



chemists helping chemists in research & industry

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M A T E R I A L S A F E T Y D A T A S H E E T PAGE 1

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 24609-3  
NAME: METHYL BUTYRATE, 99%

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 623-42-7  
MF: C5H10O2  
EC NO: 210-792-1

SYNONYMS  
METHYL N-BUTANOATE \* METHYL-N-BUTYRATE \* METHYL BUTYRATE (DOT) \*  
UN1237 (DOT) \*

SECTION 3. HAZARDS IDENTIFICATION

LABEL PRECAUTIONARY STATEMENTS

FLAMMABLE (USA)  
HIGHLY FLAMMABLE (EU)  
IRRITANT  
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.  
KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.  
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF  
WATER AND SEEK MEDICAL ADVICE.  
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE  
PROTECTION.

SECTION 4. FIRST-AID MEASURES

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF  
WATER FOR AT LEAST 15 MINUTES.  
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS  
AMOUNTS OF WATER.  
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL  
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.  
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.  
CALL A PHYSICIAN.  
WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA  
WATER SPRAY.  
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

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M A T E R I A L   S A F E T Y   D A T A   S H E E T                      P A G E   2

CATALOG #: 24609-3  
NAME: METHYL BUTYRATE, 99%

**SPECIAL FIREFIGHTING PROCEDURES**  
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.  
FLAMMABLE LIQUID.

**UNUSUAL FIRE AND EXPLOSIONS HAZARDS**  
VAPOR MAY TRAVEL CONSIDERABLE DISTANCE TO SOURCE OF IGNITION AND FLASH BACK.  
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----

EVACUATE AREA.  
SHUT OFF ALL SOURCES OF IGNITION.  
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.  
COVER WITH DRY-LIME, SAND, OR SODA ASH. PLACE IN COVERED CONTAINERS USING NON-SPARKING TOOLS AND TRANSPORT OUTDOORS.  
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. ----- HANDLING AND STORAGE-----

REFER TO SECTION 8.

SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----

WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.  
SAFETY SHOWER AND EYE BATH.  
USE ONLY IN A CHEMICAL FUME HOOD.  
DO NOT BREATHE VAPOR.  
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.  
AVOID PROLONGED OR REPEATED EXPOSURE.  
WASH THOROUGHLY AFTER HANDLING.  
IRRITANT.  
KEEP TIGHTLY CLOSED.  
KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME.  
STORE IN A COOL DRY PLACE.

SECTION 9. ----- PHYSICAL AND CHEMICAL PROPERTIES-----

APPEARANCE AND ODOR  
COLORLESS LIQUID

PHYSICAL PROPERTIES  
BOILING POINT:

102 C TO 103 C

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M A T E R I A L S A F E T Y D A T A S H E E T PAGE 3

CATALOG #: 24609-3  
NAME: METHYL BUTYRATE, 99%  
FLASHPOINT 53 F  
EXPLOSION LIMITS IN AIR: 11C  
UPPER 3.5%  
LOWER 0.9%  
VAPOR PRESSURE: 40MM 30 C  
SPECIFIC GRAVITY: 0.898  
VAPOR DENSITY: 3.5

SECTION 10. ----- STABILITY AND REACTIVITY -----

INCOMPATIBILITIES  
STRONG OXIDIZING AGENTS  
STRONG BASES

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS  
TOXIC FUMES OF:  
CARBON MONOXIDE, CARBON DIOXIDE

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

ADVERSE EFFECTS  
MAY BE HARMFUL BY INHALATION, INGESTION, OR SKIN ABSORPTION.  
VAPOR OR MIST IS IRRITATING TO THE EYES, MUCOUS MEMBRANES AND UPPER  
RESPIRATORY TRACT.  
CAUSES SKIN IRRITATION.  
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND  
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

RTECS #: ET5500000  
BUTYRIC ACID, METHYL ESTER

IRRITATION DATA  
SKN-RBT 500 MG/24H MOD FCTOD7 20,741,82

TOXICITY DATA  
ORL-RAT LD50: >5 GM/KG FCTOD7 20,741,82  
IHL-MUS LC50: 18 GM/M3/2H 85GMAT -, 81, 82  
ORL-RBT LD50: 3380 MG/KG IMSUAI 41, 31, 72  
SKN-RBT LD50: 3560 MG/KG TXAPA9 42, 417, 77  
IHL-MAM LC50: 20 GM/M3 GISAAA 51(5), 61, 86  
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES  
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR  
COMPLETE INFORMATION.

SECTION 12. ----- ECOLOGICAL INFORMATION -----

DATA NOT YET AVAILABLE.

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SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE.  
OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. ----- TRANSPORT INFORMATION -----

CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. ----- REGULATORY INFORMATION -----

EUROPEAN INFORMATION

HIGHLY FLAMMABLE  
IRRITANT  
R 36/37/38  
IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.  
HIGHLY FLAMMABLE  
S 16  
KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.  
S 26  
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.  
S 36/37/39  
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.

REVIEWS, STANDARDS, AND REGULATIONS

DEL=MAK  
DEL-RUSSIA:STEL 5 MG/M3;SKIN JAN93  
EPA TSCA SECTION 8(B) CHEMICAL INVENTORY  
EPA TSCA SECTION 8(D) UNPUBLISHED HEALTH/SAFETY STUDIES  
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, APRIL 1996

SECTION 16. ----- OTHER INFORMATION -----

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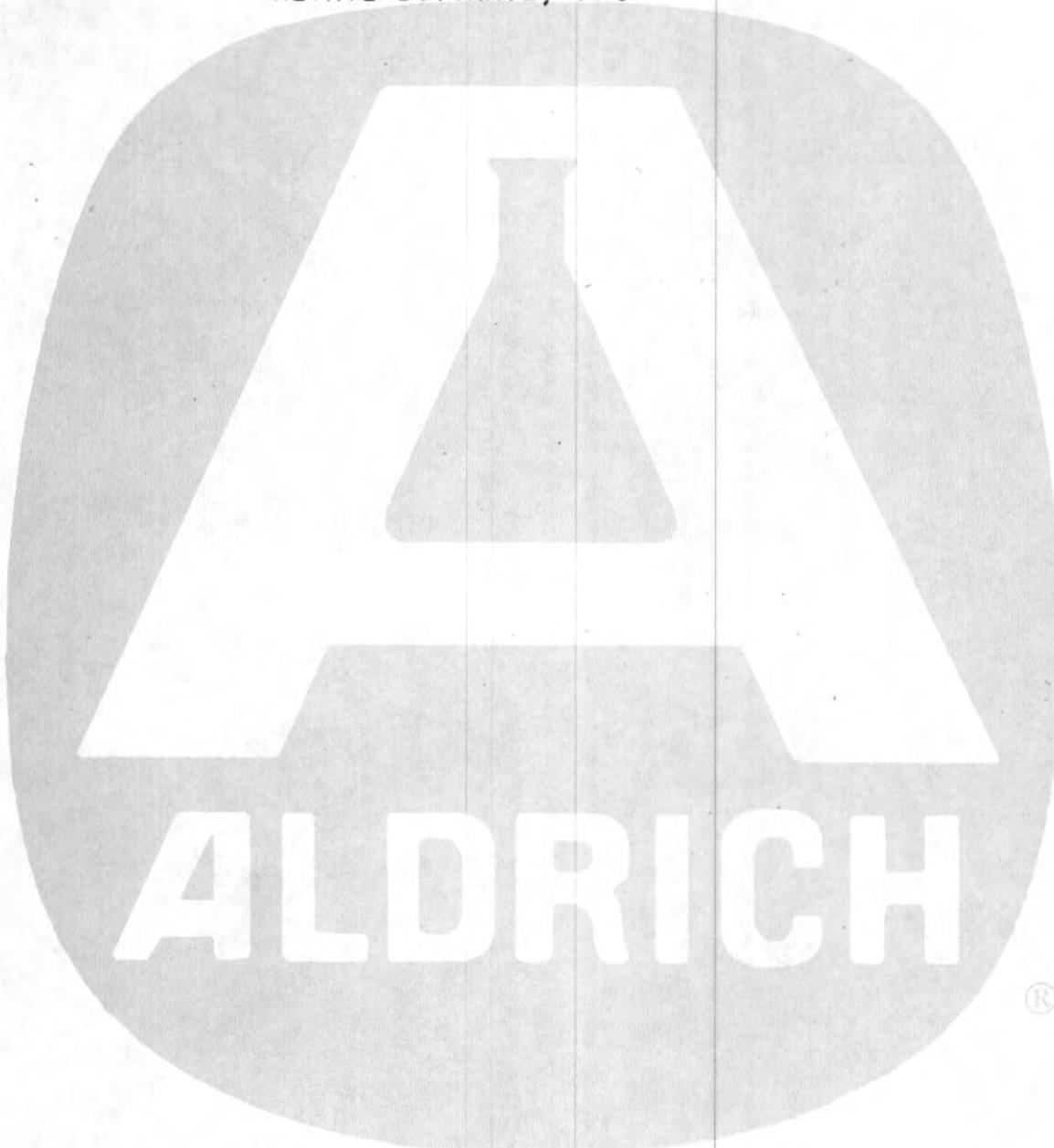
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