MSDS Material Safety Data Sheet

Date prepared: May 28, 2012 Date revised: N/A (first edition)

Section 1 - General Information

Chemical Name: Dopamine hydrochloride
CAS Reg. Number: 62-31-7
Catalog Number: 1ST1322
Manufacturer's Name: A Chemtek, Inc.
100 Barber Avenue
Worcester, MA 01606, USA
Telephone Number: 508-471-4121
Fax Number: 508-845-9201
For R & D use only

Section 2 - Hazardous Ingredients/Identity Information

Emergency Overview
OSHA Hazards
Target Organ Effect, Harmful by ingestion. Irritant
Target Organs
Cardiovascular system., Nerves.
GHS Classification
Acute toxicity, Oral (Category 4)
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)
GHS Label elements, including precautionary statements

Pictogram 
Signal word Warning
Hazard statement(s)
H302 Harmful if swallowed.
H410 Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)
P273 Avoid release to the environment.
P501 Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification
Health hazard: 2
Chronic Health Hazard: *
Flammability: 0
Physical hazards: 0

NFPA Rating
Health hazard: 2
Fire: 0
Reactivity Hazard: 0

Potential Health Effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.

Section 3 - Composition/Information on Ingredients

Formula: $C_8H_{11}N_2O \cdot HCl$
Molecular Weight: 189.64g/mol
CAS-No. 62-31-7

Section 4 - First Aid Measures

If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration.
In case of skin contact
Wash off with soap and plenty of water.

In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.

Section 5 - Fire-Fighting Measures

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.
Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas.

Section 6 - Accidental Release Measures

Personal precautions Avoid dust formation.
Environmental precautions Do not let product enter drains.
Methods for cleaning up Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

Handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
Storage Keep container tightly closed in a dry and well-ventilated place. Light sensitive.

Section 8 - Exposure Controls/Personal Protection

Contains no substances with occupational exposure limit values.
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 EN 166(EU).
Skin protection
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Body Protection
The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9 - Physical and Chemical Properties

Appearance:

Form	Powder
Colour	White

Safety data

pH:	3.0 - 5.5 at 40.0 g/l at 20 °C (68 °F)
Melting point:	245 °C (473 °F) - Decomposes on heating.
Boiling point:	not available
Flash point:	not available
Ignition temperature:	not available
Lower explosion limit:	not available
Upper explosion limit:	not available
Water solubility:	not available

Other safety information not available

Section 10 - Stability and Reactivity

Storage stability Stable under recommended storage conditions
Materials to avoid no data available
Conditions to avoid Light.
Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas.
Other decomposition products - no data available

Section 11 - Toxicological Information

Acute toxicity
Oral LD50
LD50 Oral - rat - 1,870 mg/kg
Inhalation LC50
LC50 Inhalation - rat - 4 h - > 5.0 mg/l
Dermal LD50
no data available
Other information on acute toxicity
LD50 Intravenous - rat - 4.8 mg/kg
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste): Olfaction: Other changes. Behavioral: Convulsions or effect on seizure threshold. Lungs, Thorax, or Respiration: Dyspnea.
Skin corrosion/irritation
Skin - rabbit - No skin irritation - OECD Test Guideline 404
Serious eye damage/eye irritation
Eyes - rabbit - No eye irritation - OECD Test Guideline 405
Respiratory or skin sensitization: not available
Chronic exposure
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, NTP, OSHA.
Potential health effects

Inhalation:	May be harmful if inhaled. May cause respiratory tract irritation.
Skin:	May be harmful if absorbed through skin. May cause skin irritation.
Eyes:	May cause eye irritation.
Ingestion:	May be harmful if swallowed.

Section 12 - Ecological Information

Toxicity

Toxicity to fish	static test LC50 - Leuciscus idus (Golden orfe) - 2,200.0 - 4,600.0 mg/l - 96.0 h Method: DIN 38412
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 24.5 mg/l - 48 h Method: OECD Test Guideline 202
Toxicity to algae	static test EC50 - Algae - < 1 mg/l - 72 h Method: OECD Test Guideline 201

Persistence and degradability

Biodegradability	Biotic/Aerobic Result: 60 - 70 % - According to the results of tests of biodegradability this product is not readily biodegradable.
Method:	Directive 67/548/EEC Annex V, C.4.C.

Bioaccumulative potential
Bioaccumulation is unlikely.
Mobility in soil
no data available
PBT and vPvB assessment
no data available
Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

Section 13 - Disposal Considerations

Product Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging Dispose of as unused product.

Section 14- Transport Information

DOT (US)
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Dopamine hydrochloride)
Reportable Quantity (RQ):
Marine pollutant: No
Poison Inhalation Hazard: No
IMDG
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dopamine hydrochloride) Marine pollutant: Marine pollutant
IATA
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Dopamine hydrochloride)

Section 15 - Regulatory Information

OSHA Hazards
Target Organ Effect, Harmful by ingestion. Irritant
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.
SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard
Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know Components
Dopamine hydrochloride CAS-No.62-31-7
New Jersey Right To Know Components
California Prop. 65 Components
Dopamine hydrochloride CAS-No.62-31-7
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

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. A Chemtek shall not be held liable for any damage resulting from handling or from contact with the above product.