



Technical Specifications Data Sheet

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

1.1. Product identifier

Product form: Mixture
Trade name: Hydrophilic Coating Formula
Product code: 760.14A

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

Use of the substance/mixture: Coating

1.3. Details of the supplier of the safety data sheet

VitaCoat I-Tek Medical
1837 Buerkle Road, St. Paul, MN 55110 - USA
vitacoat.org
e. matt.newman@vitatek.io

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification Repr. 1B H360

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US): GHS08

Signal word (GHS-US): Danger

Hazard statements (GHS-US): H360 - May damage fertility or the unborn child

Precautionary statements (GHS-US): P201 - Obtain special instructions before use

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

P281 - Use personal protective equipment as required

P308 + P313 - If exposed or concerned: Get medical advice/attention

P405 - Store locked up

P501 - Dispose of contents/container to approved facilities in accordance with local/regional/national regulations

2.3. Other hazards

Other hazards not contributing to the classification: .. Not expected to produce significant adverse health effects when the recommended instruction for use are followed.

2.4. Unknown acute toxicity (GHS-US) 10% of this product is of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substance Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification *
N-methyl-2-pyrrolidone (Constituent)	(CAS No) 872-50-4	1.45-2.7	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Repr. 1B, H360 STOT SE 3, H335

This product contains triethyl amine neutralizing agent at concentrations of <0.3% which is bound in the matrix of this product as a salt as supplied. This amine salt is considered essentially unreactive at room temperature. Generation of amine vapors is expected when this product is processed (heated) during the drying/hardening of the coating

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Remove victim to fresh air. If a cough or other respiratory symptoms develop, consult medical personnel.

First-aid measures after skin contact: Wash skin thoroughly with soap and water. If irritation develops seek medical attention.

First-aid measures after eye contact: IF IN EYES: Rinse cautiously with water for several minutes. If irritation develops seek medical attention.

First-aid measures after ingestion: DO NOT INDUCE VOMITING. Immediately rinse mouth and drink plenty of water. Seek medical attention. Never give anything by mouth to an unconscious person.

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

Acute Symptoms/injuries after inhalation: Based upon the classification of this product and similar product no significant symptoms are expected. Inhalation of vapors may cause mild respiratory irritation.

Acute Symptoms/injuries after skin contact: Based upon the classification of this product and similar product no significant symptoms are expected. This product may cause mild skin irritation based on similar materials.

Acute Symptoms/injuries after eye contact: Based upon the classification of this product and similar product no significant symptoms are expected. This product may cause mild eye irritation based upon similar materials. Liquid may produce irritation experienced as excess redness and swelling of the conjunctiva.

Acute Symptoms/injuries after ingestion: Based upon the classification of this product and similar product no significant symptoms are expected. May be harmful if swallowed.

Chronic symptoms: *Repeated chronic exposure to organic solvents has been associated with central nervous system damage including memory loss and kidney and liver damage.*

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: *Use water fog, foam carbon dioxide dry chemical, halogenated agents.*

5.2. Special hazards arising from the substance or mixture

Fire hazard: *Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NOx).*

Explosion hazard: *Not determined.*

5.3. Advice for firefighters

Firefighting instructions: *The material will not support combustion unless the water has evaporated.*

Protection during firefighting: *Wear self-contained breathing apparatus with full facepiece and full protective clothing. If contact occurs with material or its solutions, immediately flush with water and remove contaminated clothing.*

Other information: *Irritating and highly toxic gases may be generated by thermal decomposition or combustion in a fire. Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NOx).*

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: *No action shall be taken involving any personal risk without suitable training.*

6.1.1. For non-emergency personnel

Protective equipment: *Wear skin, eye and respiratory protection during cleanup. Floors may become slippery if spilled. Avoid breathing vapors.*

Emergency procedures: *Evacuate unnecessary personnel. Do not touch or walk through spilled material. Use personal protective equipment as required.*

6.1.2. For emergency responders

Protective equipment: *Wear skin, eye and respiratory protection during cleanup. Floors may become slippery if spilled.*

Emergency procedures: *Avoid breathing vapors. Ventilate area. Wear recommended personal protective equipment.*

6.2. Environmental precautions

Clean up any spills as soon as possible, using an absorbent material to collect it. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Refer to all applicable national, international and local regulations or provisions.

6.3. Methods and material for containment and cleaning up

For containment: Stop spill if without risk. Move containers from spill area. Clean up any spills as soon as possible, using an absorbent material to collect it.

Methods for cleaning up: Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.

Other information: Collect all waste in suitable and labeled containers and dispose according to local legislation.

6.4. Reference to other sections: No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed: Use only with adequate ventilation.

Precautions for safe handling: This product which contains an aqueous dispersion of a polymer may be difficult to remove without injuring the skin if allowed to dry. Do not eat, drink or smoke when using this product.

Hygiene measures: Eyewash station and safety shower are recommended in work area. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Remove/Take off immediately all contaminated clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep from freezing. Store, if possible, in a cool, well ventilated place away from incompatible materials. Store away from direct sunlight or other heat sources. Store at temperatures above 0 °C. Store in a well-ventilated place. Keep container tightly closed.

Incompatible materials: Strong acids. amines.

Storage temperature: 0 °C - 55 °C

Storage area: Store tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s): No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hydrophilic Coating Formula 760.14A		
No ACGIH, TLV or OSHA PEL is assigned to this mixture.		
N-methyl-2-pyrrolidone (872-50-4)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	Remark (ACGIH)	Can be absorbed through the skin

8.2. Exposure controls

Personal protective equipment: Personal protective equipment should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling the product. Gloves. Safety glasses. Chemical resistant apron. Insufficient ventilation: wear respiratory protection.



Materials for protective clothing: Nitrile rubber.
Hand protection: Wear suitable gloves resistant to chemical penetration.
Eye protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Safety glasses with side-shields. Face shield if splashing is possible.
Skin and body protection: Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.
Respiratory protection: Local exhaust or breathing protection. If needed, a NIOSH certified respirator for organic vapors, mists and fumes is recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance: Water-thin solution
Color: Clear, colorless to yellow
Odor: Characteristic
Odor threshold: No data available
pH: 6.5 -7.5
Relative evaporation rate (butylacetate=1): < 1
Melting point: No data available
Freezing point: No data available
Boiling point: > 100 °C
Flash point: > 100 °C
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapor pressure: No data available
Relative vapor density at 20 °C: No data available
Relative density: No data available
Density: No data available
Solubility: Miscible with water
Log Pow: No data available
Log Kow: No data available

Viscosity, kinematic: No data available
 Viscosity, dynamic: No data available
 Explosive properties: No data available
 Oxidizing properties: No data available
 Explosive limits: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity: No additional information available
10.2. Chemical stability: The product is stable at normal handling and storage conditions
10.3. Possibility of hazardous reactions: None under normal conditions
10.4. Conditions to avoid: Keep from freezing
10.5. Incompatible materials: Strong acids, amines
10.6. Hazardous decomposition products: Carbon oxides (CO and CO2)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Hydrophilic Coating Formula 760.14A	
Acute toxicity:	Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation:	Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation:	Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitization:	Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity:	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity:	Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity:	May damage fertility or the unborn child.
Specific target organ toxicity (single exposure):	Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure):	Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard:	Not classified (Based on available data, the classification criteria are not met)
Other information:	Likely routes of exposure: inhalation, skin and eye.

N-methyl-2-pyrrolidone (872-50-4)	
LD50 oral mouse	5130 mg/kg
LD50 dermal rabbit	8000 mg/kg
LC50 inhalation rat (ppm)	> 5100 ppm/4h
ATE US (oral)	3914.00000000 mg/kg bodyweight
ATE US (dermal)	8000.00000000 mg/kg bodyweight
Skin corrosion/irritation	May cause skin irritation.
Serious eye damage/irritation	May cause eye irritation
Respiratory or skin sensitization	Causes respiratory tract irritation. Material has a very low vapor pressure at room temperature so inhalation exposures are not expected unless material is heated or misted.
Germ cell mutagenicity	Possible effects observed
Carcinogenicity	Not listed as a carcinogen by ACGIH, IARC, NTP or CA Prop 65
Reproductive toxicity	Possible effects observed
Teratogenicity	Proposition 65 maximum allowable dose level for developmental toxicity is 3200 ug/day for the inhalation route and 17000 ug/day for the dermal route
Aspiration hazard	Not Classified
Other information: Chronic Exposure:	Prolonged or repeated exposure may cause dermatitis. Adverse reproductive effects have been reported in animals. Testicular effects were noted in rats after repeated, high dose oral and inhalation exposures (BASF).

SECTION 12: Ecological information

12.1. Toxicity

Hydrophilic Coating Formula 760.14A:

No Data Available for Environmental Toxicity

N-methyl-2-pyrrolidone (872-50-4)	
LC50 fishes 1	> 4000 mg/l Gold orfe - 96 h
EC50 Daphnia	> 4897 mg/l 48 h
EC50 Bacteria	> 9000 mg/l - 48 h

12.2. Persistence and degradability

Hydrophilic Coating Formula 760.14A	
Persistence and degradability	Not available
N-methyl-2-pyrrolidone (872-50-4)	
Persistence and degradability	Not available

12.3. Bioaccumulative potential

Hydrophilic Coating 760.14A	
Log Pow	Not Available
N-methyl-2-pyrrolidone (872-50-4)	
Log Pow	-0.046

12.5. Other adverse effects

Effect on ozone layer:No additional information available
Effect on the global warming:No known ecological damage caused by this product

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste):Collect all waste in suitable and labeled containers and dispose according to local legislation.
Waste disposal recommendations:This material and its container must be disposed of in a safe way, and as per local legislation.
Additional information:Not considered hazardous under US RCRA regulations. Empty containers contain product residue. Observe all hazard precautions. Remove all product residue from container and puncture or otherwise destroy the empty container before disposal. Do not distribute, furnish or reuse empty containers except for storage and shipment of original product.

SECTION 14: Transport information

DOT

Transport document description:No supplementary information available
DOT NA no.:No supplementary information available
DOT Proper Shipping Name:No supplementary information available

Additional information

Other information:No supplementary information available

ADR

Transport document description:No supplementary information available
Class (ADR):No supplementary information available
Danger labels (ADR):No supplementary information available

Transport by sea: Class (IMDG):No supplementary information available

Air transport: Class (IATA):No supplementary information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Hydrophilic Coating Formula 760.14A	
EPA TSCA Regulatory Flag	All components are included or exempt from listing on the TSCA Inventory of Chemical Substances.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313	N-Methyl-2-Pyrrolidone (CAS# 872-50-4): <2.7%

15.2. International regulations

CANADA

All components of this product are listed on the Canada Domestic Substances List (DSL).

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

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

Not classified

15.3. US State regulations

N-methyl-2-pyrrolidone (872-50-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
	Yes			

SECTION 16: Other information

Revision date/Reason for revision:

Data sources: Previous SDS. Supplier SDS.

Training advice: Educate and train employees in the safe use and handling of this product. Follow all label instructions.

Other information: The information contained in this Material Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications. We assigned HMIS ratings to this product based on the hazard(s) of its ingredients.

HMIS III Rating

Health:1* Slight hazard, chronic effect

Flammability: 1 Slight Hazard

Physical: 0 Minimal Hazard

Personal Protection:X

SDS US (GHS HazCom 2012)

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