

630.766.2112 customer@chemimpex.com www.chemimpex.com

SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 41395

NAME: (S)-(-)-a-Amino-g-butyrolactone hydrobromide

SYNONYMS: L-Homoserine lactone hydrobromide;

24 HR EMERGENCY (800) 535-5053 (USA)

TELEPHONE: 352-323-3500 (INTERNATIONAL)

TO REQUEST AN SDS: (800) 869-9290

CUSTOMER SERVICE: (630) 766-2112

SECTION 2. HAZARD IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

NOT A HAZARDOUS SUBSTANCE OR MIXTURE

GHA LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

NOT A HAZARDOUS SUBSTANCE OR MIXTURE

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: C4H7NO2·HBr

MW: 182.02

CAS RN: 15295-77-9

PURITY:

98.5 - 101.5% (Assay by titration)

SECTION 4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL ADVICE IMMEDIATELY REMOVE ANY CLOTHING CONTAMINATED BY THE

PRODUCT. MOVE OUT OF DANGEROUS AREA. CONSULT A

PHYSICIAN AND SHOW THIS SAFETY DATA SHEET

IF INHALED MOVE PERSON TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL

RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN AND

CONSULT A PHYSICIAN

IN CASE OF SKIN

CONTACT

IMMEDIATELY FLUSH SKIN WITH RUNNING WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.

WASH CLOTHING BEFORE REUSE. CONSULT A PHYSICIAN

IMMEDIATELY

IN CASE OF EYE CONTACT IMMEDIATELY WASH SKIN WITH COPIOUS AMOUNTS OF WATER FOR

AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING OF THE EYES

BY SEPARATING THE EYELIDS WITH FINGERS. IF IRRITATION

PERSISTS, CONSULT A PHYSICIAN.

IF SWALLOWEDDO 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

AND DELAYED

THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2) AND/OR IN SECTION

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INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING

MEDIA

USE WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE OR

CHEMICAL FOAM.

SPECIAL HAZARDS
ARISING FROM THE
SUBSTANCE OR MIXTURE

CARBON OXIDES, NITROGEN OXIDES (NOX), SULPHUR OXIDES,

POTASSIUM OXIDES

ADVICE FOR FIREFIGHTERS

WEAR SELF CONTAINED BREATHING APPARATUS FOR FIRE

FIGHTING IF NECESSARY.

FURTHER INFORMATION

NO DATA AVAILABLE

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS,

PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES WEAR PROTECTIVE EQUIPMENT AND KEEP UNPROTECTED PERSONNEL AWAY. ENSURE ADEQUATE VENTILATION. REMOVE ALL SOURCES OF IGNITION. PREVENT FURTHER LEAK OR SPILL IF SAFE

TO DO SO.

FOR PERSONAL PROTECTION SEE SECTION 8.

ENVIRONMENTAL PRECAUTIONS

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO

NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE

ENVIRONMENT MUST BE AVOIDED.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP PREVENT FURTHER LEAK OR SPILL IF SAFE TO DO SO. VACUUM, SWEEP UP, OR ABSORB WITH INERT MATERIAL AND PLACE INTO A SUITABLE DISPOSAL CONTAINER. CONSULT LOCAL REGULATIONS

FOR DISPOSAL

REFERENCE TO OTHER

SECTIONS

FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

AVOID CONTACT WITH SKIN, EYES, AND PERSONAL CLOTHING. WASH HANDS THOROUGHLY AFTER HANDLING. AVOID BREATHING FUMES. USE ONLY WITH ADEQUATE VENTILATION. WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES, AND EYE/FACE PROTECTION. KEEP AWAY FROM SOURCES OF IGNITION. MINIMIZE DUST GENERATION AND ACCUMULATION. KEEP CONTAINER TIGHTLY CLOSED. OPEN AND HANDLE CONTAINER WITH CARE. DO NOT EAT,

DRINK, OR SMOKE WHILE HANDLING. FOR PRECAUTIONS SEE SECTION 2.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

STORE IN A TIGHTLY CLOSED CONTAINER WHEN NOT IN USE. STORE IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM

INCOMPATIBLE SUBSTANCES. KEEP AWAY FROM SOURCES OF

IGNITION.

RECOMMENDED
STORAGE TEMPERATURE

Store at 2 - 8 °C

SPECIFIC END USE(S)

FOR LABORATORY USE ONLY

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL

VALUES.

PARAMETERS

EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS

AVOID CONTACT WITH SKIN, EYES, AND CLOTHING. WASH HANDS BEFORE BREAKS AND IMMEDIATELY AFTER HANDLING THE PRODUCT. FACILITIES STORING OR UTILIZING THIS MATERIAL SHOULD BE EQUIPPED WITH AN EYEWASH FOUNTAIN. USE ADEQUATE VENTILATION TO KEEP AIRBORNE CONCENTRATIONS LOW.

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION

SAFETY GLASSES WITH SIDE-SHIELDS CONFORMING TO EN166 USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN166 (EU).

SKIN PROTECTION

HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR 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 PROTECTION

IMPERVIOUS CLOTHING, THE 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 INDICATES AIR-PURIFYING RESPIRATORS ARE REQUIRED USE A DUST MASK TYPE N95 (US) OR TYPE P1 (EN 143) RESPIRATOR. RESPIRATORS AND COMPONENTS MUST TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS - NIOSH (US) OR CEN (EU).

CONTROL OF ENVIRONMENTAL EXPOSURE PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO

NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE

ENVIRONMENT MUST BE AVOIDED.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE White to beige powder or crystals

ODOR NO DATA AVAILABLE
ODOR THESHOLD NO DATA AVAILABLE
pH NO DATA AVAILABLE
MELTING/FREEZING POINT 225 °C (dec.) (Lit.)

INITIAL BOILING POINT AND BOILING RANGE

FLASH POINT

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

GAS)

UPPER/LOWER NO DATA AVAILABLE

FLAMMABILITY OR EXPLOSIVE LIMITS

VAPOR PRESSURE NO DATA AVAILABLE VAPOR DENSITY NO DATA AVAILABLE

RELATIVE DENSITY

WATER SOLUBILITY NO DATA AVAILABLE PARTITION COEFFICIENT: NO DATA AVAILABLE

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 NO DATA AVAILABLE INFORMATION

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 MATERIALS

STRONG OXIDIZING AGENTS

HAZARDOUS
DECOMPOSITION
PRODUCTS

CARBON MONOXIDE, NITROGEN OXIDES, HYDROGEN CHLORIDE

IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY NO DATA AVAILABLE

SKIN CORROSION/IRRITATION

NO DATA AVAILABLE

SERIOUS EYE DAMAGE/ EYE IRRITATION NO DATA AVAILABLE

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.

ACGIH: NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER

THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR

POTENTIAL CARCINOGEN BY ACGIH.

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 IDENTIFIED AS A CARCINOGEN OR

POTENTIAL CARCINOGEN BY OSHA.

REPRODUCTIVE TOXICITY NO DATA AVAILABLE

SPECIFIC TARGET ORGAN

TOXICITY - SINGLE

EXPOSURE

NO DATA AVAILABLE

SPECIFIC TARGET ORGAN

TOXICITY - REPEATED

EXPOSURE

NO DATA AVAILABLE

ASPIRATION HAZARD NO DATA AVAILABLE

ADDITIONAL RTECS: NOT AVAILABLE

INFORMATION TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL AND

TOXICOLOGICAL PROPERTIES OF THIS SUBSTANCE HAVE NOT BEEN

THOROUGHLY INVESTIGATED.

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 CHEMICAL TO A LICENSED

DISPOSAL COMPANY. 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)

NOT DANGEROUS GOODS

IMDG

NOT DANGEROUS GOODS

IATA

NOT DANGEROUS GOODS

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS SARA 302: NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE

REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.

SARA 313 COMPONENTS SARA 313: 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.

MASSACHUSETTS RIGHT NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT

TO KNOW COMPONENTS TO KNOW ACT.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS RN REVISION DATE

(S)-(-)-a-Amino-g- 15295-77-9

butyrolactone hydrobromide

NEW JERSEY RIGHT TO KNOW COMPONENTS

CAS RN REVISION DATE

(S)-(-)-a-Amino-g- 15295-77-9

CALIFORNIA PROP. 65 COMPONENTS

butyrolactone hydrobromide

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

SECTION 16. OTHER INFORMATION

SDS LEGEND

MW: MOLECULAR WEIGHT
MF: MOLECULAR FORMULA

VOC: VOLATILE ORGANIC COMPOUNDS

ACGIH: AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL

HYGINISTS

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

PEL: PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV: THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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