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

· 1.1 Product identifier

Trade name: NIK Test A

· Article number: A-800-6071

· 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

· Application of the substance / the mixture Marquis Reagent - General Alkaloids Drug Test

· 1.3 Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier: **Distributor:** 

Safariland, LLC Arrowhead Forensics 11030 Strang Line Road 13386 International Parkway Lenexa, KS 66215 Jacksonville, FL 32218

Customer Care (800) 347-1200 (913) 894-8388; www.arrowheadforensics.com



1.4 Emergency telephone number:

ChemTel Inc.

(800)255-3924, +1 (813)248-0585

### **SECTION 2: Hazards identification**

- · 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



health hazard

Carc. 1A H350 May cause cancer.



corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.



Skin Sens. 1 H317 May cause an allergic skin reaction.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



C; Corrosive

R35: Causes severe burns.



Xn; Harmful

Limited evidence of a carcinogenic effect.



R43: May cause sensitisation by skin contact.

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#### · Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

#### · Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

#### 2.2 Label elements

### · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms







**GHS05 GHS07 GHS08** 

#### · Signal word Danger

## · Hazard-determining components of labelling:

Sulfuric Acid

formaldehyde

#### · Hazard statements

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H350 May cause cancer.

### · Precautionary statements

P260 Do not breathe mist/vapours/spray.

P281 Use personal protective equipment as required.

P264 Wash thoroughly after handling.

P202 Do not handle until all safety precautions have been read and understood.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

### · Additional information:

Restricted to professional users.

### Hazard description:

#### · WHMIS-symbols:

D2A - Very toxic material causing other toxic effects

E - Corrosive material



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· NFPA ratings (scale 0 - 4)

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Health = 4 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



\* - Indicates a long term health hazard from repeated or prolonged exposures.

· HMIS Long Term Health Hazard Substances

All ingredients are listed.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

## **SECTION 3: Composition/information on ingredients**

- · 3.2 Mixtures
- · **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 7664-93-9 EINECS: 231-639-5 Index number: 016-020-00-8	sulphuric acid ☐ C R35 ♦ Skin Corr. 1A, H314	50-100%
CAS: 50-00-0 EINECS: 200-001-8 Index number: 605-001-00-5	formaldehyde ☑ T R23/24/25; ☑ C R34; ※ Xn R40; ※ Xi R43 Carc. Cat. 3	2,5-10%
	Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 Carc. 2, H351 Skin Corr. 1B, H314 Skin Sens. 1, H317	

• **Additional information:** For the wording of the listed risk phrases refer to section 16.

## **SECTION 4: First aid measures**

- · 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

If skin irritation continues, consult a doctor.

Seek immediate medical help for blistering or open wounds.

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· After eye contact:

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Remove contact lenses if worn, if possible.

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions

Strong caustic effect on skin and mucous membranes.

· Hazards

Danger of gastric perforation.

Danger of severe eye injury.

· 4.3 Indication of any immediate medical attention and special treatment needed

Contains formaldehyde. May produce an allergic reaction.

## **SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- For safety reasons unsuitable extinguishing agents: None.
- 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

• Additional information No further relevant information available.

#### **SECTION 6: Accidental release measures**

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:

Use limestone to neutralize and absorb spill.

Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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## **SECTION 7: Handling and storage**

### · 7.1 Precautions for safe handling

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

When diluting always pour product into water and not vice versa.

- Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

No special requirements.

Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with alkalis (caustic solutions).

Store away from metals.

- · Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- · 7.3 Specific end use(s) No further relevant information available.

### **SECTION 8: Exposure controls/personal protection**

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- Ingredients with limit values that require monitoring at the workplace:

### 7664-93-9 sulphuric acid

IOELV (EU) Long-term value: 0,05 mg/m<sup>3</sup> PEL (USA) Long-term value: 1 mg/m<sup>3</sup> REL (USA) Long-term value: 1 mg/m<sup>3</sup> TLV (USA) Long-term value: 0,2\* mg/m3 \*as thoracic fraction EL (Canada) Long-term value: 0,2 mg/m<sup>3</sup>

ACGIH A2; IARC 1

EV (Canada) Long-term value: 0,2 mg/m3

## 50-00-0 formaldehyde

PEL (USA) Short-term value: 2 ppm

Long-term value: 0,75 ppm see 29 CFR 1910,1048(c)

Long-term value: 0,016 ppm REL (USA)

Ceiling limit: 0.1\* ppm

\*15-min; See Pocket Guide App. A

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TLV (USA) Ceiling limit: 0,37 mg/m³, 0,3 ppm

(SEN) NIC-DSEN; RSEN

EL (Canada) Long-term value: 0,3 ppm

Ceiling limit: 1 ppm ACGIH A2; IARC 1; S

EV (Canada) | Short-term value: 1,0 ppm

Ceiling limit | 1,5 ppm

- · DNELs No further relevant information available.
- · PNECs No further relevant information available.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

#### Respiratory protection:

Not required under normal conditions of use.

Use suitable respiratory protective device when aerosol or mist is formed.

For spills, respiratory protection may be advisable.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

#### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### · Eye protection:

Contact lenses should not be worn.



Safety glasses

· Body protection: Protective work clothing

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· Limitation and supervision of exposure into the environment

No further relevant information available.

· Risk management measures

See Section 7 for additional information. No further relevant information available.

## **SECTION 9: Physical and chemical properties**

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid Colourless
Odour: Acrid

· Odour threshold: Not determined.

• **pH-value:** < 1,0

· Change in condition

Melting point/Melting range:
Boiling point/Boiling range:
Undetermined.

Flash point:
Flammability (solid, gaseous):
Auto/Self-ignition temperature:
Not applicable.
Not determined.

Not determined.

· **Self-igniting:** Product is not self-igniting.

Danger of explosion:
 Product does not present an explosion hazard.

· Explosion limits:

**Lower:** Not determined. **Upper:** Not determined.

Vapour pressure at 20 °C:
 Density at 20 °C:
 Relative density
 Vapour density
 Evaporation rate
 < <0,01 hPa</p>
 1,79 g/cm³
 Not determined.
 Not determined.
 Not determined.

· Solubility in / Miscibility with

water: Fully miscible.

• Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

**Dynamic:** Not determined. **Kinematic:** Not determined.

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· 9.2 Other information

No further relevant information available.

## **SECTION 10: Stability and reactivity**

- · 10.1 Reactivity
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Heating occurs when water is added.

When diluting, always add acid to water, never vice versa.

Toxic fumes may be released if heated above the decomposition point.

Reacts with alkali (Ives).

Corrosive action on metals.

Reacts with metals forming hydrogen.

- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Sulphur oxides (SOx)

## **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity:
- LD/LC50 values relevant for classification:

## 50-00-0 formaldehyde

Oral LD50 >200 mg/kg (rat)

- Primary irritant effect:
- on the skin: Strong caustic effect on skin and mucous membranes.
- on the eye: Strong caustic effect.
- · **Sensitization**: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Corrosive

Irritant

Danger through skin adsorption.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Toxic and/or corrosive effects may be delayed up to 48 hours.

Suspected of causing cancer.

- · Sensitisation: May cause an allergic skin reaction.
- · Repeated dose toxicity:

May cause damage to organs through prolonged or repeated exposure.

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Repeated exposures may result in skin and/or respiratory sensitivity.

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):

Carc. 1A

## SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. If the dilution of the use-level pH-value is considerably increased after use, the aqueous waste, emptied into drains, is only low water-dangerous.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

## **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- · Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.

### **SECTION 14: Transport information**

· 14.1 UN-Number

· DOT. ADR. IMDG. IATA

· 14.2 UN proper shipping name

· DOT

· ADR 1830 SULPHURIC ACID

UN1830

Sulfuric acid

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(Contd. of page 9) · IMDG, IATA SULPHURIC ACID · 14.3 Transport hazard class(es) · DOT 8 Corrosive substances. · Class · Label · ADR · Class 8 (C1) Corrosive substances. · Label · IMDG, IATA · Class 8 Corrosive substances. · Label · 14.4 Packing group · DOT, ADR, IMDG, IATA Ш · 14.5 Environmental hazards: · Marine pollutant: · 14.6 Special precautions for user Warning: Corrosive substances. Danger code (Kemler): · EMS Number: F-A,S-B · Segregation groups Acids · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · Transport/Additional information: · ADR · Limited quantities (LQ) 1L · Excepted quantities (EQ) Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml · Transport category · Tunnel restriction code Ε · IMDG · Excepted quantities (EQ) Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml (Contd. on page 11)

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· UN "Model Regulation":

UN1830, SULPHURIC ACID, 8, II

· UN "Model Regulation":	UN1830, SULPHURIC ACID, 8, II		
SECTION 15: Regulatory information			
· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture · United States (USA) · SARA			
· Section 355 (extremely hazardous su	ubstances):		
All ingredients are listed.			
Section 313 (Specific toxic chemical listings):			
All ingredients are listed.			
· TSCA (Toxic Substances Control Act):			
All ingredients are listed.			
Proposition 65 (California):			
· Chemicals known to cause cancer:			
50-00-0 formaldehyde			
Chemicals known to cause reproduc	ctive toxicity for females:		
None of the ingredients are listed.			
· Chemicals known to cause reproduc	ctive toxicity for males:		
None of the ingredients is listed.			
· Chemicals known to cause developmental toxicity:			
None of the ingredients is listed.			
· Carcinogenic Categories			
· EPA (Environmental Protection Agency)			
50-00-0 formaldehyde	B1		
IARC (International Agency for Rese	arch on Cancer)		
7664-93-9 sulphuric acid	1		
50-00-0 formaldehyde	1		
TLV (Threshold Limit Value establish	hed by ACGIH)		
7664-93-9 sulphuric acid	A2		
50-00-0 formaldehyde	A2		
NIOSH-Ca (National Institute for Occ	upational Safety and Health)		
50-00-0 formaldehyde			
Canada			
	· Canadian Domestic Substances List (DSL)		
All ingredients are listed.			
· Canadian Ingredient Disclosure list (limit 0.1%)			
50-00-0 formaldehyde			
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Canadian Ingredient Disclosure list (limit 1%)

7664-93-9 sulphuric acid

· Other regulations, limitations and prohibitive regulations

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H331 Toxic if inhaled.

H351 Suspected of causing cancer.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R34 Causes burns.

R35 Causes severe burns.

R40 Limited evidence of a carcinogenic effect.

R43 May cause sensitisation by skin contact.

#### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Carc. 1A: Carcinogenicity, Hazard Category 1A

Carc. 2: Carcinogenicity, Hazard Category 2

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· Sources

SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

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