Language: EN Country:

## \*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

TRANS-4-(AMINOMETHYL)-CYCLOHEXANE CARBOXYLIC ACID, 98+%

\*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: TRANS-4-(AMINOMETHYL)-CYCLOHEXANE CARBOXYLIC ACID, 98+% Catalog Numbers:

22804-0000, 22804-0100, 22804-0500

Synonyms:

Tranexamic acid

Company Identification (Europe): Acros Organics BVBA

Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

Company Identification (USA):

Acros Organics One Reagent Lane Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01 For information in Europe, call: 0032(0) 14575211 For information in Europe, call: 0032(0) 1457
For emergencies in the US, call CHEMTREC: 800-424-9300 For emergencies in Europe, call: 0032(0) 14575299

\*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\*

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į	CAS#	Chemical Name	8	EINECS#	Haz Symbols	Risk Phrases	į
		TRANS-4-(AMINOMETHYL)-CYCLOHEXANE CARB	98+%	214-818-2	     		т
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Hazard Symbols: XI Risk Phrases: 36/37/38

\*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin.

Potential Health Effects

The toxicological properties of this material have not been investigated. Use appropriate procedures to prevent opportunities for direct contact with the skin or eyes and to prevent inhalation.

\*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\*

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2--4 cupfuls of milk or water.

Inhalation:

Remove from exposure and move to fresh air immediately.

Notes to Physician:

\*\*\*\* SECTION 5 - FIRE FIGHTING MEASURES \*\*\*\*

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

\*\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*\*

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal.

\*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\*

Handling:

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Wash thoroughly after handling. Remove contaminated clothing and
                                wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid
                                ingestion and inhalation.
                Storage
                               Store in a cool, dry place. Keep container closed when not in use.
                                **** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****
               Engineering Controls:
                                Use adequate general or local exhaust ventilation to keep airborne
                               concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls
                                to control airborne levels.
               Personal Protective Equipment
                                                      Eyes:
                                                                          Wear safety glasses and chemical goggles if splashing
                                                                         is possible.
                                                      Skin:
                                                                          Wear appropriate protective gloves and clothing to
                                                                         prevent skin exposure.
                                         Clothing:
                                                                         Wear appropriate protective clothing to minimize
                                                                         contact with skin.
                                Respirators:
                                                                          Wear a NIOSH/MSHA or European Standard EN 149
                                                                          approved full-facepiece airline respirator in the
                                                                          positive pressure mode with emergency escape
                                                                         provisions.
                                         **** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****
                                                                                         Crystalline powder
Physical State:
Color:
                                                                                         white
Odor:
                                                                                          Not available.
                                                                                          6.5-8.0 (5% aq.sol)
Vapor Pressure:
                                                                                         Not available.
Viscosity:
                                                                                         Not available.
Boiling Point:
                                                                                         Not available.
Freezing/Melting Point:
                                                                                          > 300 deg C
Autoignition Temperature:
                                                                                         Not available.
Flash Point:
                                                                                         Not available.
Explosion Limits, lower:
                                                                                          Not available.
Explosion Limits, upper:
                                                                                         Not available.
Decomposition Temperature:
Solubility in water:
                                                                                         1g/6ml
Specific Gravity/Density:
Molecular Formula:
                                                                                          C8H15NO2
Molecular Weight:
                                                      **** SECTION 10 - STABILITY AND REACTIVITY ****
               Chemical Stability:
                                Stable under normal temperatures and pressures.
                Conditions to Avoid:
               Incompatible materials, strong oxidants. Incompatibilities with Other Materials:
                                Strong oxidizing agents.
                Hazardous Decomposition Products:
                               Nitrogen oxides, carbon monoxide, irritating and toxic fumes and % \left( 1\right) =\left( 1\right) \left( 1\right) \left(
               gases, carbon dioxide, nitrogen.
Hazardous Polymerization: Has not been reported.
                                                   **** SECTION 11 - TOXICOLOGICAL INFORMATION ****
               RTECS#:
                                CAS# 1197-18-8: GU8400000
                LD50/LC50:
                                CAS# 1197-18-8: Oral, mouse: LD50 = >10 gm/kg.
               Carcinogenicity:
                      TRANS-4-(AMINOMETHYL)-CYCLOHEXANE CARBOXYLIC ACID -
                               Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
See actual entry in RTECS for complete information.
                                                          **** SECTION 12 - ECOLOGICAL INFORMATION ****
                                                       **** SECTION 13 - DISPOSAL CONSIDERATIONS ****
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Dispose of in a manner consistent with federal, state, and local regulations. \*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

pH:

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IATA
        No information available.
        No information available.
   RID/ADR
        No information available.
                 **** SECTION 15 - REGULATORY INFORMATION ****
European/International Regulations
   European Labeling in Accordance with EC Directives
         Hazard Symbols: XI
         Risk Phrases:
                     R 36/37/38 Irritating to eyes, respiratory system
                     and skin.
         Safety Phrases:
                     S 24/25 Avoid contact with skin and eyes.
  WGK (Water Danger/Protection)
        CAS# 1197-18-8: No information available.
  United Kingdom Occupational Exposure Limits
  United Kingdom Maximum Exposure Limits
 Canada
        None of the chemicals in this product are listed on the DSL/NDSL list.
        CAS# 1197-18-8 is not listed on Canada's Ingredient Disclosure List.
  Exposure Limits
US FEDERAL
   TSCA
         CAS# 1197-18-8 is not listed on the TSCA inventory.
         It is for research and development use only.
                 **** SECTION 16 - ADDITIONAL INFORMATION ****
   MSDS Creation Date: 7/16/1996 Revision #0 Date: Original.
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The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.