Safety Data Sheet

In accordance with CFR 1910.1200 (OSHA HCS)

SDS No. 1787 Review Date: February 28, 2019

1 Identification of substance and company

Product name: ***Potassium Thiocyanate***

Product code: 15502

Relevant identified uses of the substance: Research and product development

Manufacturer/Supplier: Noah Technologies Corporation
1 Noah Park
San Antonio, Texas 78249-3419
Phone: 210-691-2000
Fax: 210-691-2600
Web site: www.noahtech.com

Emergency information: CHEMTREC
800-424-9300

2 Hazards identification

Emergency Overview:

Pictogram(s):

Signal word(s): Warning

Hazard statements: H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements: P261 - Avoid breathing dust / fume / gas / mist / vapors / 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
P273 - Avoid release to the environment
P280 - Wear protective gloves / protective clothing
P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or doctor / physician if you feel unwell. Rinse mouth.
P302 + P352 + P312 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor / physician if you feel unwell.
P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor / physician if you feel unwell
P363 - Wash contaminated clothing before reuse
P501 - Dispose of contents/ container to an approved waste disposal plant

GHS Classification: Acute toxicity, Oral - 4
Acute toxicity, Inhalation - 4
Acute toxicity, Dermal - 4
Acute aquatic toxicity - 3
Chronic aquatic toxicity - 3

Hazards not otherwise classified: Contact with acids liberates very toxic gas

HMIS ratings (scale 0-4):

Health hazard:	2
Flammability:	0
Physical hazard:	0

3 Composition/Information on ingredients

Chemical name: Potassium thiocyanate

Designation: (CAS#): 333-20-0

EC number: 206-370-1

Formula: KSCN

Synonyms: Potassium rhodanide, Potassium sulfocyanate

4 First aid measures

After inhalation:	Move to fresh air. If not breathing, give artificial respiration. Consult a physician.
After skin contact:	Wash with soap and water. Consult a physician.
After eye contact:	Rinse opened eye for at least 15 minutes under running water. Assure adequate flushing by separating the eyelids with fingers. If irritation persists, seek medical advice.
After ingestion:	If conscious, rinse mouth out with water. Never give anything by mouth to an unconscious person. Seek medical advice.
Most important symptoms and effects, both acute and delayed:	Show this safety data sheet to the doctor in attendance Headache, nausea, vomiting. Convulsions or effect on seizure threshold. Shortness of breath.

5 Fire-fighting measures

Suitable and unsuitable extinguishing agents:	Dry powder
Special hazards caused by the material, its products of combustion or resulting gases:	Oxides of potassium, nitrogen (NOx), sulfur (SOx), carbon monoxide and dioxide
Special fire fighting procedures:	Wear self-contained breathing apparatus. Always wear full fire fighting equipment/clothing in fire situations

6 Accidental release measures

Person-related safety precautions:	Always wear personal protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray.
Measures for environmental protection:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Measures for cleaning/collecting:	Sweep or scoop up and remove. Keep in suitable, closed containers for disposal. Dispose of contaminated material as waste according to item 13
Additional information:	See Section 7 for information on safe handling See Section 8 for information on personal protective equipment See Section 13 for information on disposal See Section 15 for regulatory information

7 Handling and storage

Information for safe handling:	Keep container tightly sealed. Store in cool, dry place. Ensure good ventilation/exhaust at the workplace
Storage requirements to be met by storerooms and containers:	No special requirements.
Incompatibility (avoid contact with):	Strong acids. Strong bases. Strong oxidizers. Calcium chlorite, perchloryl fluoride.
Further information about storage conditions:	May decompose on exposure to moist air or water. May discolor on exposure to light.

8 Exposure controls/personal protection

Ventilation requirements:	Always maintain exposure below permissible exposure limits. Local exhaust.
Components with exposure limits that require monitoring:	OSHA PEL: TWA 5 mg/m3
Additional information:	None
General protective and hygienic measures:	The usual precautionary measures for handling chemicals should be adhered to Keep away from foodstuffs, beverages and food Instantly remove any soiled and impregnated garments Wash hands during breaks and at the end of the work Avoid contact with the eyes and skin
Personal protective equipment:	
Respiratory protection:	Only use NIOSH/MESA or CEN approved equipment. For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.
Hand protection:	Neoprene / Natural rubber / Impervious
Eye protection:	Safety glasses / goggles
Skin protection:	Protective work clothing
Additional protective equipment:	Sufficient to prevent contact. Emergency eyewash and safety shower.

9 Physical and chemical properties

Physical state:	Crystals
Color:	Colorless-white
Odor:	No data available
Molecular Weight (Calculated):	97.18
pH	5.3 - 8.7 @ 97.2 g/L at 25 C
Melting point/freezing point/range:	173.2 C
Boiling point/range:	500 C (decomposes)
Sublimation temperature/start:	No data available
Flash point:	Non-flammable
Autoignition temperature:	No data available

Danger of explosion:	No data available
Flammable limits:	No data available
Lower:	No data available
Upper:	No data available
Evaporation Rate:	No data available
Vapor pressure (mm Hg):	No data available
Specific gravity:	1.886 g/cm3
Solubility in/Miscibility with water:	208 g/L @ 20 C

10 Stability and reactivity

Chemical stability:	Stable under recommended storage conditions.
Conditions to be avoided:	Contact with incompatibles See section 7 for information on proper handling and storage
Materials to be avoided:	Strong acids. Strong bases. Strong oxidizers. See section 7 for information on proper handling and storage
Hazardous Decomposition products:	Oxides of potassium, nitrogen (NOx), sulfur (SOx), carbon monoxide and dioxide

11 Toxicological information

LD/LC50 values that are relevant for classification:	oral-human LD_{Lo}: 80 mg/kg oral-rat LD_{50}: 854 mg/kg
Primary irritant or corrosive effect:	
on the skin:	Moderate irritation
on the eye:	Moderate irritation
Potential health effects:	
Inhalation:	May cause irritation to the mucous membranes and upper respiratory system
Signs and symptoms of exposure:	May be harmful by inhalation, ingestion, or skin absorption. A human poison by ingestion. Poison experimentally by ingestion, intramuscular, subcutaneous and intravenous routes. Repeated exposure to thiocyanates can cause nausea, vomiting, diarrhea, psychosis, thyroid hypofunction, anemia, skin disease, liver and kidney damage. Effects are cumulative.
Carcinogenicity:	No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH
Additional information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

12 Ecotoxicological information

Toxicity:	
Toxicity to fish:	Rainbow trout LC_{50}: >100 mg/L:96H
Toxicity to daphnia and other aquatic invertebrates:	Daphnia magna EC_{50}: 11 mg/L:48H
Toxicity to algae:	No data available
Persistence and degradability:	No data available
Biodegradability:	
Bioaccumulative potential:	
Bioaccumulation:	Rainbow Trout - 16 weeks - 35,000 ug/L Bioconcentration factor (BCF): 13.4
Mobility in soil:	No data available
Other adverse effects:	Harmful to aquatic life with long lasting effects. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

13 Disposal considerations

Recommendation:	Consult state, local or national regulation for proper disposal Allow professional disposal company to handle waste Must be specially treated under adherence to official regulations
Unclean packagings recommendation:	Disposal must be made according to official regulations

14 Transport information

Land transport DOT

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Potassium thiocyanate

Air transport ICAO-TI and IATA-DGR:

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Potassium thiocyanate

UPS Ground / FedEx Ground

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Potassium thiocyanate

UPS Air

Proper shipping name:	Chemicals Non-Hazardous
Technical name:	Potassium thiocyanate

15 Regulatory information

SARA Section 302 Extremely Hazardous components and corresponding TPQs:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 311 / 312 hazards:	Acute Health Hazard / Chronic Health Hazard
SARA Section 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 II, Section 313
California Proposition 65 components:	This product does not contain any chemicals know to State of California to cause cancer, birth defects, or any other reproductive harm
TSCA:	Material is listed on TSCA inventory.

16 Other information

The above information is accurate to the best of our knowledge. However, since data, safety standards and government regulation are subject to change and the conditions of handling and use, or misuse are beyond our control. NOAH MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE COMPLETENESS OR CONTINUING ACCURACY OF THE INFORMATION CONTAINED HEREIN AND DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. User should satisfy himself that he has all current data relevant to his particular use.