

**ABBOT INDUSTRIAL SUPPLIES INTL. INC.**

11604 HART STREET  
NORTH HOLLYWOOD, CA 91605  
(818) 982-2707 • FAX (818) 982-1192

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**MATERIAL SAFETY DATA SHEET**

**Section 01 Identification**

Info Furnished By: **Abbott Industrial Supplies**  
Address: **11604 Hart Street, North Hollywood, CA 91605**  
Emergency Phone #: **818-982-2707**  
Date Effective: **04/08/99**  
Product or Trade Name: **FIXATIVE FORMULA**  
Chemical Name/Synonyms: **ALCOHOL MIXTURE**  
Hazardous Ingredients: **CAS REGISTRATION #**  
HAZARD DATA

ITEM #1  
ISOBROPYL ALCOHOL, 67-63-0

**OCCUPATIONAL EXPOSURE LIMITS**

NO.	OSHA PEL/TWA	OSHA PEL/Ceiling	TLV/TWA	TLV/STEL	OTHER
1	400PPM		400 PPM	500PPM	500PPM*

50% ODOR RECOGNITION THRESHOLD IS 7.5 PPM. \* OSHA PEL/STEL.

**Section 02 Physical Data**

Boiling Point: 180 (DEG. F.)  
Specific Gravity: 0.752  
Vapor Pressure: 32 @ 68 DEG. F. (MM HG)  
Melting Point: N/A  
Solubility: COMPLETE (IN WATER)  
Vapor Density: 2.1 (AIR=1)  
Evaporation Rate (N-Butyl Acetate=1): 1.4  
VOC (G/L) = 752  
Appearance and Odor: COLORLESS, MOBILS LIQUID. MILD ODOR.

**Section 03 Fire And Explosion Hazard Data**

Flash Point and Method: 53 DEG. F. - TCC (LOWEST COMPONENT)

Flammable Limits /% Volume in Air:

Lower: 2  
Upper: 12

**EXTINGUISHING MEDIA:**

USE WATER FOG, "ALCOHOL" FOAM, DRY CHEMICAL OR CO2.

**SPECIAL FIRE-FIGHTING PROCEDURES AND PRECAUTIONS:**

W-A R N I N G - FLAMMABLE. CLEAR FIRE AREA OF UNPROTECTED PERSONNEL.  
DO NOT ENTER CONTAINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE PRESSURE NIOSH-APPROVED, SELF-CONTAINED BREATHING APPARATUS. COOL FIRE-EXPOSED CONTAINERS WITH WATER.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**

CONTAINERS EXPOSED TO INTENSE HEAT FROM FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP WHICH COULD RESULT IN CONTAINER RUPTURE. CONTAINER AREAS EXPOSED TO DIRECT FLAME CONTACT SHOULD BE COOLED WITH LARGE QUANTITIES OF WATER AS NEEDED TO PREVENT WEAKENING OF CONTAINER.

**FOR PRODUCT EMERGENCY CONTACT:**  
**CHEM-TEL INC. 1-800-255-3924**

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Section 03 Fire And Explosion Hazard Data

STRUCTURE

Section 04 Reactivity Data

STABILITY: STABLE

HAZARDOUS POLYMERIZATION: NIL, NOT OCCUR.

CONDITIONS AND MATERIALS TO AVOID:

AVOID HEAT, SPARKS, FLAME AND CONTACT WITH STRONG OXIDIZING AGENTS. DO NOT  
STORE OR HANDLE IN ALUMINUM EQUIPMENT AT TEMPERATURES ABOVE 120 DEG. F.

HAZARDOUS DECOMPOSITION PRODUCTS:

CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING  
COMBUSTION.

Section 05 Spill, Leak And Disposal Procedures

SPILL OR LEAK PROCEDURES: ELIMINATE ALL IGNITION SOURCES. HANDLING  
EQUIPMENT MUST BE GROUNDED TO PREVENT SPARKING.

W A R N I N G - FLAMMABLE.

LARGE SPILLS: EVACUATE THE HAZARD AREA OF UNPROTECTED PERSONNEL. WEAR APPROPRIATE  
RESPIRATOR AND PROTECTIVE CLOTHING. SHUT OFF SOURCE OF LEAK ONLY IF SAFE  
TO DO SO. DIKE AND CONTAIN. IF VAPOR CLOUD FORMS, WATER FOG MAY BE USED  
TO SUPPRESS. CONTAIN RUN-OFF. REMOVE WITH VACUUM TRUCKS OR PUMP TO  
STORAGE/SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT SUCH AS CLAY,  
SAND OR OTHER SUITABLE MATERIAL, PLACE IN NON-LEAKING CONTAINERS FOR  
PROPER DISPOSAL. FLASH AREA WITH WATER TO REMOVE TRACE RESIDUE; DISPOSE OF  
FLASH SOLUTIONS AS ABOVE.

SMALL SPILLS: TAKE UP WITH AN ABSORBENT MATERIAL AND PLACE IN NON-LEAKING CONTAINERS;  
SEAL TIGHTLY FOR PROPER DISPOSAL.

ENVIRONMENTAL RELEASE INFORMATION:

KEEP OUT OF SURFACE WATERS, SEWERS AND WATERWAYS ENTERING OR LEADING  
TO SURFACE WATERS. NOTIFY AUTHORITIES IF ANY EXPOSURE TO THE GENERAL  
PUBLIC OR ENVIRONMENT OCCURS OR IS LIKELY TO OCCUR.

RCRA INFORMATION: UNDER EPA-RCRA (40 CFR 261.21), IF THIS PRODUCT BECOMES A WASTE MATERIAL,  
IT WOULD BE IGNITABLE, HAZARDOUS WASTE, HAZARDOUS WASTE NUMBER D001. REFER  
TO LATEST EPA OR STATE REGULATIONS REGARDING PROPER DISPOSAL.

Section 06 Health Hazard Data

ACUTE TOXICITY DATA:

NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
1	5840 MG/KG (RAT)	13000 MG/KG (RABBIT)	12000 PPM (RAT) 8 HRS

HEALTH INFORMATION:

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE

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Section 06. Health Hazard Data

OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT: MODERATELY IRRITATING TO THE EYES.

SKIN CONTACT: MILDLY IRRITATING TO THE SKIN.

INHALATION: MAY CAUSE MILD IRRITATION TO THE NOSE, THROAT AND RESPIRATORY TRACT AND MAY RESULT IN CENTRAL NERVOUS SYSTEM (CNS) DEPRESSION.

INGESTION: IRRITATING TO THE GASTROINTESTINAL TRACT, CAUSING ABDOMINAL PAIN AND VOMITING, SOMETIMES BLOODY. INGESTION MAY CAUSE CNS DEPRESSION, LOW BLOOD PRESSURE, RAPID HEART BEAT AND LIVER DAMAGE.

SIGNS AND SYMPTOMS: IRRITATION AS NOTED ABOVE. EARLY TO MODERATE CNS (CENTRAL NERVOUS SYSTEM) DEPRESSION MAY BE EVIDENCED BY GIDDINESS, HEADACHE, DIZZINESS AND NAUSEA. IN EXTREME CASES, UNCONSCIOUSNESS, RESPIRATORY DEPRESSION AND DEATH MAY OCCUR. LIVER DAMAGE MAY BE EVIDENCED BY LOSS OF APPETITE, JAUNDICE (YELLOW SKIN COLOR) AND SOMETIMES PAIN IN THE UPPER ABDOMEN ON THE RIGHT SIDE.

SUPPLEMENTAL HEALTH INFORMATION:

1PA: IN RESPONSE TO A TSCA TEST RULE, SEVERAL STUDIES OF 1PA HAVE NOW BEEN COMPLETED. THE STUDIES AND THEIR RESULTS ARE AS FOLLOWS: CHD ASSAYS, 1. BOTH MUTAGENICITY STUDIES, THE MOUSE MICRONUCLEUS AND DEVELOPMENTAL TOXICOLOGY. 2. RAT AND RABBIT ORAL TERATOGENICITY AND DEVELOPMENTAL TOXICOLOGY. A) THERE WAS NO EVIDENCE THAT 1PA CAUSED TERATOGENICITY IN RATS OR RABBIT. B) DEVELOPMENTAL TOXICITY WAS SHOWN IN RATS AT 1200 MG/KG (EVIDENCED BY DECREASED BODY WEIGHT\*\*) WHILE NO DEVELOPMENTAL TOXICITY WAS SEEN IN THE RABBIT STUDY. FOR RATS, THE NOAEL WAS 400 MG/KG; FOR RABBIT, 480 MG/KG. THIS WORK ALSO IDENTIFIED PREGNANT RABBIT TO BE APPROXIMATELY EIGHT TIMES MORE SENSITIVE TO 1PA'S LETHAL EFFECTS THAN NON-PREGNANT RABBIT\*\*.

OTHER TEST RULE RELATED STUDIES: 3. RAT ORAL REPRODUCTIVE TOXICITY: IN THE RAT REPRODUCTIVE TOXICITY STUDY, THE NOAEL FOR REPRODUCTION INDICERS WAS 1000 MG / KG. HOWEVER, THERE WAS A MARKED INCREASE IN POST - MEANING PUP MORTALITY AT THIS LEVEL\*\*; THE NOAEL FOR THIS EFFECT WAS 500 MG / KG. ALSO, THE NOAEL FOR PARENTAL FEMALE BODY WEIGHT DECREASE WAS 100 MG / KG. 4. IN RAT INHALATION NEUROTOXICITY AND ORAL DEVELOPMENTAL NEUROTOXICITY STUDIES, THERE WAS NO EVIDENCE BASED ON CLINICAL SIGNS OF CNS DEPRESSION (BOTH SPECIES) AND INCREASED BODY WEIGHT AND BLOOD EFFECTS (RAT ONLY) SEEN AT 1500 PPM. (NOTE: THE INFORMATION TAGGED BY \*\*\*\* ABOVE WERE SUBMITTED TO EPA UNDER THE REQUIREMENTS OF TSCA 8(e)).

Section 07. First Aid Procedures And Physician Notes

EYE CONTACT: IMMEDIATELY FLUSH EYES WITH PLURITY OF WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

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Section 07 First Aid Procedures and Physician Notes

SKIN CONTACT: IF IRRITATION OCCURS, GET MEDICAL ATTENTION.  
FLUSH SKIN WITH WATER.

INHALATION: REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT.  
GET MEDICAL ATTENTION.

INGESTION: DO NOT GIVE LIQUIDS IF VICTIM IS UNCONSCIOUS OR VERY DROWSY. OTHERWISE, GIVE NO MORE THAN 2 GLASSES OF WATER AND INDUCE VOMITING BY GIVING 30CC (2 TABLESPOONS) SYRUP OF IPECAC. IF IPECAC IS UNAVAILABLE, GIVE 2 GLASSES OF WATER AND INDUCE VOMITING BY TOUCHING FINGER TO BACK OF VICTIM'S THROAT. KEEP VICTIM'S HEAD BELOW HIPS WHILE VOMITING. GET MEDICAL ATTENTION.

NOTES TO PHYSICIAN: IF VICTIM IS A CHILD, GIVE NO MORE THAN 1 GLASS OF WATER AND 15 CC (1 TABLESPOON) SYRUP OF IPECAC. IF SYMPTOMS SUCH AS LOSS OF GAG REFLEX, CONVULSIONS OR UNCONSCIOUSNESS OCCUR BEFORE EMESIS, GASTRIC LAVAGE SHOULD BE CONSIDERED FOLLOWING INTUBATION WITH A CURVED ENDOTRACHEAL TUBE.

Section 08 Special Handling Information

RESPIRATORY PROTECTION: IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS (SEE SECTION 1), USE NIOSH-APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134, USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS.

PROTECTIVE CLOTHING: WEAR CHEMICAL GOGGLES IF THERE IS LIKELIHOOD OF AVOID CONTACT WITH EYES. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. WEAR CHEMICAL-RESISTANT GLOVES AND OTHER CLOTHING AS REQUIRED TO MINIMIZE CONTACT. TEST DATA FROM PUBLISHED LITERATURE AND/OR GLOVE AND CLOTHING MANUFACTURERS INDICATE THE BEST PROTECTION IS PROVIDED BY NITRILE, NEOPRENE AND NATURAL RUBBER GLOVES.

ADDITIONAL PROTECTIVE MEASURES: USE EXPLOSION-PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS. EYE WASH FOUNTAINS AND SAFETY SHOWERS SHOULD BE AVAILABLE FOR EMERGENCY USE.

Section 09 Special Precautions

KEEP LIQUID AND VAPOR AWAY FROM HEAT, SPARKS AND FLAME. SURFACES THAT ARE SUFFICIENTLY HOT MAY IGNITE EVEN LIQUID PRODUCT IN THE ABSENCE OF SPARKS OR FLAME. EXTINGUISH PILOT LIGHTS, CIGARETTES, AND TORN OFF SOURCES OF IGNITION PRIOR TO USE AND UNTIL ALL VAPORS ARE GONE.

VAPORS MAY ACCUMULATE AND TRAVEL TO IGNITION SOURCES DISTANT FROM THE HANDLING SITE. FLASH-FIRE CAN RESULT. KEEP CONTAINERS CLOSED WHEN NOT IN USE. USE WITH ADEQUATE VENTILATION. CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, CAN CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, DRILL, GRIND, WELD OR PERFORM SIMILAR OPERATIONS ON OR NEAR CONTAINERS. DO NOT PRESSURIZE DRUM CONTAINERS TO EMPTY THEM. STATIC ELECTRICITY MAY ACCUMULATE AND CREATE A FIRE HAZARD. GROUND FIXED EQUIPMENT. BOND AND GROUND TRANSFER CONTAINERS & EQUIPMENT.

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Section 09 Special Precautions

WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. AIR-DRY CLOTHING IN A WELL-VENTILATED AREA BEFORE LAUNDERING.

DO NOT STORE OR HANDLE IN ALUMINUM EQUIPMENT AT TEMPERATURES ABOVE 120 DEG. F.

Section 10 Additional Information

DOT # ISOPROPANOL SOLUTION, 3, UN1219, PGII

Section 11 SARA Title III Information

INGREDIENT 1 CAS 67-63-0 SUPER CONC. 93.5

Section 09 Footnotes

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, ARRI MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. ARRI ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

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