SAFETY DATA SHEET

HYBRID AG

ToNik

Hybrid-Ag Pty Ltd

Catalogue number: **N/A**
Version No: **0.1**
Issue date: 19/**03/2021**
Safety Data Sheet according to WHS and ADG requirements

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	ToNik
Synonyms	N/A
Other means of identification	Urea Liquid Fertiliser

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

Relevant identified uses	Fertiliser, soil stimulation

Details of the manufacturer/importer

Registered company name	Hybrid-Ag Pty Ltd
Address	52 Buckler Road, Wangaratta, VIC 3677
Telephone	(03) 5722 7555
Mobile	
Website	www.hybridag.com.au
Email	admin@hybridag.com.au

Emergency telephone number

Association / Organisation	Poisons Information Centre
Emergency telephone numbers	13 1126
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

NON-HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

Poisons Schedule	Not Applicable
GHS Classification [1]	Not Applicable

Label elements

GHS label elements	Not applicable
SIGNAL WORD	**NOT APPLICABLE**

Hazard statement(s)

Not Applicable

Precautionary statement(s) Prevention

P102	Keep out of reach of children

Precautionary statement(s) Response

If in eye, flush gently with running water for 15 minutes. If inhaled, remove from exposure area. If irritation persists, seek medical attention. If skin or hair contact occurs, remove contaminated clothing and flush affected areas with running water. If irritation persists, seek medical attention.

Precautionary statement(s) Storage

Use only in well ventilated areas. Store away from other chemicals. Keep containers closed when not in use.

Precautionary statement(s) Disposal

P501	Dispose of contents and containers in accordance with local regulations

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

All ingredients are non-hazardous

Mixtures

CAS No	% (weight)	Name
7732-18-5	63	Filtered Water
57-13-6	50	Urea
479-66-3	0.5	Fulvic Acid

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin contact occurs with concentrate: Flush skin and hair with running water. Seek medical advice in event of irritation.
Inhalation	Not applicable
Ingestion	Do NOT induce vomiting. No treatment necessary unless large quantities are swallowed. If symptoms persist, obtain medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

	There is no restriction on the type of extinguisher which may be used. Though the material is non-combustive, evaporation of water from the mixture, cause by the heat of nearby fire, may produce floating layers of combustible substances. In such an event consider; • Foam • Dry chemical powder • Carbon dioxide

Special hazards arising from the substrate or mixture

Fire incompatibility	When heated, releases ammonia. When heated to decomposition, releases toxic fumes of nitrogen oxides, ammonia, cyanuric acid.

Advice for firefighters

Fire Fighting	Alert Fire Brigade and tell them location and nature of hazard. Fire fighters to wear self-contained breathing apparatus (SCBA) and suitable protective clothing. Use firefighting procedures suitable for the surrounding environment. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected locations. If safe to do so, remove containers from path of fire.
Fire/Explosion Hazard	When heated to decomposition, releases toxic fumes of nitrogen oxides, ammonia, cyanuric acid.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	Sweep up & dispose of.
Major Spills	Sweep into a centralised location and place into labelled drums and dispose of according to local government regulations. Immediately notify emergency services (Police or Fire Brigade) if the spill is too large for you to safely and effectively handle. Prevent by any means available any spillage entering sewers, water courses, basements or confined areas.

	Personal protective equipment advice is contained in Section 8 of this SDS

SECTION 7 HANDLING ANDSTORAGE

Precautions for safe handling

Safe handling	Wear suitable protective clothing depending on the circumstances as per section 8. Do not mix with other chemicals unless expressly recommended by the manufacturer. Always store in original container.
Other information	

Conditions for safe storage, including any incompatibilities

Suitable container	1L drum, 5L drum, 20L drum, 200L drums, 1000L IBC's, bulk storage containers or tanks
Storage incompatibilities	Avoid: • Storage/mixing with oxidizing agents. • Carbon steels, zinc coated carbon steels, mild iron. • Non-ferrous metals & alloys: copper, copper alloys, zinc, lead. • Solders containing lead, silver zinc, copper. • Aluminium, aluminium alloys.

	• Magnesium, magnesium alloys. • Plastics or metals coated with nickel.

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

Exposure controls

Appropriate engineering controls	Ensure adequate ventilation
Personal protection	 Wear overalls or PVC apron
Eye and face protection	Wear gloves, dust mask, safety glasses with side shield, long sleeves, long pants & steel cap boots
Hands/feet protection	Wear gloves, dust mask, long sleeves, long pants & steel cap boots

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Dark brown to black liquid

Physical state	Liquid	**Specific Gravity (Water = 1)**	1.137
Odour	Low to slight ammoniacal odour	**Partition coefficient n-octanol / water**	Not Available
Odour threshold	Not Available	**Auto-ignition temperature (°C)**	Not Applicable
pH (as supplied)	6-9	**Decomposition temperature**	100°C
Melting point / freezing point (°C)	Not Applicable	**Viscosity (cSt)**	Not Available
Initial boiling point and boiling range (°C)	100	**Molecular weight (g/mol)**	Not Available
Flash point (°C)	Not Applicable	**Taste**	Not Available
Evaporation rate	Not Available	**Explosive properties**	Not Available
Flammability	Not Applicable	**Oxidising properties**	Not Available
Upper Explosive Limit (%)	Not Applicable	**Surface Tension (dyn/cm or mN/m)**	Not Available
Lower Explosive Limit(%)	Not Applicable	**Volatile Component (%vol)**	Not Available
Vapour pressure (kPa)	Not Available	**Gas group**	Not Available
Solubility in water (g/L)	Fully Miscible	**pH as a solution**	6-9
Vapour density (Air = 1)	Not Available	**VOC g/L**	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 7

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Mists and spray from the product may cause irritation to the nose, throat and respiratory system with effects including; coughing and discomfort.
Ingestion	May cause irritation to the mouth, throat and stomach. Urea may cause irritation to the digestive tract, nausea, vomiting, diarrhea, salt depletion, headache, confusion.
Skin Contact	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Eye	May cause irritation, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
Chronic	Extended period of contact may cause irritation in sensitive individuals.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
urea	LC50	96	Fish	5mg/L	4
urea	EC50	48	Crustacea	3910mg/L	4
urea	EC50	96	Algae or other aquatic plants	42184.758mg/L	3
urea	BCF	24	Algae or other aquatic plants	0.05mg/L	4
urea	EC50	384	Crustacea	894.861mg/L	3
urea	NOEC	96	Crustacea	1000mg/L	4
Legend:	*Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data*				

Ingredient Toxicity:

Urea Oral (rat) LD50: 8471 mg/kg [2]
Water Oral (rat) LD50: >90000 mg/kg [2]

2. Value obtained from manufacturer's SDS*

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Urea	Low	Low
Water	Low	Low

Bio accumulative potential

Ingredient	Bioaccumulation
Urea	LOW (BCF = 10)
Water	LOW (LogKOW = -1.38)

Mobility in soil

Ingredient	Mobility
Urea	LOW (KOC = 4.191)
Water	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / packaging disposal	Recycle wherever possible. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after admixture with suitable combustible material). Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	No
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

Non-Hazardous Chemical. Non-Dangerous Goods.
According to the WHS Regulations and the ADG Code
UREA(57-13-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS
Australia Inventory of Chemical Substances (AICS)
WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS
Australia Inventory of Chemical Substances (AICS)

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources.
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 Government Industrial Hygienists
STEL:	Short Term Exposure Limit
TEEL:	Temporary Emergency Exposure Limit
IDLH:	Immediate Danger to Life or Health Concentrations
OSF:	Odour Safety Factor
NOAEL:	No Observed Effects Level
TLV:	Threshold Limit Value
LOD:	Limit Of Detection
OTV:	Odour Threshold Value
BCF:	Bio Concentration Factors
BEI:	Biological Exposure Index

End of SDS