****TECHNIC, INC.**SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product Name: TECHNISTAN AG MAKE UP

Product Code: 405427

Recommended use: Electroplating bath component; for industrial use only.

Supplier:

Technic Inc.

Current SDS preparation date: May 7, 2019
1 Spectacle Street

Original SDS preparation date: May 6, 2014

Cranston, RI 02910 USA

Telephone no: 401-781-6100

Emergency no: ChemTrec 800-424-9300, Outside the USA and Canada 703-527-3887

SECTION 2. HAZARD IDENTIFICATION

Classification:

Acute Toxicity - Oral, Category 3
Skin Corrosion/Irritation, Category 1B
Eye Damage/Irritation, Category 1

Label elements and precautionary statements:

Signal word: Danger

Pictogram(s):





Hazards not otherwise classified: None

Hazard statement(s):

Toxic if swallowed

Causes severe skin burns and eye damage

Precautionary statement(s):

Do not breathe dust, fume, gas, mist, vapors or spray.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

Wear protective gloves, clothing and eye and face protection.

If swallowed: Rinse mouth. DO NOT induce vomiting. Immediately call a poison center or doctor/physician.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

Wash contaminated clothing before reuse.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Dispose of contents and container in accordance with local, state and federal regulations.

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SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical nameCAS NumberEINECS NumberConcentrationMethanesulfonic acid75-75-2200-898-615 %Thiosemicarbazide79-19-6201-184-75 %

The chemical identity and concentration of one or more ingredients of this product are withheld as a trade secret under the provisions of paragraph (i) of 29 CFR 1910.1200. This information will be made available to health professionals and others in accordance with the applicable provisions of this paragraph.

SECTION 4. FIRST AID MEASURES

Inhalation:

Remove patient to fresh air. Support breathing if required. Obtain medical treatment for dizziness, unconsciousness or irritation or difficulty in breathing.

Skin contact:

Remove contaminated clothing and wash affected area thoroughly with soap and water. Launder clothing before rewearing. Seek medical attention for prolonged skin irritation.

Eve contact:

Flush with water, including under lids, for fifteen minutes. Obtain immediate medical attention.

Ingestion:

If patient is conscious, rinse mouth and drink at least two large glasses of water. DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Obtain immediate medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Use media appropriate for surrounding fire such as foam, extinguishing powder, carbon dioxide or water spray. In case of fire, cool endangered containers with water spray.

Unsuitable extinguishing media: High pressure water jet.

Specific hazards in case of fire: Thermal decomposition may release sulfur dioxide and sulfur trioxide.

Special protective equipment and precaution for fire fighters: For fires in enclosed areas, wear self-contained breathing apparatus and full protective gear. Do not inhale combustion gases.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear appropriate skin, eye and respiratory protection. Do not eat, drink or smoke while cleaning up. Ensure adequate ventilation.

Methods and materials for containment and cleaning up:

Wear appropriate personal protective gear including eye, skin and respiratory protection. Contain spilled material and collect by absorption or other suitable method. Flush spill area with water. Do not allow this material or its rinsings to enter storm or sanitary sewers or other waterways. (See also Section 13).

Environmental precautions:

Prevent spills and rinsings from entering storm or sanitary sewers or other waterways and contact with soil.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with eyes. Avoid prolonged repeated skin contact and breathing mists or vapors. Use in well-ventilated area. Do not empty waste into sanitary drains.

Conditions for safe storage, including incompatibilities:

Store in a cool, dry area. Use with adequate ventilation. Keep container tightly closed when not in use. Store only in the original container.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:

Ingredient ACGIH TLV OSHA PEL Other Limits

There are no exposure limits established for the ingredients in this material.

Appropriate engineering controls:

Use in well-ventilated area with local exhaust.

Respiratory protection: Wear appropriate, approved respirator when ventilation is inadequate.

Eye protection:

Chemical splash goggles or safety glasses with side shields must be worn.

Skin protection:

Wear rubber or neoprene gloves. Wear rubber apron and long sleeves to prevent skin contact. Wash hands thoroughly with soap and water after handling and before eating or smoking.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid Color: Clear colorless

Odor: None

Odor threshold: Not available

pH: 1.0+/-0.5

Melting/freezing point: Not determined Initial boiling point: Not determined

Flash point: Not applicable Evaporation rate: Not available

Flammability (solid, gas): Not applicable Upper/lower explosion limits: Non-explosive

Vapor pressure: Not determined **Vapor density:** Not determined

Relative density ($H_2O = 1$) @25 °C: 1.09+/-0.05 Solubility: Completely soluble in water at 20 °C

Partition coefficient octanol/water: Not determined

Auto-ignition temperature: Not applicable **Decomposition temperature:** Not available

Viscosity: Similar to water

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Stable, non-reactive when stored and used according to recommendations.

Chemical stability: No decomposition if used according to specifications.

Possibility of hazardous reactions: None are known.

Conditions to avoid: Excessive heat.

Incompatible materials: Strong alkaline materials. **Hazardous decomposition products:** Oxides of sulfur.

SECTION 11. TOXICOLOGICAL INFORMATION

Routes of Exposure and Symptoms

Inhalation: Causes severe irritation of upper respiratory tract, coughing, sneezing, salivation and difficulty in breathing

difficulty in breathing.

Ingestion: Produces severe burns to mouth, stomach and gastrointestinal tract.

Skin Contact: Causes severe skin burns. **Eye Contact:** Causes severe eye damage.

Acute and Chronic Effects from Short- and Long-term Exposure:

See Routes of Exposure and Symptoms above.

Acute Oral Toxicity: LD50: 9.16 mg/kg (rat, thiosemicarbazide)

Acute Dermal Toxicity: LD50: 2200 mg/kg (rabbit, thiosemicarbazide)

Acute Inhalation Toxicity: No applicable information available.

Acute Eye Irritation: No applicable information available.

Dermal Irritation: No applicable information available.

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Carcinogen Listings: No applicable information available.

IARC: No NTP: No OSHA: No

Reproductive Effects: No applicable information available. **Target Organ Effects:** No applicable information available.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity: LC50: 20.8 mg/l, 96 hours (Fathead minnow, thiosemicarbazide)

Persistence and degradability: There are no data reported for this material.

Bio-accumulative potential: There are no data reported for this material.

Mobility in soil: Accidental spillage may lead to penetration in the soil and groundwater. However,

improper handling and disposal of this material may cause environmental damage.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal:

Disposal of this material is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

SECTION 14. TRANSPORT INFORMATION

Classification for shipment by road or rail, sea (IMDG) and air (IATA/ICAO):

UN number: UN1760

UN proper shipping name: Corrosive Liquid, N.O.S. (Contains Methane Sulfonic Acid)

Transport hazard class: 8
Packing group: III

Marine Pollutant: No.

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SECTION 15. REGULATORY INFORMATION

Inventory Status: All components are on T U.S. Regulations:	ΓSCA, EINECS/ELI	NCS, AICS, and D	SL.	
U.S. Superfund Amen	dments and Rea	uthorization Ac	t (SARA)	Title III:
SARA (311/312) HAZ	ARD CATEGORIE	ES:		
None <u>X</u> Immedi	iateDelayed	FireR	leactive	Pressure generating
SARA 313: This produc Chemical Name Thiosemicarbazide	ct contains the follo CAS Numb 79-19-6			ease Chemicals. ntration
The following product co Chemical Name None	omponents are cite CAS Numb		List Cit	tations nia Proposition 65 List
	SECTION 1	6. OTHER	NFOR	MATION
VOC (Volatile Organic	Compounds): 1	None		
HMIS Ratings:				
Health: 3 Fl	ammability: 0	Reactivity: 0	Pers	sonal Protection: C
Prepared by: Allan H.	Reed			
SDS Preparation date: May 7, 2019 Supersedes previous version: May 6, 2014.				
This SDS contains revis	ions in the followir	ng section(s): 14		
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