

LIQUID IONIC FLUID (HEZion)

HioniQ LLC

Version No: **3.20**

Safety Data Sheet according to OSHA HazCom Standard (2012)

Issue Date: **10/1/2025**

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S.GHS.USA.EN

Chemwatch Hazard Alert Code: 3



To insure you have the latest version, please visit our online SDS.

SECTION 1: IDENTIFICATION

Product Identifier	
Product name	HEZion Concentrate Fluid
Synonyms	Ionic Liquid Concentrate
Other means of identification	SKU: 001-HEZION-500-CON

Recommended Use Of The Chemical And Restrictions On Use	
Relevant identified uses	Hydrogenator / Acid

Responsible Party Contact Information	
Registered company name	HioniQ LLC
Address	2319 Timberloch Pl. Suite H, The Woodlands, TX 77380
Telephone	+1 (713) 501-9756
Fax	Not Available
Website	www.hioniq.com
Email	info@hioniq.com

Emergency Phone Numbers	
Association / Organization	CHEMWATCH
Emergency telephone numbers	+1 (877) 715-9305
Other emergency telephone numbers	+1 (855) 237-5573 (toll-free)

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the substance or mixture:

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Health Hazard	
Classification	3 – Danger Corrosive (Serious Eye Damage)

Label Elements	
None	

Hazard Statements	
H318	Hydrogenator

Hazard(s) Not Otherwise Classified (HNOC)	
None Identified	

POTENTIAL HEALTH AFFECTS

Significant Affect(s)

Eye: Category 3 - Danger (Acid - Serious Eye Damage)
Skin: Mild to no irritation in normal industrial use
Ingestion: No hazard expected in normal industrial use.
Inhalation: No hazard expected in normal industrial use.
Chronic: Eye Only

Precautionary statement(s) Protection

Eye protection mandatory

Precautionary statement(s) Storage

NA

Precautionary Statement(s) Disposal

NA

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substances - See section below for composition of Mixtures

Mixtures		
Component	CAS No	Weight %
Hydron	12408-02-5	> 96
Oxygen	7782-44-7	1 – 4
Sulfur	7704-34-9	<0.05
Magnesium	7439-95-4	<0.04
Calcium	7440-44-0	<0.04

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: FIRST AID MEASURES

Description Of First Aid Measures

First Aid

- Eyes: Rinse aggressively, get medical attention
- Skin: Get medical aid if irritation or symptoms occur
- Ingestion: Get medical aid if irritation or symptoms occur
- Inhalation: Get medical aid if a cough or other symptoms appear
- Notes to Physician: Treat symptomatically and supportively

Symptoms And Affects

Potential Health Affects

Potential Health Effects

- Eye: Corneal Damage
- Skin: Mild to no irritation to the skin.
- Ingestion: Mild to no hazard expected in normal industrial use
- Inhalation: now hazard expected in normal industrial use
- Chronic: Eyes Only

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing	
<i>Extinguishing Media</i>	Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Special Hazards Arising From The Substrate Or Mixture	
<i>Fire Incompatibility</i>	None Noted
<i>Flashpoint</i>	NA
<i>Method</i>	NA

Autoignition Temperature Explosion Limits	
<i>Upper</i>	NA
<i>Lower</i>	NA
<i>Sensitivity to Mechanical Impact</i>	NA
<i>Sensitivity to Static Discharge</i>	NA

Specific Hazards Arising From The Chemical	
<i>Specials Hazards</i>	Non-combustible
<i>Hazardous Combustion Products</i>	None under normal use conditions.

Special Protective Equipment And Precautions For Fire-Fighters	
<i>Fire Fighting</i>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<i>Fire/Explosion Hazard (Estimated)</i>	Health = 0 Flammability = 0 Reactivity = 0 Special Hazard = 0

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures - See section 8

Environmental precautions - See section 12

Methods And Material For Containment And Cleaning Up	
<i>Personal Precautions Environmental Precautions</i>	If spilled, take caution, as material may cause surfaces to become slippery. No special environmental precautions required.
<i>Methods for Containment and Clean Up</i>	Soak up with inert absorbent material.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7: HANDLING AND STORAGE

Precautions For Safe Handling	
<i>Safe Handling</i>	No special handling advice is necessary.

Storage	No special storage conditions required. Incompatible Materials. None known.
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SECTION 8: EXPOSURE CONTROLS / PERSONEL PROTECTION

Control parameters - Occupational Exposure Limits (OEL)

INGREDIENT DATA - Not Available

Exposure Controls	
Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure Limits established by the region-specific regulatory bodies.
Engineering Measures	None under normal use
Eye And 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
Skin Protection	No special protective equipment required.
Hands/Feet Protection	No special protective equipment required
Respiratory Protection	No protective equipment is needed under normal use conditions.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties	
Physical state	Liquid
Odor	Odorless
Odor threshold	Not Available
pH (as supplied)	<1
pH RTU/Blended	<2
Melting point / freezing point (°C)	0 °C / 32 °F
Initial boiling point and boiling range (°C)	Not Available
Flash point (°C)	Not Available
Evaporation rate	Not Available
Flammability	Not Applicable
Upper Explosive Limit (%)	Not Available
Lower Explosive Limit (%)	Not Available
Vapor pressure (kPa)	Not Available
Solubility in water	100% in water
Vapor density (Air = 1)	>1
Specific Gravity	1.06-1.10

SECTION 10: STABILITY AND REACTIVITY

STABILITY AND REACTIVITY	
Reactivity	None known, based on information available
Chemical stability	Stable under normal conditions.
Incompatible Materials	Strong acids, strong hydroxides, and metal salts
Hazardous Decomposition Products	None under normal use conditions
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

SECTION 11: TOXICOLOGICAL INFORMATION

Information On Toxicological Effects	
<i>Acute Toxicity</i>	- Occupational Exposure Limit: n/a - Threshold Limit Value: Not established - OSHA Permissible Exposure Limit: Not established - Health Hazard Determination: The components of this mixture have not been found to be carcinogenic - Effects of Overexposure: Contact of the product with eyes may result in mild irritation reaction

Product Information	
<i>Ionic Liquid</i>	Product does not present an acute toxicity hazard based on known information

Component Information	
<i>Component Information</i>	None Available

Delayed And Immediate Effects As Well As Chronic Effects From Short And Long-Term Exposure	
<i>Irritation</i>	No information available
<i>Sensitization</i>	No information available
<i>Carcinogenicity</i>	No information available
<i>Mutagenic Effects</i>	No information available
<i>Reproductive Effects</i>	No information available
<i>Developmental Effects</i>	No information available
<i>Teratogenicity</i>	No information available
<i>STOT – Single Exposure</i>	None known
<i>STOT – Repeated exposure</i>	None known
<i>Aspiration Hazard</i>	No information available
<i>Symptoms / Effects, Both Acute and Delayed</i>	No information available
<i>Endocrine Disruptor Information</i>	No information available
<i>Other Adverse Effects</i>	No information available

SECTION 12: ECOLOGICAL INFORMATION

Natural Advantage	
<i>Ecotoxicity</i>	Contains no substances known to be hazardous to the environment or that are not degradable in wastewater treatment plants.

Persistence and Degradability	
<i>Persistence and Degradability</i>	Miscible with water Persistence is unlikely based on information available.

Bioaccumulative Potential	
<i>Bioaccumulation / Accumulation</i>	No information available.

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

SECTION 13: DISPOSAL CONSIDERATIONS

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

SECTION 14: TRANSPORTATION INFORMATION

Transport	
Land Transport (DOT)	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
TDG	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
IATA	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
IMDG/IMO	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15: REGULATORY INFORMATION

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export - Not applicable

International Inventories

Canada (DSUNDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	SIHL	AISC	IECSC	KECL
Water	7732-18-5	X	-	132-791-2	X	X		X	X	KE-35400

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations

SARA 313 Section 313 of Title III of the Superfund Amendments and Reauthorization of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311 /312 Hazard Categories - See section 2 for more information

CWA (Clean Water Act) - This product does not contain any substance regulated as pollutants pursuant to the Clean

Water Act - (40 CFR 122.21 and 40 CFR 122.42)

Clean Air Act - No information available

OSHA - Occupational Safety and Health Administration
Not applicable

CERCLA - This material, as supplied, does not contain any substance regulated as a hazardous substance under the Comprehensive Environment Response

Compensational and Liability Act - (CERCLA)(40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA)(40 CFR 355).

California Proposition 65 - This product does not contain any Proposition 65 chemicals.

International Inventories

TSCA All chemical substances in this material are included on or exempted from listing on the TSCA inventory of Chemical substances.

DSL / NDSL - All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).

EINECS / ELINCS - All chemical substances in this product comply with the listing on the European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

SECTION 16: OTHER INFORMATION

Revision And Issuances			
Description	Date	Revision No.	Description
Prepared By			Integrity Industries
SDS Summary Version	01/03/2024	1	Initial Draft
Print Date	02/04/2024		Major Release
PS Branded Draft	11/01/2024		Reformatted
Revision (Placeholder)			

Other information:

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and Abbreviations	
PC —TWA	Permissible Concentration-Time Weighted Average
PC —STEL	Permissible Concentration-Short Term Exposure Limit
IARC	International Agency for Research on Cancer
ACGIH	American Conference of Governmental Industrial Hygienists
STEL	Short Term Exposure Limit
TEEL	Temporary Emergency Exposure Limit
IDLH	Immediately Dangerous to Life or Health Concentrations ES: Exposure Standard
ES	Exposure Standard
OSF	Odor Safety Factor
NOAEL	No Observed Adverse Effect Level
LOAEL	Lowest Observed Adverse Effect Level
TLV	Threshold Limit Value
LOD	Limit Of Detection OTV
OTV	Odor Threshold Value
BCF	Bio-Concentration Factors BEI
BEI	Biological Exposure Index
AIIC	Australian Inventory of Industrial Chemicals DSL: Domestic Substances List
DSL	Domestic Substances List
NDSL	Non-Domestic Substances List
IECSC	Inventory of Existing Chemical Substance in China
EINECS	European Inventory of Existing Commercial chemical Substances
ELINCS	European List of Notified Chemical Substances
NLP	No-Longer Polymers
ENCS	Existing and New Chemical Substances Inventory

KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances
TSCA	Toxic Substances Control Act
TCSI	Taiwan Chemical Substance Inventory
INSQ	Inventario Nacional de Sustancias Químicas
NCI	National Chemical Inventory
FBEPH	Russian Register of Potentially Hazardous Chemical and Biological Substances
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END OF SAFETY DATA SHEET – HEZion (IONIC HYDROGEN)