NARTEC, Inc.

Mecke's Reagent for Heroin/Opiates

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Form: Mixtures
Product Name: Mecke's Reagent for Heroin/Opiates
Product Code: HR-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Laboratory chemical.

1.3 Details of the supplier of the safety data sheet

NARTEC, Inc.
1001 N. Hawks Perch
Nixa, MO 65714
Phone: 417-587-3340
http://www.nartec.com
aware@nartec.com

1.4 Emergency telephone number

Emergency number: 1-800-424-9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification: This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity:	Category 3
Acute dermal toxicity:	Category 1
Acute Inhalation Toxicity – Dust and Mists	Category 3
Specific target organ toxicity – repeated exposure	Category 2
Skin corrosion/irritation:	Category 1
Serious eye damage/eye irritation:	Category 1
Specific organ toxicity – single exposure	Category 3
Target organs – Respiratory system.	

2.2 Label Elements

Signal Word: DANGER

Hazard Statements: Causes severe skin burns and eye damage
May cause respiratory irritation
Fatal in contact with skin
Toxic if swallowed
Toxic if inhaled
May cause Damage to organs through prolonged or repeated exposure






2.3 Precautionary Statements

Prevention: Wear protective gloves/clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Wash face, hands, and any exposed skin thoroughly after handling
Do not eat, drink, or smoke when using this product
Avoid breathing dust/fumes/gas/mist/vapors/spray
Do not get in eyes, on skin, or on clothing

Response: Get Medical attention/advice if you feel unwell.
Immediately call a POISON CENTER or doctor.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor.

Skin: Immediately call a POISON CENTER or doctor
Remove contaminated clothing and wash before reuse
Wash skin with plenty of soap and water

Eyes: Rinse with water for several minutes.
Remove contact lenses.

Ingestion: Immediately call POISON CENTER or doctor
Rinse mouth with water, DO NOT induce vomiting

Storage: Store locked up
Store in a well-ventilated place
Keep container tightly closed

Disposal: Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC): Very toxic to aquatic life with long lasting effects.

Other hazards: Hygroscopic

SECTION 3 Composition/Information on Ingredients

Component	CAS-No	Weight %
Selenious Acid	7783-00-8	0.2
Sulfuric Acid	7664-93-9	96

SECTION 4 First-aid measures

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Immediate medical attention is required.

Skin Contact: Wash off with plenty of water for at least 15 minutes.
Immediate medical attention is required.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.

Ingestion: Do not induce vomiting. Call a physician or POISON CONTROL CENTER immediately.

Most Important Symptoms/Effects: Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation or stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

Notes to Physician: Treat symptomatically.

SECTION 5 Fire-Fighting Measures

Suitable Extinguishing Media: Use alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media: Do not use water.

Flash point: No Information available.

Specific hazards arising from the chemical:

Do not allow run-off from fire-fighting to enter drains or water courses. Corrosive material. Reacts violently with water. Reaction with water may generate much heat which will increase the concentration of fumes in the air. Contact with metals may evolve flammable hydrogen gas. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

Hazardous Combustion Products: Hydrogen Sulfur oxides

Protective Equipment and Precautions for Firefighters:

As in any, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gas and vapors.

NFPA

Health	Flammability	Instability	Physical Hazards
4	1	2	W

SECTION 6 Accidental Release Measures

Personal Precautions: Ensure adequate ventilation. Use personal protective equipment. Wear self-contained breathing apparatus and protective suit. Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Avoid dust formation.

Environmental Precautions: Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Avoid release into the environment. Collect spillage.

Methods for Containment And Clean-up: Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

SECTION 7 Handling and Storage

Handling: Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Do not breathe vapors/dust. Do not ingest.

Storage: Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep locked-up. Corrosives area.

SECTION 8 Exposure Controls/Personal Protection

Exposure Guidelines:

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Selenious Acid	TWA: 0.2 mg/m^3	(Vacated) TWA: 0.2 mg/m^3	IDLH: 1 mg/m^3 TWA: 0.2 mg/m^3
Sulfuric Acid	TWA: 0.2 mg/m^3	(Vacated) TWA: 0.1 mg/m^3	IDLH: 15 mg/m^3 TWA: 0.1 mg/m^3

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Selenious Acid	TWA: 0.2 mg/m^3	TWA: 0.2 mg/m^3	TWA: 0.2 mg/m^3
Sulfuric Acid	TWA: 0.1 mg/m^3 STEL: 3 mg/m^3	TWA: 0.1 mg/m^3	TWA: 0.2 mg/m^3

Legend

ACGIH – American Conference of Governmental Industrial Hygienists

OSHA – Occupational Safety and Health Administration

NIOSH IDLH – The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Engineering Measures: Use only under chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/Face Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.

Skin & Body Protection: Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

SECTION 9 Physical and Chemical Properties

Physical State: Liquid (sulfuric acid), Solid (Selenious acid), mixture liquid

Appearance: mixture- colorless liquid

Odor: Odorless

PH: 1 1N aq.sol (sulfuric acid)

Melting Point Range: Sulfuric acid- 10 ^{0}C/50 ^{0}F, Selenious acid – 70 ^{0}C/ 158 ^{0}F

Boiling Range: 290 ^{0}C/ 554 ^{0}F (sulfuric acid)

Vapor Pressure: Sulfuric acid – 1 mmHg @ 146 ^{0}C, Selenious acid – 2.7 mbar@ 15 ^{0}C

Relative Density: 1.840 (sulfuric acid)

Solubility: 167 g/100ml (20 ^{0}C) (Selenious acid)

Decomposition Temp: 340 ^{0}C (sulfuric acid)

Viscosity: 21mPa.s @ 25 ^{0}C (sulfuric acid)

Molecular Formula: H2 O3 SE (Selenious acid) H2 O4 S (sulfuric acid)

Molecular Weight: 128.97 (Selenious acid) 98.07 (sulfuric acid)

SECTION 10 Stability and Reactivity

Reactive Hazard: Yes

Stability: Hygroscopic, Water Reactive

Conditions to Avoid: Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water.

Incompatible Materials: Strong oxidizing agents. Combustible material, bases, organic materials. Reducing agents. Powdered metals. Peroxides.

Hazardous Decomposition Products: Hydrogen, Sulfur oxides.

Hazardous Reactions: Contact with metals may evolve flammable hydrogen gas. Reacts violently with water.

SECTION 11 Toxicological Information

Acute Toxicity

Product Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Selenious Acid	Not listed	4 mg/kg (Rabbit)	Not listed
Sulfuric Acid	2140 mg/kg (Rat)	Not listed	510 mg/m^3 (Rat) 2 h

Delayed and Immediate effects as well as chronic effects from short and long-term exposure:

Irritation: Causes severe burns by all exposure routes

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Selenious Acid	7783-00-8	Not listed	Not listed	Not listed	Not listed	Not listed
Sulfuric Acid	7664-93-9	Group 1	Not listed	A2	X	A2

IARC: (International Agency for Research on Cancer)

Group 1 – Carcinogenic to Humans
Group 2A – Probably carcinogenic to Humans
Group 2B – Possibly carcinogenic to Humans

A1 – Known Human Carcinogen
A2 – Suspected Human Carcinogen
A3 – Animal Carcinogen

STOT – Single Exposure: Respiratory system

Symptoms/effects, Both acute and delayed: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

Other Adverse Effects: See actual entry in RTECS for complete information.

SECTION 12 Ecological Information

Ecotoxicity: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sulfuric Acid	-	500 mg/L LC50 96 h	-	EC50: 29 mg/L/24h

Persistence & Degradability: Soluble/miscible in water Persistence is unlikely based on information available.

Bioaccumulation/Accumulation: No Information available

Mobility: Will likely be mobile in the environment due to its water solubility.

SECTION 13 Disposal Considerations

Waste Disposal Methods: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14 Transport Information

DOT

UN-No: UN3283 (Selenious acid) UN1830 (sulfuric acid)
Proper Shipping Name: Chemical Kit
Hazard Class: 8
Packing Group: II

TDG

UN-No: UN3283 (Selenious acid) UN1830 (sulfuric acid)
Proper Shipping Name: Chemical Kit
Hazard Class: 8
Packing Group: II

IATA

UN-No: UN3283 (Selenious acid) UN1830 (sulfuric acid)
Proper Shipping Name: Chemical Kit

Hazard Class: 8
Packing Group: II

IMDG/IMO

UN-No: UN3283 (Selenious acid) UN1830 (sulfuric acid)
Proper Shipping Name: Chemical Kit
Hazard Class: 8
Packing Group: II

SECTION 15 Regulatory Information

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Selenious Acid	X	X	-	231-974-7	-		X	X	X	X	X
Sulfuric Acid	X	X	-	231-639-5	-		X	X	X	X	X

Legend:

X – Listed

E – Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N – Indicates a polymeric substance containing a no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P – Indicates a commenced PMN substance.

R – Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S – Indicates a substance that is identified in a proposed or final Significant New Use Rule.

T – Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU – Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 – Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 – Indicates an exempt polymer that is a polyester and is made from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 – Threshold Values %
Selenious Acid	7783-00-8	>95	1.0
Sulfuric Acid	7664-93-9	>95	1.0

SARA 311/312 Hazardous Categorization

Acute Health Hazard Yes
Chronic Health Hazard Yes (Selenious Acid) No (Sulfuric Acid)
Fire Hazard No
Sudden Release of Pressure Hazard No
Reactive Hazard Yes (Sulfuric Acid) No (Selenious Acid)

Clean Water Act

Component	CWA-Hazardous Substances	CWA- Reportable Quantities	CWA-Toxic Pollutants	CWA-Priority Pollutants
Selenious Acid	-	-	X	-
Sulfuric Acid	X	1000 lb	-	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Selenious Acid	X		-

Sulfuric Acid – Not Applicable

OSHA Not Applicable

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Selenious Acid	10lb	10 lb
Sulfuric Acid	1000 lb	1000 lb

California Proposition 65 This product (sulfuric acid) contains the following Proposition 65 chemicals:

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Sulfuric Acid	7664-93-9	Carcinogen	-	Carcinogen

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Selenious Acid	X	X	X	X	X
Sulfuric Acid	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): Y (sulfuric acid), N (Selenious acid)

DOT Marine Pollutant: N

DOT Severe Marine Pollutant: N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

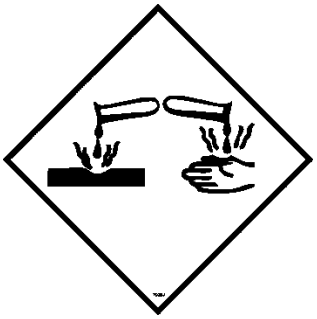
Mexico – Grade No Information available

Canada This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the SDS contains all the information required by the CPR.

WHMIS Hazard Class D1A Very toxic materials

E Corrosive material





SECTION 16 Other Information

Prepared By: Nartec, Inc

Creation Date: March 2016

Summary: This document has been created to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

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