

## **Ethion Formulation**

dentification			
t identifier	:	Ethion Formulation	on
mended use of the ch	emi	ical and restriction	ons on use
mended use	:	Pharmaceutical	
ions on use	:	Not applicable	
cturer or supplier's d	etai	ls	
ny	:	MSD	
5	:	50 Tuas West Dr Singapore - Sing	-
one	:	+1-908-740-4000	)
ency telephone number	:	65 6697 2111 (24	4/7/365)
address	:	EHSDATASTEW	/ARD@msd.com
	mended use ions on use <b>acturer or supplier's d</b> ny s	identifier       :         mended use of the chem         mended use       :         ions on	et identifier       : Ethion Formulation         mended use of the chemical and restriction         mended use       : Pharmaceutical         ions on use       : Not applicable         acturer or supplier's details         ny       : MSD         s       : 50 Tuas West Dr         one       : +1-908-740-4000         ency telephone number       : 65 6697 2111 (24)

## Section 2: Hazard identification

#### Classification of the substance or mixture

Acute toxicity (Oral)	:	Category 2
Acute toxicity (Inhalation)	:	Category 3
Acute toxicity (Dermal)	:	Category 2
Serious eye damage/eye irri- tation	:	Category 1
Specific target organ toxicity - single exposure	:	Category 1 (Central nervous system)
Specific target organ toxicity - repeated exposure	:	Category 1 (Central nervous system)
Short-term (acute) aquatic hazard	:	Category 1
Long-term (chronic) aquatic hazard	:	Category 1

#### GHS Label elements, including precautionary statements



# **Ethion Formulation**

ersion .0	Revision Date: 06.04.2024	SDS Number: 10597659-00008	Date of last issue: 30.09.2023 Date of first issue: 28.01.2022
	rd pictograms I word	: Danger	
Hazai	rd statements	H318 Causes s H331 Toxic if in H370 Causes o H372 Causes o through prolong	atal if swallowed or in contact with skin. erious eye damage. haled. lamage to organs (Central nervous system). lamage to organs (Central nervous system) ged or repeated exposure. c to aquatic life with long lasting effects.
Preca	utionary statements	P262 Do not ge P264 Wash ski P270 Do not ea P271 Use only P273 Avoid rele P280 Wear pro	eathe mist or vapours. et in eyes, on skin, or on clothing. n thoroughly after handling. at, drink or smoke when using this product. outdoors or in a well-ventilated area. ease to the environment. tective gloves/ protective clothing/ eye protec- ction/ hearing protection.
		POISON CENT P302 + P352 + Immediately ca P304 + P340 + and keep comfo doctor. P305 + P351 + water for severa and easy to do. CENTER/ doctor	exposed or concerned: Call a POISON
		Storage: P405 Store loci	-
		Disposal:	of contents/ container to an approved waste

None known.

# Section 3: Composition/information on ingredients



## **Ethion Formulation**

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.0	06.04.2024	10597659-00008	Date of first issue: 28.01.2022

#### Substance / Mixture : Mixture

Components		
Chemical name	CAS-No.	Concentration (% w/w)
Ethion	563-12-2	>= 70 -< 90
Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	>= 3 -< 10

#### Section 4: First-aid measures

Description of necessary first	-aid measures
General advice :	In the case of accident or if you feel unwell, seek medical ad- vice immediately. When symptoms persist or in all cases of doubt seek medical advice.
If inhaled :	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
In case of skin contact :	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Destroy contaminated shoes.
In case of eye contact :	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention immediately.
If swallowed :	If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Call a physician or poison control centre immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.
Most important symptoms and	d effects, both acute and delayed
Risks :	Fatal if swallowed or in contact with skin. Causes serious eye damage. Toxic if inhaled. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.
Protection of first-aiders :	First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
Indication of any immediate m	edical attention and special treatment needed
Treatment :	Treat symptomatically and supportively.

Section 5: Fire-fighting measures

#### Extinguishing media



# **Ethion Formulation**

Version 3.0	Revision Date: 06.04.2024	SDS Number: 10597659-00008	Date of last issue: 30.09.2023 Date of first issue: 28.01.2022
Suit	able extinguishing media	: Water spray Alcohol-resista Carbon dioxid Dry chemical	
Uns mec	uitable extinguishing lia	: None known.	
Spe	cial hazards arising from	n the substance o	r mixture
Spe fight	cific hazards during fire- ing	: Exposure to co	ombustion products may be a hazard to health.
	ardous combustion prod-	: Carbon oxides Sulphur oxides Oxides of phos	3
Spe	cial protective actions for	or fire-fighters	
for f	cial protective equipment irefighters cific extinguishing meth-	Use personal : Use extinguish cumstances a Use water spra	fire, wear self-contained breathing apparatus. protective equipment. ning measures that are appropriate to local cir- nd the surrounding environment. ay to cool unopened containers. maged containers from fire area if it is safe to do
Persona	6: Accidental release me I precautions, protective sonal precautions	e equipment and e : Evacuate pers Only trained p Follow safe ha	mergency procedures sonnel to safe areas. ersonnel should re-enter the area. andling advice (see section 7) and personal pro- ment recommendations (see section 8).

## **Environmental precautions**

Environmental precautions	:	Avoid release to the environment.
		Prevent further leakage or spillage if safe to do so.
		Prevent spreading over a wide area (e.g. by containment or oil
		barriers).
		Retain and dispose of contaminated wash water.
		Local authorities should be advised if significant spillages cannot be contained.

#### Methods and materials for containment and cleaning up

Methods for cleaning up	<ul> <li>Soak up with inert absorbent material.</li> <li>For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.</li> <li>Clean up remaining materials from spill with suitable absorbent.</li> <li>Local or national regulations may apply to releases and disposal of this material, as well as those materials and items</li> </ul>	
	posal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter- mine which regulations are applicable.	



# **Ethion Formulation**

Version 3.0	Revision Date: 06.04.2024	SDS Number:Date of last issue: 30.09.202310597659-00008Date of first issue: 28.01.2022	
		Sections 13 and 15 of this SDS provide information regard certain local or national requirements.	ling
Section 7	: Handling and stora		
Prec	autions for safe hand	Ig	
Tech	nical measures	: See Engineering measures under EXPOSURE	
Loca	I/Total ventilation	<ul> <li>CONTROLS/PERSONAL PROTECTION section.</li> <li>If sufficient ventilation is unavailable, use with local exhaus ventilation.</li> </ul>	st
	ce on safe handling	<ul> <li>Do not get on skin or clothing. Do not breathe mist or vapours. Do not swallow. Do not get in eyes. Wash skin thoroughly after handling. Handle in accordance with good industrial hygiene and sat practice, based on the results of the workplace exposure a sessment Keep container tightly closed. Do not eat, drink or smoke when using this product. Take care to prevent spills, waste and minimize release to environment.</li> </ul>	as-
Hygie	ene measures	<ul> <li>If exposure to chemical is likely during typical use, provide flushing systems and safety showers close to the working place.</li> <li>When using do not eat, drink or smoke.</li> <li>Wash contaminated clothing before re-use.</li> <li>The effective operation of a facility should include review of engineering controls, proper personal protective equipment appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the use of administrative controls.</li> </ul>	of nt,
Cond	ditions for safe storag	including any incompatibilities	
Conc	litions for safe storage	<ul> <li>Keep in properly labelled containers.</li> <li>Store locked up.</li> <li>Keep tightly closed.</li> <li>Keep in a cool, well-ventilated place.</li> <li>Store in accordance with the particular national regulations</li> </ul>	S.
Mate	rials to avoid	: Do not store with the following product types: Explosives	

## Section 8: Exposure controls/personal protection

#### **Control parameters**

#### **Occupational Exposure Limits**

Components	CAS-No.	Value type	Control parame-	Basis



# **Ethion Formulation**

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.0	06.04.2024	10597659-00008	Date of first issue: 28.01.2022

		(Form of	ters / Permissible	
		exposure)	concentration	
Ethion	563-12-2	PEL (long	0.4 mg/m3	SG OEL
		term)	-	
		TWA	4 µg/m3 (OEB 4)	Internal
	Further informa	ation: Skin		
		Wipe limit	40 µg/100 cm2	Internal
		TWA (Inhal-	0.05 mg/m3	ACGIH
		able fraction	-	
		and vapor)		

Appropriate engineering control measures	:	All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment. Essentially no open handling permitted. Use closed processing systems or containment technologies. If handled in a laboratory, use a properly designed biosafety cabinet, fume hood, or other containment device if the poten- tial exists for aerosolization. If this potential does not exist, handle over lined trays or benchtops.
Individual protection measure	es,	, such as personal protective equipment (PPE)
Eye/face protection	:	Wear safety glasses with side shields or goggles. If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles. Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.
Skin protection	:	Work uniform or laboratory coat. Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, dis- posable suits) to avoid exposed skin surfaces. Use appropriate degowning techniques to remove potentially contaminated clothing.
Respiratory protection	:	If adequate local exhaust ventilation is not available or expo- sure assessment demonstrates exposures outside the rec- ommended guidelines, use respiratory protection.
Filter type Hand protection	:	Organic vapour type
Material	:	Chemical-resistant gloves
Remarks	:	Consider double gloving.
den o Dissets d'and strategiest		

#### Section 9: Physical and chemical properties

Appearance	:	liquid
Colour	:	No data available
Odour	:	No data available



# **Ethion Formulation**

Vers 3.0	sion	Revision Date: 06.04.2024		S Number: 97659-00008	Date of last issue: 30.09.2023 Date of first issue: 28.01.2022
	Odour <sup>-</sup>	Threshold		No data available	
	рН			No data available	
	•	noint/francing noint	•		
	-	point/freezing point	:	No data available	
	Initial b range	oiling point and boiling	:	No data available	
	Flash p	oint	:	No data available	)
	Evapor	ation rate	:	No data available	)
	Flamma	ability (solid, gas)	:	Not applicable	
	Flamma	ability (liquids)	:	Not applicable	
		explosion limit / Upper bility limit	:	No data available	)
		explosion limit / Lower bility limit	:	No data available	
	Vapour	pressure	:	No data available	)
	Relative	e vapour density	:	No data available	)
	Relative	e density	:	No data available	9
	Density	,	:	No data available	9
	Solubili Wat	ty(ies) er solubility	:	No data available	9
		n coefficient: n-	:	Not applicable	
	octanol Auto-ig	/water nition temperature	:	No data available	)
	Decom	position temperature	:	No data available	)
	Viscosi Visc	ty cosity, kinematic	:	No data available	)
	Explosi	ve properties	:	Not explosive	
	Oxidizir	ng properties	:	The substance of	r mixture is not classified as oxidizing.
	Molecu	lar weight	:	No data available	)
	Particle Particle	e characteristics e size	:	Not applicable	



# **Ethion Formulation**

Version	Revision Date: 06.04.2024	SDS Number:	Date of last issue: 30.09.2023
3.0		10597659-00008	Date of first issue: 28.01.2022

#### Section 10: Stability and reactivity

	: : :	Not classified as a reactivity hazard. Stable under normal conditions. Can react with strong oxidizing agents.
tions Conditions to avoid Incompatible materials Hazardous decomposition products		None known. Oxidizing agents No hazardous decomposition products are known.

## Section 11: Toxicological information

Information on likely routes of exposure	:	Inhalation Skin contact Ingestion Eye contact
Acute toxicity		
Fatal if swallowed or in contact Toxic if inhaled.	wi	th skin.
Product:		
Acute oral toxicity	:	Acute toxicity estimate: 14.88 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: 0.515 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: 70.95 mg/kg Method: Calculation method
Components:		
Ethion:		
Acute oral toxicity	:	LD50 (Rat): 13 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): 0.450 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 (Rat): 62 mg/kg
Alcohols, C11-14-iso-, C13-ri	ch.	ethoxylated:
Acute oral toxicity	:	LD50 (Rat): > 2,000 - 3,340 mg/kg
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg



Ethion	Formulation		•	
Version 3.0	Revision Date: 06.04.2024	SDS Number: 10597659-00008	Date of last issue: 30.09.2023 Date of first issue: 28.01.2022	
Ш				
	corrosion/irritation			
	lassified based on ava	ailable information.		
Com	ponents:			
Ethio				
Spec Resu		: Rabbit : Mild skin irritation	on	
Caria		i wita eti e u		
	ous eye damage/eye es serious eye damag			
<u>Com</u>	ponents:			
Ethio	on:			
Resu	lt	: No eye irritatior	1	
Alcol	hols, C11-14-iso-, C1	3-rich, ethoxylated:		
Resu	lt	: Irreversible effe	ects on the eye	
Resp	piratory or skin sensi	tisation		
Skin	sensitisation			
	lassified based on ava			
-	<b>biratory sensitisation</b> classified based on ava			
	ponents:			
Ethio				
	sure routes	: Skin contact		
Spec Resu		: Guinea pig : negative		
Germ	n cell mutagenicity			
	lassified based on ava	ailable information.		
Com	ponents:			
Ethio				
Geno	otoxicity in vitro	: Test Type: Bac Result: negative	terial reverse mutation assay (AMES e	5)
			A damage and repair, unscheduled I nalian cells (in vitro) e	DNA syn-

Test Type: In vitro sister chromatid exchange assay in mam-malian cells



# **Ethion Formulation**

	vision Date: 04.2024		S Number: 597659-00008	Date of last issue: 30.09.2023 Date of first issue: 28.01.2022
			Result: negative	
			Tost Typo: in vitr	o micronucleus test
			Result: positive	
Genotoxicit	v in vivo		Test Type: Chror	nosomal aberration
Conotonion	,	•	Species: Rat	
			Result: negative	
				o micronucleus test
			Species: Mouse Result: positive	
			•	· · · · · · ·
Germ cell m Assessmen	nutagenicity - t	:	Weight of eviden cell mutagen.	ce does not support classification as a ge
			· · · · · · · · · · · · · · · · · · ·	
Carcinoge	-			
Not classifie	ed based on avail	able	information.	
<u>Componen</u>	<u>ts:</u>			
Ethion:				
Species	Douto	:	Rat	
Application Exposure til		:	Ingestion 18 Months	
Result		:	negative	
Species		:	Mouse	
Application		:	Ingestion	
Exposure ti Result	ne	:	24 Months negative	
Reproduct	-		· • •	
	ed based on avail	able	information.	
<u>Componen</u>	<u>ts:</u>			
Ethion:				
Effects on f	ertility	:	Test Type: Three Species: Rat	-generation reproduction toxicity study
			Application Route	e: Ingestion
			Result: negative	
			Test Type: Embr	yo-foetal development
Effects on f	oetal develop-	:	1000 i jp0. Emoi	
Effects on f	petal develop-	:	Species: Rat	
	betal develop-	:		e: Ingestion

Causes damage to organs (Central nervous system).



# **Ethion Formulation**

Version 3.0	Revision Date: 06.04.2024		9S Number: 597659-00008	Date of last issue: 30.09.2023 Date of first issue: 28.01.2022
Comp	oonents:			
Ethio				
Asses		:	Causes damage t	to organs.
	- repeated exposure es damage to organs (Co	entr	al nervous system)	) through prolonged or repeated exposure
Comp	oonents:			
Ethio	n:			
	t Organs sment	:	Central nervous s Causes damage t exposure.	system to organs through prolonged or repeated
Repe	ated dose toxicity			
Comp	oonents:			
Ethio	n:			
Speci		:	Dog	
	cation Route Sure time	:	0.05 mg/kg Ingestion 90 Days	
Aspir	ation toxicity			
Not cl	assified based on availa	ble	information.	
Expe	rience with human exp	osı	ire	
Comp	oonents:			
Ethio	n:			
Ingest	tion	:	Symptoms: Blurre	ed vision, Dizziness, Headache
Section 12	2: Ecological information	on		
Тохіс	ity			
<u>Comp</u>	oonents:			
Ethio	n:			
Toxici	ty to fish	:	LC50 (Oncorhync Exposure time: 96	chus mykiss (rainbow trout)): 0.18 mg/l 5 h
Toxici	ty to daphnia and other ic invertebrates	:	EC50: 0.056 - 7.7 Exposure time: 48	
			•	
aquat		:	10,000	



# **Ethion Formulation**

/ersion 3.0	Revision Date: 06.04.2024	-	9S Number: 597659-00008	Date of last issue: 30.09.2023 Date of first issue: 28.01.2022
toxicity	()			
Alcoh	ols, C11-14-iso-, C13-r	ich	, ethoxylated:	
Toxicit	y to fish	:	LC50 : > 1 - 10 mg Exposure time: 96	
	y to daphnia and other c invertebrates	:	EC50 (Daphnia sr Exposure time: 48	o. (water flea)): > 1 - 10 mg/l 3 h
Toxicit plants	y to algae/aquatic	:	EC50: > 1 - 10 mg Exposure time: 72	
Toxicit icity)	y to fish (Chronic tox-	:	mg/l Exposure time: 30	es promelas (fathead minnow)): > 0.1 - 1 ) d on data from similar materials
	c invertebrates (Chron-	:	Exposure time: 21	nagna (Water flea)): > 0.1 - 1 mg/l l d on data from similar materials
Persis	tence and degradabili	ty		
<u>Comp</u>	onents:			
Ethion	:			
Biodeg	radability	:	Result: not rapidly	v degradable
Alcoh	ols, C11-14-iso-, C13-r	ich	ethoxylated:	
	jradability	:	Result: Readily bi	odegradable.
Bioaco	cumulative potential			
Comp	onents:			
Ethion Partitic octano	on coefficient: n-	:	log Pow: 5.07	
Mobili	<b>ty in soil</b> a available			

#### Other adverse effects

No data available

#### Section 13: Disposal considerations

Disposal methods		
Waste from residues	:	Do not dispose of waste into sewer.
		Dispose of in accordance with local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste han-



## **Ethion Formulation**

Revision Date: 06.04.2024			Date of last issue: 30.09.2023 Date of first issue: 28.01.2022
			vcling or disposal.
4: Transport informatio		herwise s	specified: Dispose of as unused product.
national Regulations			
<b>TDG</b> umber roper shipping name sport hazard class(es) ng group s onmental hazards	: TOXIC	LIQUID,	ORGANIC, N.O.S.
<b>-DGR</b> O No. roper shipping name	: Toxic li	quid, orga	anic, n.o.s.
port hazard class(es) ng group s ng instruction (cargo ft) ng instruction (passen- ircraft)	: 6.1 : II : Toxic : 662 : 654	,	
<b>i-Code</b> umber er shipping name	: TOXIC	LIQUID,	ORGANIC, N.O.S.
sport hazard class(es) ng group s Code e pollutant	: 6.1 : II : 6.1		
	4: Transport information ational Regulations TDG umber roper shipping name port hazard class(es) ng group s onmental hazards -DGR 0 No. roper shipping name sport hazard class(es) ng group s ng instruction (cargo ft) ng instruction (passen- rcraft) 6-Code umber er shipping name sport hazard class(es) ng group s code e pollutant	06.04.2024       10597659-4         dling sittlef not of         4: Transport information         national Regulations         rDG         umber       :         upport hazard class(es)       :         opport hazard class(es)       :         ng group       :         s       :         ng instruction (cargo       :         ing instruction (passen-       :         oport hazard class(es)       :         off       :         oport hazard class(es)       :         oport hazard class(e	06.04.2024       10597659-00008         dling site for recylif not otherwise s         4: Transport information         national Regulations         rDG         umber       :         roper shipping name       :         ing group       :         s       :         s       :         onmental hazards       :         ing group       :         oper shipping name       :         to coper shipping name       :         s       :         s       :         onnental hazards       :         oper shipping name       :         to coper shipping name       :         to coper shipping name       :         oper shipping name       :         to coper shipping name       :         to coper shipping name       :         s       :         s       :         s       :         if not otherwise s         if not otherwise s         if not otherwise s         if not otherwise s         ing group       :         ing instruction (cargo         if oper shipping name       :

Not applicable for product as supplied.

#### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### Section 15: Regulatory information

#### Safety, health and environmental regulations specific for the product in question

Workplace Safety and Health Act and Workplace Safety and Health (General Provisions) Regulations: This product is subjected to the SDS, labelling, PEL and other requirements in the Act/Regulations.



## **Ethion Formulation**

Version 3.0	Revision Date: 06.04.2024	SDS Number:Date of last issue: 30.09.202310597659-00008Date of first issue: 28.01.2022					
Envir	Environmental Protection and Management Act and Environmental Protection and Management (Hazard- ous Substances) Regulations : Phosphorus compounds used as pesticides (insecticides, acaricides, etc.)						
	Fire Safety (Petroleum and Flammable Materials) : Not applicable Regulations						
The components of this product are reported in the following inventories:							
AICS		: not determined					
DSL		: not determined					
IECS	С	: not determined					
Section 1	6: Other information						
Revis	sion Date	: 06.04.2024					
Furth	ner information						
	ces of key data used to bile the Safety Data t	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/					
Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.							
Date	format	dd.mm.yyyy					
Full t	ext of other abbreviati	ns					
ACG SG C		USA. ACGIH Threshold Limit Values (TLV) Singapore. Workplace Safety and Health (General Provisions) Regulations - First Schedule Permissible Exposure Limits of Toxic Substances.					
	IH / TWA DEL / PEL (long term)	8-hour, time-weighted average Permissible Exposure Level (PEL) Long Term					
		f Industrial Chemicals; ANTT - National Agency for Trans					

AllC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Con-



## **Ethion Formulation**

Version	Revision Date:	SDS Number:	Date of last issue: 30.09.2023
3.0	06.04.2024	10597659-00008	Date of first issue: 28.01.2022

centration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified: Nch - Chilean Norm: NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

SG / EN