For information in the US, call: 800-ACROS-01 For information in Europe, call: +32 14 57 52 11 Emergency Number, Europe: +32 14 57 52 99 201-796-7100 Emergency Number US: CHEMTREC Phone Number, US: 800-424-9300 CHEMTREC Phone Number, Europe: 703-527-3887 Section 2 - Composition, Information on Ingredients CAS#: 69-96-5 Chemical Name: DL-threo-3-Phenylserine hydrate %: 99 200-721-2 EINECS#: Hazard Symbols: None listed Risk Phrases: None listed Section 3 - Hazards Identification EMERGENCY OVERVIEW Caution! The toxicological properties of this material have not been fully investigated. May cause eye and skin irritation. May cause respiratory and digestive tract irritation. Target Organs: None. Potential Health Effects Eye: May cause eye irritation. Skin: May cause skin irritation. May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully Ingestion: investigated. May cause respiratory tract irritation. The toxicological properties of this substance have not been fully Inhalation: investigated. No information found. Chronic: Section 4 - First Aid Measures Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get Eyes: medical aid immediately. Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated Skin: clothing and shoes. Wash clothing before reuse. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an Ingestion: unconscious person. Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If Inhalation: breathing is difficult, give oxygen. Get medical aid. Notes to Physician: Section 5 - Fire Fighting Measures As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH General (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be Information: generated by thermal decomposition or combustion. Extinguishing Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or Media: appropriate foam. Autoignition Temperature: Not available Flash Point: Not available Explosion Limits: Lower: Not available Explosion Limits: Not available Upper: NFPA Rating: health: 1; flammability: 0; instability: 0; Section 6 - Accidental Release Measures General Use proper personal protective equipment as indicated in Section 8. Information:

> Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty

> > NIOSH | OSHA - Final PELs|

Section 7 - Handling and Storage Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Section 8 - Exposure Controls, Personal Protection

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Section 9 - Physical and Chemical Properties

Physical State: Powder

Vapor Pressure: Not available Vapor Density: Not available Evaporation Rate: Not available

Decomposition Temperature: Not available

Molecular Weight: 181.19

Specific Gravity/Density:

CAS# 69-96-5: None listed

RTECS: Not available.

Not available

Not available

Shipping Name: Not regulated as a hazardous material

Solubility in water: Not available

Molecular Formula: C9H11NO3.xH2O

Section 10 - Stability and Reactivity

Strong oxidizing agents.

Has not been reported. Section 11 - Toxicological Information

Section 12 - Ecological Information

Section 13 - Disposal Considerations Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None

Section 14 - Transport Information

Section 15 - Regulatory Information

None of the chemicals are on the Health & Safety Reporting List.

None of the chemicals in this material have a SNUR under TSCA.

None of the chemicals are listed under TSCA Section 12b.

None of the chemicals in this material have an RQ.

None of the chemicals in this product have a TPQ.

No chemicals are reportable under Section 313.

None of the chemicals in this product are listed.

S 28A After contact with skin, wash immediately with plenty of water.

and the MSDS contains all of the information required by those regulations.

CAS# 69-96-5 is not listed on Canada's Ingredient Disclosure List.

company has been advised of the possibility of such damages.

None of the chemicals in this product are under a Chemical Test Rule.

This material does not contain any hazardous air pollutants. This material does not contain any

None of the chemicals in this product are listed as Priority Pollutants under the CWA. None

DL-threo-3-Phenylserine hydrate is not present on state lists from CA, PA, MN, MA, FL, or

Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors. None of the chemicals in this product are listed as Hazardous Substances under the CWA.

of the chemicals in this product are listed as Toxic Pollutants under the CWA.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations

Section 16 - Other Information

The information above is believed to be accurate and represents the best information currently available

to us. However, we make no warranty of merchantibility 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 event 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

MSDS Creation Date: 12/22/1998

Revision #3 Date 10/03/2005

CAS# 69-96-5 is not listed on the TSCA Inventory. It is for research and development

Stable under normal temperatures and pressures.

Incompatible materials, dust generation, strong oxidants.

Carbon monoxide, oxides of nitrogen, carbon dioxide.

Viscosity: Not available Boiling Point: Not available Freezing/Melting Point: 186 deg C (366.80°F)

Color: off-white

Odor: Not available pH: Not available

Handling: ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep

|-----| | DL-threo-3-Phenylse|none listed | none listed | none listed

protection regulations in 29 CFR 1910.133 or European Standard EN166.

Wear appropriate protective gloves to prevent skin exposure. Wear appropriate protective clothing to prevent skin exposure.

hydrate | | | |

Section 1 - Chemical Product and Company Identification

AC174000000, AC174000100, AC174000250, AC174001000

Acros Organics BVBA Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium Acros Organics

One Reagent Lane Fair Lawn, NJ 07410

DL-threo-3-Phenylserine hydrate, 99%

Material Safety Data Sheet

MSDS# 21053

MSDS Name:

Synonyms:

Catalog Numbers:

Company Identification:

Company Identification: (USA)

DL-threo-3-Phenylserine hydrate, 99%

Chemical Stability: Conditions to Avoid: Incompatibilities with Other Materials Hazardous Decomposition Products Hazardous Polymerization

Spills/Leaks:

rine hydrate

Personal Protective Equipment

Engineering Controls:

Exposure Limits

Eyes:

Skin:

Clothing:

conditions. Provide ventilation.

| Chemical Name | ACGIH |

OSHA Vacated PELs: DL-threo-3-Phenylserine hydrate: None listed

adequate ventilation to keep airborne concentrations low.

container tightly closed. Avoid ingestion and inhalation.

RTECS#: LD50/LC50: Carcinogenicity: DL-threo-3-Phenylserine hydrate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. Epidemiology: Not available Teratogenicity: Not available Reproductive: Not available Neurotoxicity: Not available

Mutagenicity:

Other:

Not available

listed.

US DOT

Hazard Class: UN Number: Packing Group: Canada TDG

Hazard Class: UN Number: Packing Group:

US Federal

TSCA

List

Rule

use only.

Health & Safety Reporting

TSCA Significant New Use

Chemical Test Rules

CERCLA Hazardous Substances and

corresponding RQs SARA Section 302 Extremely Hazardous

Section 12b

Substances Section 313

Clean Air Act:

Clean Water Act:

California Prop 65

California No Significant

Canada

European/International Regulations

Risk Phrases:

Safety Phrases:

possible).

WGK (Water Danger/Protection)

CAS# 69-96-5: Not available

NJ.

European Labeling in Accordance with EC Directives

S 24/25 Avoid contact with skin and eyes.

Canadian WHMIS Classifications: Not available

Hazard Symbols:Not available

S 37 Wear suitable gloves.

OSHA:

STATE

Risk Level:

Shipping Name: Not available