NIK Test W Ampoule 1

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 2/14/2025 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : NIK Test W Ampoule 1
Product code : 160-156 (1004794)

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Forensics

1.4. Supplier's details

Manufacturer
Safariland, LLC
11386 International Parkway
Jacksonville, Florida 32218
T Customer Care (800) 347-1200

1.5. Emergency phone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA)
CCN 6410

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

GHS US classification

Corrosive to metals, Category 1	H290	May be corrosive to metals.
Skin corrosion/irritation, Category 1A	H314	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.
Carcinogenicity, Category 1A	H350	May cause cancer.
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation.

Full text of H-statements: see section 16

2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger
Hazard statements (GHS US) : May be corrosive to metals
Causes severe skin burns and eye damage
May cause respiratory irritation
May cause cancer.
Precautionary statements (GHS US) : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.

Keep only in original packaging.
Do not breathe dusts or mists.
Wash hands, forearms and face thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
Immediately call a poison center or doctor.
If swallowed: rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash contaminated clothing before reuse.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
Call a poison center or doctor if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If exposed or concerned: Get medical advice/attention.
Absorb spillage to prevent material damage.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
sulphuric acid … %	CAS-No.: 7664-93-9	> 90	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Carc. 1A, H350 STOT SE 3, H335
Ammonium trioxovanadate	CAS-No.: 7803-55-6	0.5	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

SECTION 4 First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Induce artificial respiration with mask fitted with one-way valve or other suitable device but not mouth-to-mouth. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : Move the affected person away from the contaminated area and into the fresh air. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately transport the casualty to an eye doctor / hospital. Continue rinsing during the transport with isotonic saline solution, alternatively with water.

First-aid measures after ingestion : Rinse mouth out with water. Drink plenty of water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes severe burns. May cause severe irreversible damage.

Symptoms/effects after eye contact : Causes serious eye burns. May cause severe irreversible damage.

Symptoms/effects after ingestion : Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic symptoms : May cause cancer.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Explosion hazard : No direct explosion hazard.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Sulfur oxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Use water spray or fog for cooling exposed containers. Move containers from fire area if it can be done without personal risk. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment	:	Wear recommended personal protective equipment.
Emergency procedures	:	Evacuate unnecessary personnel. Do not touch or walk on the spilled product. Avoid breathing mist, spray, vapours, gas. Ventilate spillage area.

For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	:	Evacuate unnecessary personnel. Stop leak if safe to do so. Remove all sources of ignition. Ventilate spillage area. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.
Environmental precautions	:	Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment	:	Stop leak without risks if possible. Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up	:	Take up liquid spill into absorbent material. Contaminated absorbent material may pose the same hazard as the spilt product. Decontaminate surfaces and equipment with water and detergent. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

For further information refer to section 8: "Exposure controls/personal protection",For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Wear personal protective equipment. Avoid breathing mist, spray, vapours, gas. Avoid contact with skin, eyes and clothing. Eliminate all ignition sources if safe to do so.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including incompatibilities

Technical measures	:	Keep in a cool, well-ventilated place away from heat.
Storage conditions	:	Keep cool. Protect from sunlight. Keep only in original container. Keep container closed when not in use.
Incompatible products	:	Strong bases. Oxidizing agents. Aluminium. Tin. Zinc.
Incompatible materials	:	Metals.
Storage temperature	:	Store at room temperature
Specific end uses	:	Forensics.
Packaging materials	:	Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

sulphuric acid … % (7664-93-9)

USA - ACGIH - Occupational Exposure Limits

Local name	Sulfuric acid
ACGIH OEL TWA	0.2 mg/m³ (T - Thoracic particulate matter)

sulphuric acid … % (7664-93-9)	
Remark (ACGIH)	TLV® Basis: Pulm func. Notations: A2 (Suspected Human Carcinogen. Classification refers to sulfuric acid contained in strong inorganic acid mists)
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Sulfuric acid
OSHA PEL TWA	1 mg/m³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - NIOSH - Occupational Exposure Limits	
Local name	Sulfuric acid
NIOSH REL 10h TWA	1 mg/m³
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves. The following materials are suitable for protective gloves: Butyl rubber, Fluoroelastomer (FKM), Chloroprene rubber

Eye protection:
Chemical goggles or face shield

Skin and body protection:
Body protection should be chosen depending on activity and possible exposure. Wear suitable protective clothing

Respiratory protection:		
Wear respiratory protection.		
Device	**Filter type**	**Condition**
	ABEK, Filter E (yellow)	

Personal protective equipment symbol(s):

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid

Appearance	:	Liquid.
Colour	:	Light yellow
Odour	:	Odorless
Odour threshold	:	No data available
pH	:	Acidic
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Flammability (solid, gas)	:	Non flammable.
Vapour pressure	:	No data available
Relative vapour density at 20°C	:	No data available
Relative density	:	No data available
Density	:	1.79 g/cm³ @ 20 °C/ 68 °F
Solubility	:	Water: Miscible with water
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosive limits	:	No data available
Explosive properties	:	Product does not present an explosion hazard.
Particle characteristics	:	No data available

Ammonium trioxovanadate	
Particle characteristics	No data available

sulphuric acid … %	
Particle characteristics	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions. Reacts with water, generates heat.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

High temperature. Metals.

10.5. Incompatible materials

Strong bases. Chlorinated solvents. Aluminium. Tin. Zinc.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Sulfur oxide.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Ammonium trioxovanadate (7803-55-6)	
LD50 oral rat	58.1 mg/kg
LD50 dermal rat	> 2500 mg/kg bodyweight
LD50 dermal	2500 mg/kg
ATE US (oral)	58.1 mg/kg bodyweight
ATE US (dermal)	2500 mg/kg bodyweight

sulphuric acid … % (7664-93-9)	
LD50 oral rat	2140 mg/kg bodyweight
LC50 Inhalation - Rat	0.375 mg/l air
ATE US (oral)	2140 mg/kg bodyweight

Skin corrosion/irritation : Causes severe skin burns.
pH: Acidic

sulphuric acid … % (7664-93-9)	
pH	0.3

Serious eye damage/irritation : Causes serious eye damage.
pH: Acidic

sulphuric acid … % (7664-93-9)	
pH	0.3

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer.

sulphuric acid … % (7664-93-9)	
IARC group	1 - Carcinogenic to humans
National Toxicity Program (NTP) Status	Known Human Carcinogens

Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.

Ammonium trioxovanadate (7803-55-6)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Ammonium trioxovanadate (7803-55-6)	
NOAEL (oral, rat, 90 days)	1.6 mg/kg bodyweight Animal: rat, Animal sex: male

Aspiration hazard : Not classified

NIK Test W Ampoule 1	
Viscosity, kinematic	No data available

Ammonium trioxovanadate (7803-55-6)	
Viscosity, kinematic	No data available

sulphuric acid … % (7664-93-9)	
Viscosity, kinematic	12.228 mm²/s

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Causes severe burns. May cause severe irreversible damage.

Symptoms/effects after eye contact : Causes serious eye burns. May cause severe irreversible damage.

Symptoms/effects after ingestion : Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic symptoms : May cause cancer.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

sulphuric acid … % (7664-93-9)	
LC50 - Fish [1]	16 – 28 mg/l
EC50 - Crustacea [1]	> 100 mg/l
EC50 72h - Algae [1]	> 100 mg/l
ErC50 algae	> 100 mg/l
NOEC (chronic)	0.15 mg/l
NOEC chronic fish	0.31 mg/l
NOEC chronic crustacea	0.15 mg/l

12.2. Persistence and degradability

NIK Test W Ampoule 1	
Persistence and degradability	Not established.

Ammonium trioxovanadate (7803-55-6)	
Persistence and degradability	Not rapidly degradable

sulphuric acid … % (7664-93-9)	
Persistence and degradability	Inorganic compound.

12.3. Bioaccumulative potential

sulphuric acid … % (7664-93-9)	
Partition coefficient n-octanol/water (Log Pow)	-2.2

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations. U.S. - RCRA (Resource Conservation Recovery Act) - D Waste- Characteristic Waste Codes. D002- Aqueous with pH < 2.0 or pH > 12.5, or Liquid and corrodes steel at > 0.25 inch / year, at 55° C.
Additional information : Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

14.1. UN Number

UN-No. (DOT) : UN1830
UN-No. (IMDG) : 1830
UN-No. (IATA) : 1830

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Sulfuric acid
Proper Shipping Name (IMDG) : SULPHURIC ACID
Proper Shipping Name (IATA) : Sulphuric acid

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 8
Hazard labels (DOT) : 8

IMDG

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8

IATA

Transport hazard class(es) (IATA) : 8
Danger labels (IATA) : 8

14.4. Packing group

Packing group (DOT)	:	II
Packing group (IMDG)	:	II
Packing group (IATA)	:	II

14.5. Environmental hazards

Other information	:	No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT)	:	UN1830
DOT Special Provisions (49 CFR 172.102)	:	A3 - For combination packagings, if glass inner packagings (including ampoules) are used, they must be packed with absorbent material in tightly closed metal receptacles before packing in outer packagings. A7 - Steel packagings must be corrosion-resistant or have protection against corrosion. B3 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks and DOT 57 portable tanks are not authorized. B83 - Bottom outlets are prohibited on tank car tanks transporting sulfuric acid in concentrations over 65.25 percent. B84 - Packagings must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance for sulfuric acid or spent sulfuric acid in concentration up to 65.25 percent. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. N34 - Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material. T8 - 4 178.274(d)(2) Normal..... Prohibited TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
DOT Packaging Exceptions (49 CFR 173.xxx)	:	154
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	202
DOT Packaging Bulk (49 CFR 173.xxx)	:	242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	30 L
DOT Vessel Stowage Location	:	C - The material must be stowed ‘‘on deck only’’ on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	:	14 - For metal drums, stowage permitted under deck on cargo vessels,53 - Stow ‘‘separated from’’ alkaline compounds,58 - Stow ‘‘separated from’’ cyanides

IMDG

Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
IBC special provisions (IMDG)	:	B20
Tank instructions (IMDG)	:	T8
Tank special provisions (IMDG)	:	TP2
EmS-No. (Fire)	:	F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	:	S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	:	C
Stowage and handling (IMDG)	:	SW15
Segregation (IMDG)	:	SGG1, SG36, SG49
Properties and observations (IMDG)	:	Colourless, oily liquid, mixture over 1.41 up to 1.84 relative density. In the presence of moisture, highly corrosive to most metals. Causes burns to skin, eyes and mucous membranes.

IATA

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y840
PCA limited quantity max net quantity (IATA)	:	0.5L
PCA packing instructions (IATA)	:	851
PCA max net quantity (IATA)	:	1L
CAO packing instructions (IATA)	:	855
CAO max net quantity (IATA)	:	30L
ERG code (IATA)	:	8L

SECTION 15 Regulatory information

15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency’s Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Ammonium trioxovanadate	7803-55-6	Not present	-	
sulphuric acid … %	7664-93-9	Present	Active	

sulphuric acid … % (7664-93-9)

Not subject to reporting requirements of the United States SARA Section 313 Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1000 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 lb

15.2. International regulations

CANADA

sulphuric acid … % (7664-93-9)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

sulphuric acid … % (7664-93-9)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other Information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date : 2/14/2025

Full text of hazard classes and H-statements	
H290	May be corrosive to metals
H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H350	May cause cancer.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.