  
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FLASH POINT(METHOD USED): 101 F (TCC)

FLAMMABLE LIMITS: ISPROPANOL

LEL 2.0%

UEL 12.0

EXTINGUISHING MEDIA: CO2, DRY CHEMICAL, ALCOHOL TYPE FOAM

SPECIAL FIRE FIGHTING PROCEDURES: FIRE FIGHTERS SHOULD WEAR SELF CONTAINED BREATHING APPARATUS USE WATER SPRAY TO COOL NEARBY STRUCTURES AND CONTAINERS EXPOSED TO FIRE

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

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SECTION V HEALTH HAZARD DATA  
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ROUTE(S) OF ENTRY: INHALATION? X EYES? X SKIN? X INGESTION?

(ACUTE) HEALTH HAZARDS:

EYES: LIQUID AND MISTS MAY IRRITATE THE EYES PROLONGED CONTACT MAY CAUSE CONJUNCTIVITIS.

SKIN: BRIEF CONTACT WILL DEFAT THE SKIN PROLONGED CONTACT MAY CAUSE IRRITATION AND RESULT IN DERMATITIS.

INGESTION: MAY CAUSE NAUSEA AND VOMITING LARGE AMOUNTS WILL LEAD TO HEADACHE, DIZZINESS, NAUSEA AND DIARRHEA. DO NOT ALLOW VOMITING TO BE BREATHED INTO LUNGS-MAY CAUSE CHEMICAL PNEUMONITIS

INHALATION: VAPOR AND MIST MAY BE IRRITATING TO THE NOSE HIGH CONCENTRATIONS MAY CAUSE HEADACHE, NAUSEA, GIDDINESS

(CHRONIC) HEALTH HAZARDS:

MAY CAUSE LIVER, KIDNEY AND LUNG DAMAGE BY PROLONGED EXCESSIVE OVER EXPOSURE

SIGNS AND SYMPTOMS OF EXPOSURE:

EYES: WATERING OF EYES. IRRITATION & OCCASIONAL INFLAMMATION OF CONJUNCTIVITIS

SKIN: DRY SKIN, INFLAMMATION

INGESTION: BASTRO-INTESTIONAL IRRITATION, NAUSEA, VOMITING

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

NONE

EMERGENCY AND FIRST AID PROCEDURES:

EYES: FLUSH EYES WITH RUNNING WATER FOR 15 MINS IF IRRITATION OCCURS, OBTAIN MEDICAL ATTENTION.

SKIN: WASH WITH SOAP & WATER. IF IRRITATION PERSISTS OR IF BLISTERS OCCUR, OBTAIN MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. OBTAIN MEDICAL ATTENTION, IMMEDIATELY

INHALATION: REMOVE TO FRESH AIR IF SYMPTOMS PERSISTS, OBTAIN MEDICAL ATTENTION;  
IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION OBTAIN MEDICAL ATTENTION

SECTION VI TOXICITY DATA

CARCINOGENICITY: NO NTP? IARC MONOGRAPHS? OSHA REGULATED?

ORAL: 2-BUTOXYETHANOL LD50(RAT) = 1480 MG/KG (RABBIT) = 320 MG/KG

DERMAL: 2-BUTOXYETHANOL LD-50(RABBIT) = 490 MG/KG

INHALATION: 2-BUTOXYETHANOL LC50(MOUSE)= 700 PPM/7H;  
HUMAN TCLO=195 PPM/8H

SECTION VII REACTIVITY DATA

STABILITY - UNSTABLE: CONDITIONS TO AVOID: OPEN FLAMES, WELDING  
STABLE: XX ARCS OR OTHER HIGH TEMPERATURE SOURCES WHICH  
MAY INTRODUCE THERMAL DECOMPOSITION

INCOMPATIBILITY (MATERIALS TO AVOID): ALKALIS, OXIDIZING AGENTS, POWDERED ZIN  
OR THIER ALLOYS.

HAZARDS DECOMPOSITION OR BYPRODUCTS: CARBON MONOXIDE, CARBON DIOXIDE, HYDROGE  
N CHLORIDE, CHLORINE OR PHOSGENE.

HAZARDOUS POLYMERIZATION - MAY OCCUR:  
WILL NOT OCCUR: XX  
CONDITIONS TO AVOID:

SECTION VIII PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: WEAR PROTECTIVE  
EQUIPMENT INCLUDING RUBBER BOOTS, RUBBER GLOVES, RUBBER APRON, CHEMICAL GOGGLE  
AND APPROPRIATE RESPIRATORY PROTECTION EXTINGUISH ALL IGNITION SOURCES  
SMALL SPILLS: MOP OR WIPE UP AND DISPOSE OF IN DOT-APPROVED WASTE CONTAINERS  
LARGE SPILLS: CONTAIN BY DIKING WITH SOIL OR OTHER ABSORBENT MATERIAL AND THE  
PUMP INTO DOT-APPROVED WASTE CONTAINERS OR ABSORB WITH SORBENT MATERIAL AND  
PLACE THE RESIDUE IN DOT-APPROVED WASTE CONTAINER

WASTE DISPOSAL METHOD:  
DISPOSE OF CONTAMINATED PRODUCT AND MATERIALS USED IN CLEANING UP SPILLS AND  
LEAKS IN A MANNER APPROVED FOR THIS MATERIAL CONSULT APPROPRIATE FEDERAL,  
STATE AND LOCAL REGULATORY AGENCIES TO ASCERTAIN PROPER DISPOSAL PROCEDURES

NOTE: EMPTY CONTAINERS CAN RETAIN RESIDUES, GASES AND MISTS AND ARE SUBJECT  
TO PROPER WASTE DIPOSAL, AS ABOVE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STRING:  
STORE IN A COOL, DRY PLACE VENT CONTAINER FREQUENTLY, AND MORE OFTEN IN WARM  
WEATHER, TO RELIEVE PRESSURE KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE  
DO NOT USE PRESSURE TO EMPTY CONTAINER WASH THOROUGHLY AFTER HANDLING DO NOT  
GET IN EYES, ON SKIN, OR ON CLOTHING

OTHER PRECAUTIONS:

DO NOT CUT, GRIND, WELD OR DRILL ON OR NEAR THIS CONTAINER VAPORS OF THIS PRODUCT ARE HEAVIER THAN AIR AND WILL COLLECT IN LOW PLACES, SUCH AS PITS (DEGREASERS, OR OTHER POORLY VENTILATED AREAS DO NOT ENTER PLACES WHERE VAPORS ARE SUSPECTED UNLESS, SPECIAL RESPIRATORY IS WORN AND AN OBSERVER IS PRESENT. CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, WILL RETAIN RESIDUE AND VAPOR. ALWAYS OBEY HAZARD WARNINGS AND HANDLE EMPTY CONTAINERS AS IF THEY WERE FULL

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SECTION IX CONTROL MEASURES  
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RESPIRATORY PROTECTION (SPECIFY TYPE): USE NIOSH/APPROVED RESPIRATOR WHEN USED IN UNVENTILATED CONFINED AREAS

VENTILATION: GOOD ROOM VENTILATION

LOCAL EXHAUST: NA

MECHANICAL (GENERAL): EXHAUST FANS TO MAINTAIN PELS IF AREAS ARE CONFINED

SPECIAL: NA

OTHER:

PROTECTIVE GLOVES: PLASTIC OR NEOPRENE

EYE PROTECTION: CHEMICAL SAFETY GLASSES

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: EYE WASH EQUIPMENT

WORK/HYGIENIC PRACTICES:

THE RECOMMENDATIONS DESCRIBED IN THIS SECTION ARE PROVIDED AS GENERAL GUIDANCE FOR MINIMIZING EXPOSURE WHEN HANDLING THIS PRODUCT. BECAUSE USE CONDITIONS VARY DEPENDING UPON CUSTOMER APPLICATIONS, SPECIFIC SAFE HANDLING PROCEDURES SHOULD BE DEVELOPED BY PERSONS KNOWLEDGEABLE OF THE INTENDED USE CONDITIONS AND EQUIPMENT.

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SECTION X DOT HAZARDOUS INFORMATION  
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UN/NA: NA 1993

CLASSIFICATION: COMBUSTIBLE

PROPER SHIPPING NAME: COMPOUND, CLEANING, LIQUID

(CONTAINS ISOPROPRANOL), COMBUSTIBLE, NA1993

PHOTO CHEMICALLY REACTIVE? NA X

NON-PHOTO CHEMICALLY REACTIVE? NA

<4% ---->4% ----

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SECTION XI MISCELLANEOUS INFORMATION  
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VOC = 217 GRAMS PER LITER OF MATERIAL

SARA TITLE III SECTION 313: ANNUAL REPORT REQUIRED UNDER GLYCOL ETHER CATEGORY FOR USAGE EXCEEDING 10,000 POUNDS/YEAR FROM ALL SOURCES. THIS PRODUCT CONTAINS 2-BUTOXYETHANOL AT 15% BY WEIGHT, CAS NO. 111-76-2

PROP 65: NO

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NOTICE

ALL INFORMATION, RECOMMENDATIONS, AND SUGGESTIONS APPEARING HEREIN CONCERNING THIS PRODUCT ARE BASED UPON DATA OBTAINED FROM THE MANUFACTURER AND/OR RECOGNIZED TECHNICAL SOURCES; HOWEVER, FLO-KEM, INC. MAKES NO WARRANTY, REPRESENTATION OR GUARANTY AS TO THE ACCURACY, SUFFICIENCY OR COMPLETENESS OF THE MATERIAL SET FORTH HEREIN IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SAFETY, TOXICITY AND SUITABILITY OF HIS OWN USE, HANDLING AND DISPOSAL OF THE PRODUCT ADDITIONAL PRODUCT LITERATURE MAY BE AVAILABLE UPON REQUEST SINCE ACTUAL USE BY OTHERS IS BEYOND OUR CONTROL, NO WARRANTY, EXPRESS OF IMPLIED, IS MADE BY FLO-KEM, INC. AS TO THE EFFECTS OF SUCH USE, THE RESULTS TO BE OBTAINED OR THE SAFETY AND TOXICITY OF THE PRODUCT, NOR DOES FLO-KEM, INC. ASSUME ANY LIABILITY ARISING OUT OF USE BY OTHERS OF THE PRODUCT

NA - NOT APPLICABLE

S - MAY BE ABSORBED THROUGH INTACT SKIN

ND - NO DATA AVAILABLE