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# SAFETY DATA SHEET

# SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 41369

NAME: (R)-(+)-2-(Methoxymethoxy)-1-propanol

SYNONYMS: MOM protected (*R*)-1,2-Propanediol

24 HOUR EMERGENCY

TELEPHONE:

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# SECTION 2. HAZARDS IDENTIFICATION

# CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)

FLAMMABLE LIQUIDS (CATEGORY 4), H227 ACUTE TOXICITY, ORAL (CATEGORY 4), H302 SKIN IRRITATION (CATEGORY 2), H315 EYE IRRITATION (CATEGORY 2A), H319 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3), RESPIRATORY SYSTEM, H335

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

# GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM

SIGNAL WORD WARNING

# **HAZARD STATEMENT(S)**

ATION

H319	CAUSES SERIOUS EYE IRRITATION.			
H335	MAY CAUSE RESPIRATORY IRRITATION.			
	PRECAUTIONARY STATEMENT(S)			
P210	KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT			
	SURFACES. NO SMOKING.			
P261	AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPOURS/			
	SPRAY.			
P264	WASH SKIN THOROUGHLY AFTER HANDLING.			
P270	DO NOT EAT, DRINK OR SMOKE WHEN USING THIS			
	PRODUCT.			
P271	USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.			
P280	WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE			
	PROTECTION.			
P301 + P312 + P330	IF SWALLOWED: CALL A POISON CENTER/DOCTOR IF YOU			
	FEEL UNWELL. RINSE MOUTH.			
P302 + P352	IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.			
P304 + P340 + P312	IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP			
	COMFORTABLE FOR BREATHING. CALL A POISON			
	CENTER/DOCTOR IF YOU FEEL UNWELL.			
P305 + P351 + P338	IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL			
	MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND			
	EASY TO DO. CONTINUE RINSING.			
P332 + P313	IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/			
	ATTENTION.			
P337 + P313	IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/			
	ATTENTION.			
P362	TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE			
	REUSE.			
P370 + P378	IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR			
	ALCOHOL-RESISTANT FOAM TO EXTINGUISH.			
P403 + P233	STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER			
	TIGHTLY CLOSED.			
P403 + P235	STORE IN A WELL-VENTILATED PLACE. KEEP COOL.			
P405	STORE LOCKED UP.			

P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED

WASTE DISPOSAL PLANT.

HAZARDS NOT NONE
OTHERWISE
CLASSIFIED (HNOC)
OR NOT COVERED
BY GHS

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF:  $C_5H_{12}O_3$ 

MW: 120.15

CAS-NO. 159350-97-7

PURITY:  $\geq 88\%$  (GC)

# **HAZARDOUS COMPONENTS**

COMPONENT	CLASSIFICATION	CONCENTRATION	
(R)-(+)-2-(Methoxymethoxy)-1-propanol			
	FLAM. LIQ. 4; ACUTE TOX. 4;	<= 100 %	
	SKIN IRRIT. 2; EYE IRRIT. 2A;		
	STOT SE 3; H227, H302, H315,		
	H319, H335		

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

# **SECTION 4. FIRST-AID MEASURES**

# **DESCRIPTION OF FIRST AID MEASURES**

**GENERAL ADVICE** CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA

SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT

OF DANGEROUS AREA

**IF INHALED** IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF

NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.

CONSULT A PHYSICIAN.

IN CASE OF SKIN WASH OFF WITH SOAP AND PLENTY OF WATER.

**CONTACT** CONSULT A PHYSICIAN.

IN CASE OF EYE RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT

**CONTACT** LEAST 15 MINUTES AND CONSULT A PHYSICIAN.

**IF SWALLOWED** DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING

BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE

MOUTH WITH WATER. CONSULT A PHYSICIAN.

MOST IMPORTANT SYMPTOMS AND **EFFECTS, BOTH ACUTE**  THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11.

AND DELAYED

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT **NEEDED** 

NO DATA AVAILABLE

# SECTION 5. FIRE AND EXPLOSION DATA

#### **EXTINGUISHING MEDIA**

**SUITABLE** EXTINGUISHING MEDIA SUITABLE EXTINGUISHING MEDIA

USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY

CHEMICAL OR CARBON DIOXIDE.

UNSUITABLE EXTINGUISHING MEDIA

DO NOT USE WATER JET.

SPECIAL HAZARDS ARISING FROM THE

SUBSTANCE OR MIXTURE

CARBON OXIDES

ADVICE FOR **FIREFIGHTERS**  WEAR SELF-CONTAINED BREATHING APPARATUS FOR

FIREFIGHTING IF NECESSARY.

FURTHER INFORMATION USE WATER SPRAY TO COOL UNOPENED CONTAINERS.

# SECTION 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL** PRECAUTIONS, **PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES** 

USE PERSONAL PROTECTIVE EQUIPMENT. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. REMOVE ALL SOURCES OF IGNITION. EVACUATE PERSONNEL TO SAFE AREAS. BEWARE OF VAPOURS ACCUMULATING TO FORM EXPLOSIVE CONCENTRATIONS. VAPOURS CAN

ACCUMULATE IN LOW AREAS.

FOR PERSONAL PROTECTION SEE SECTION 8.

**ENVIRONMENTAL PRECAUTIONS** 

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP CONTAIN SPILLAGE, AND THEN COLLECT WITH NON-COMBUSTIBLE ABSORBENT MATERIAL, (E.G. SAND, EARTH, DIATOMACEOUS EARTH, VERMICULITE) AND PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL/NATIONAL REGULATIONS (SEE SECTION 13). KEEP IN SUITABLE, CLOSED CONTAINERS FOR

DISPOSAL.

REFERENCE TO OTHER SECTIONS

FOR DISPOSAL SEE SECTION 13.

#### SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

AVOID CONTACT WITH SKIN AND EYES. AVOID

INHALATION OF VAPOUR OR MIST.

KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING. TAKE MEASURES TO PREVENT THE BUILD

UP OF ELECTROSTATIC CHARGE. FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND

WELL-VENTILATED PLACE.

HANDLE UNDER NITROGEN, PROTECT FROM

MOISTURE. HEAT-, LIGHT-, AND MOISTURE-SENSITIVE.

Store at RT

SPECIFIC END USE(S)

APART FROM THE USES MENTIONED IN SECTION 1.2

NO OTHER SPECIFIC USES ARE STIPULATED.

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

#### **CONTROL PARAMETERS**

# COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.

# **EXPOSURE CONTROLS**

APPROPRIATEHANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENEENGINEERINGAND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND

**CONTROLS** AT THE END OF WORKDAY.

# PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR **PROTECTION** 

EYE PROTECTION TESTED AND APPROVED UNDER

APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH

(US) OR EN 166(EU).

SKIN

HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR **PROTECTION** TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE

(WITHOUT TOUCHING GLOVE"S OUTER SURFACE) TO AVOID

SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF

CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES.

WASH AND DRY HANDS.

**BODY** 

COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE **PROTECTION** TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED

ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE

DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.

RESPIRATORY **PROTECTION** 

WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULLFACE

RESPIRATOR WITH MULTI-PURPOSE COMBINATION (US) OR

TYPE ABEK (EN 14387) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS

THE SOLE MEANS OF PROTECTION, USE A FULL-FACE

SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND

COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).

CONTROL OF ENVIRONMENTAL

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.

**EXPOSURE** 

#### **SECTION 9.** PHYSICAL AND CHEMICAL PROPERTIES

# INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Colorless to vellow liquid **ODOUR** NO DATA AVAILABLE NO DATA AVAILABLE ODOUR THRESHOLD ΡН NO DATA AVAILABLE

**MELTING** 

POINT/FREEZING POINT INITIAL BOILING POINT AND BOILING RANGE

75.5 °C FLASH POINT

**EVAPORATION RATE** NO DATA AVAILABLE FLAMMABILITY (SOLID, NO DATA AVAILABLE

GAS)

UPPER/LOWER NO DATA AVAILABLE

FLAMMABILITY OR EXPLOSIVE LIMITS

VAPOUR PRESSURE NO DATA AVAILABLE VAPOUR DENSITY
RELATIVE DENSITY
WATER SOLUBILITY
PARTITION COEFFICIENT:
NO DATA AVAILABLE
1.002 g / mL at 25 °C
NO DATA AVAILABLE
LOG POW: -0.16

N- OCTANOL/WATER

AUTO-IGNITION NO DATA AVAILABLE

TEMPERATURE

DECOMPOSITION NO DATA AVAILABLE

TEMPERATURE

VISCOSITY NO DATA AVAILABLE EXPLOSIVE PROPERTIES NO DATA AVAILABLE OXIDIZING PROPERTIES NO DATA AVAILABLE

OTHER SAFETY INFORMATION

NO DATA AVAILABLE

### SECTION 10. STABILITY AND REACTIVITY

**REACTIVITY** NO DATA AVAILABLE

CHEMICAL STABILITY STABLE UNDER RECOMMENDED STORAGE

CONDITIONS.

POSSIBILITY OF HAZARDOUS REACTIONS NO DATA AVAILABLE

**CONDITIONS TO AVOID** HEAT, FLAMES AND SPARKS.

INCOMPATIBLE NO DATA AVAILABLE MATERIALS

HAZARDOUS OTHER DECOMPOSITION PRODUCTS - NO DATA

**DECOMPOSITION** AVAILABLE

**PRODUCTS** HAZARDOUS DECOMPOSITION PRODUCTS FORMED

UNDER FIRE CONDITIONS. - CARBON OXIDES

IN THE EVENT OF FIRE: SEE SECTION 5

# SECTION 11. TOXICOLOGICAL INFORMATION

# INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY NO DATA AVAILABLE

INHALATION: NO DATA AVAILABLE

DERMAL: NO DATA AVAILABLE

NO DATA AVAILABLE

SKIN

NO DATA AVAILABLE

**CORROSION/IRRITATION** 

**SERIOUS EYE** NO DATA AVAILABLE

DAMAGE/EYE IRRITATION

RESPIRATORY OR SKIN SENSITISATION

NO DATA AVAILABLE

GERM CELL MUTAGENICITY NO DATA AVAILABLE

**CARCINOGENICITY** 

IARC: NO COMPONENT OF THIS PRODUCT PRESENT AT

LEVELS GREATER THAN OR EQUAL TO 0.1% IS

IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED

HUMAN CARCINOGEN BY IARC.

NTP: NO COMPONENT OF THIS PRODUCT PRESENT AT

LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED

CARCINOGEN BY NTP.

OSHA: NO COMPONENT OF THIS PRODUCT PRESENT AT

LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON OSHA S LIST OF REGULATED CARCINOGENS.

OSHA S LIST OF REGULATED CARCINO

REPRODUCTIVE TOXICITY NO DATA AVAILABLE

**SPECIFIC TARGET ORGAN** 

TOXICITY - SINGLE

**EXPOSURE** 

INHALATION - MAY CAUSE RESPIRATORY

IRRITATION.

SPECIFIC TARGET ORGAN

**TOXICITY - REPEATED** 

**EXPOSURE** 

NO DATA AVAILABLE

**ASPIRATION HAZARD** NO DATA AVAILABLE

ADDITIONAL

RTECS: NOT AVAILABLE

**INFORMATION** 

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY NO DATA AVAILABLE

PERSISTENCE AND DEGRADABILITY

NO DATA AVAILABLE

**BIOACCUMULATIVE** 

**POTENTIAL** 

NO DATA AVAILABLE

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT AND VPVB ASSESSMENT

PBT/VPVB ASSESSMENT NOT AVAILABLE AS

CHEMICAL SAFETY ASSESSMENT NOT

REQUIRED/NOT CONDUCTED.

OTHER ADVERSE EFFECTS NO DATA AVAILABLE

#### SECTION 13. DISPOSAL CONSIDERATIONS

#### WASTE TREATMENT METHODS

PRODUCT OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS

TO A LICENSED DISPOSAL COMPANY. THIS COMBUSTIBLE MATERIAL MAY BE BURNED IN A

CHEMICAL INCINERATOR EQUIPPED WITH AN

AFTERBURNER AND SCRUBBER. CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE

OF THIS MATERIAL.

CONTAMINATED PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

# SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: COMBUSTIBLE LIQUID, N.O.S. ((R)-(+)-2-

(Methoxymethoxy)-1-propanol)

NA-NUMBER: 1993 CLASS: NONE PACKING GROUP: III

REPORTABLE QUANTITY

(RQ):

POISON INHALATION NO

HAZARD:

IMDG NOT DANGEROUS GOODS

# SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO

THE REPORTING REQUIREMENTS OF SARA TITLE III,

SECTION 302.

SARA 313 COMPONENTS THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL

COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

SARA 311/312 HAZARDS FIRE HAZARD, ACUTE HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

(R)-(+)-2-(Methoxymethoxy)-1- 159350-97-7

propanol

NEW JERSEY RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

(R)-(+)-2-(Methoxymethoxy)-1- 159350-97-7

propanol

# SECTION 16. OTHER INFORMATION

# FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

H227 COMBUSTIBLE LIQUID. H302 HARMFUL IF SWALLOWED. H315 CAUSES SKIN IRRITATION.

H319 CAUSES SERIOUS EYE IRRITATION.H335 MAY CAUSE RESPIRATORY IRRITATION.

MSDS LEGEND

MW: MOLECULAR WEIGHT MF: MOLECULAR FORMULA

VOC: VOLATILE ORGANIC COMPOUNDS

ACGIH: AMERICAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL

**HYGINISTS** 

CAS: CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

PEL: PERMISSIBLE EXPOSURE LIMIT (OSHA)

TLV: THRESHOLD LIMIT VALUE (ACGIH)

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