Safety Data Sheet

30 Mix pesticides and herbicides in acetonitrile

Version：V2.0.0.1
Report No.：BWN5891-2016-MSDS-EP
Creation Date：2026/01/07
Revision Date：-

***Prepared in accordance with EU REACH Regulation (REACH 1907/2006 with amendment 2020/878)**

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

1.1 Product identifier

Product Name	30 Mix pesticides and herbicides in acetonitrile
Cat No.	BWN5891-2016
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable
REACH Registration Number	-
UFI	No information available

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

Relevant identified uses	Please consult manufacturer.
Uses advised against	Please consult manufacturer.

1.3 Details of the supplier of the Safety Data Sheet

Name of the company	Weiyel Inc
Address of the company	Hedian Light Industrial Park, Chengguan Town, Shangcheng County, Xinyang City, Henan Province, China
Post code	465350
Telephone number	010-58103678
Fax number	010-84840368
E-mail address	info@weiyel.com

1.4 Emergency telephone number

Emergency telephone number	010-58103678
Opening hours	24h

2 Hazards identification

2.1 CLP classification according to Regulation (EC) No. 1272/2008 with amendment 2023/707

Flammable liquids	Category 2
Acute Toxicity - Oral	Category 4
Acute Toxicity - Dermal	Category 4
Serious eye damage/irritation	Category 2
Acute Toxicity - Inhalation	Category 4

Hazardous to the aquatic environment - long-term (chronic) hazard	Category 3

2.2 Label elements

Hazard pictograms	
Signal word	**Danger**

Hazard statements

H225	Highly flammable liquid and vapour
H302	Harmful if swallowed
H312	Harmful in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
H412	Harmful to aquatic life with long lasting effects

Precautionary statements

- Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing gas/mist/vapour/spray.
P264	Wash hands and other parts of the body (if related) thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

- Response

P312	Call a POISON CENTRE/ doctor/… if you feel unwell.
P321	Specific treatment (see related instructions on the label).
P330	Rinse mouth.
P301+P312	IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	Small fire: dry chemical, CO_2 or alcohol-resistant foam; Large fire: alcohol-resistant foam; Fire involving tanks, rail tank cars or highway tanks: Fight fire from maximum distance or use unmanned master stream devices or monitor

	nozzles. Cool containers with flooding quantities of water until well after fire is out.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

◆ Storage

P403+P235	Store in a well-ventilated place. Keep cool.

◆ Disposal

P501	Dispose of contents/container in accordance with local/regional/national/ international regulations.

2.3 Other hazards

◆ Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
Acetonitrile	Not PBT/vPvB
Methamidophos	Insufficient information, temporarily unable to evaluate
Fenamiphos	Insufficient information, temporarily unable to evaluate
FenaMiphos sulfone	Insufficient information, temporarily unable to evaluate
FenaMiphos sulfoxide	Insufficient information, temporarily unable to evaluate
Fonofos	Insufficient information, temporarily unable to evaluate
Sulfotep	Insufficient information, temporarily unable to evaluate
Carbofuran	Insufficient information, temporarily unable to evaluate
CARBOFURAN-3-HYDROXY	Insufficient information, temporarily unable to evaluate
Ethametsulfuron methyl ester	Insufficient information, temporarily unable to evaluate
Metsulfuron methyl	Insufficient information, temporarily unable to evaluate
Chlorsulfuron	Insufficient information, temporarily unable to evaluate
Cadusafos	Insufficient information, temporarily unable to evaluate
Isazofos	Insufficient information, temporarily unable to evaluate
Phorate	Insufficient information, temporarily unable to evaluate
O,O-diethyl-s-(ethyl sulfoxidomethyl) dithiophosphate emulsion	Insufficient information, temporarily unable to evaluate
O,O-diethyl {[(ethanesulfonyl)methyl]sulfanyl}phosphonothioate	Insufficient information, temporarily unable to evaluate
Coumaphos	Insufficient information, temporarily unable to evaluate
Phosfolan	Insufficient information, temporarily unable to evaluate
Phosphamidon	Insufficient information, temporarily unable to evaluate
Aldicarb	Insufficient information, temporarily unable to evaluate
Aldoxycarb	Insufficient information, temporarily unable to evaluate

ALDICARB-SULFOXIDE	Insufficient information, temporarily unable to evaluate
Monocrotophos	Insufficient information, temporarily unable to evaluate
Demeton	Insufficient information, temporarily unable to evaluate
Ethoprophos	Insufficient information, temporarily unable to evaluate
Terbufos Sulfone	Insufficient information, temporarily unable to evaluate
TERBUFOS-SULFOXIDE	Insufficient information, temporarily unable to evaluate
Isocarbophos	Insufficient information, temporarily unable to evaluate
Chlordimeform	Insufficient information, temporarily unable to evaluate
Isofenphos-methyl	Insufficient information, temporarily unable to evaluate

◆ Results of endocrine disrupting properties assessment

Component	Results of endocrine disrupting properties assessment [according to (EU) No 2017/2100 or (EU) No 2018/605]
Acetonitrile	Insufficient information, temporarily unable to evaluate
Methamidophos	Insufficient information, temporarily unable to evaluate
Fenamiphos	Insufficient information, temporarily unable to evaluate
FenaMiphos sulfone	Insufficient information, temporarily unable to evaluate
FenaMiphos sulfoxide	Insufficient information, temporarily unable to evaluate
Fonofos	Insufficient information, temporarily unable to evaluate
Sulfotep	Insufficient information, temporarily unable to evaluate
Carbofuran	Insufficient information, temporarily unable to evaluate
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Metsulfuron methyl	Insufficient information, temporarily unable to evaluate
Chlorsulfuron	Insufficient information, temporarily unable to evaluate
Cadusafos	Insufficient information, temporarily unable to evaluate
Isazofos	Insufficient information, temporarily unable to evaluate
Phorate	Insufficient information, temporarily unable to evaluate
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Aldoxycarb	Insufficient information, temporarily unable to evaluate

ALDICARB-SULFOXIDE	Insufficient information, temporarily unable to evaluate
Monocrotophos	Insufficient information, temporarily unable to evaluate
Demeton	Insufficient information, temporarily unable to evaluate
Ethoprophos	Insufficient information, temporarily unable to evaluate
Terbufos Sulfone	Insufficient information, temporarily unable to evaluate
TERBUFOS-SULFOXIDE	Insufficient information, temporarily unable to evaluate
Isocarbophos	Insufficient information, temporarily unable to evaluate
Chlordimeform	Insufficient information, temporarily unable to evaluate
Isofenphos-methyl	Insufficient information, temporarily unable to evaluate

◆ Other

	Not applicable.

3 Composition/information on ingredients

3.1 Substance

	Not applicable

3.2 Mixture

Component	Weight % content(or range)	Classification according to Regulation (EC) No. 1272/2008 with amendment 2023/707 [CLP]	Specific Conc. Limits, M-factors
Acetonitrile CAS : 75-05-8 EC : 200-835-2 Index No. : 608-001-00-3	99.87524	Flammable liquids, Category 2, H225; Acute Toxicity - Oral, Category 4, H302; Acute Toxicity - Dermal, Category 4, H312; Serious eye damage/irritation, Category 2, H319; Acute Toxicity - Inhalation, Category 4, H332	-
Methamidophos CAS : 10265-92-6 EC : 233-606-0 Index No. : 015-095-00-4	0.00636	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 3, H311; Acute Toxicity - Inhalation, Category 2, H330; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400	-
Fenamiphos CAS : 22224-92-6 EC : 244-848-1 Index No. : 015-123-00-5	0.00255	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 2, H310; Serious eye damage/irritation, Category 2, H319; Acute Toxicity - Inhalation, Category 2, H330; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	M=100;M(Chronic)=100
FenaMiphos sulfone CAS : 31972-44-8 EC : - Index No. : -	0.00255	Acute Toxicity - Oral, Category 2, H300	-
FenaMiphos sulfoxide CAS : 31972-43-7 EC : - Index No. : -	0.00255	Acute Toxicity - Oral, Category 1, H300	-
Fonofos CAS : 944-22-9 EC : 213-408-0 Index No. : 015-091-00-2	0.00255	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 1, H310; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1,	-

		H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	
Sulfotep CAS : 3689-24-5 EC : 222-995-2 Index No. : 015-027-00-3	0.00255	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 1, H310; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	M=1000
Carbofuran CAS : 1563-66-2 EC : 216-353-0 Index No. : 006-026-00-9	0.00636	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Inhalation, Category 2, H330; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
CARBOFURAN-3-HYDROXY CAS : 16655-82-6 EC : 625-078-9 Index No. : -	0.00636	Acute Toxicity - Oral, Category 2, H300	-
Ethametsulfuron methyl ester CAS : 97780-06-8 EC : 619-290-0 Index No. : 607-751-00-9	0.00636	Serious eye damage/irritation, Category 2, H319; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	M=1000;M(Chronic)=100
Metsulfuron methyl CAS : 74223-64-6 EC : 616-063-8 Index No. : 613-139-00-2	0.00636	Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	M=1000
Chlorsulfuron CAS : 64902-72-3 EC : 265-268-5 Index No. : 613-121-00-4	0.00636	Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	M=1000;M(Chronic)=100
Cadusafos CAS : 95465-99-9 EC : 619-129-4 Index No. : -	0.00255	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 1, H310; Acute Toxicity - Inhalation, Category 1, H330; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400	-
Isazofos CAS : 42509-80-8 EC : 255-863-8 Index No. : 015-153-00-9	0.00127	Acute Toxicity - Oral, Category 3, H301; Acute Toxicity - Dermal, Category 3, H311; Sensitization - skin, Category 1, H317; Acute Toxicity - Inhalation, Category 2, H330; Specific target organ toxicity - repeated exposure, Category 2, H373; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Phorate CAS : 298-02-2 EC : 206-052-2 Index No. : 015-033-00-6	0.00255	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 1, H310; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	M=1000

O,O-diethyl-s-(ethyl sulfoxidomethyl) dithiophosphate emulsion CAS : 2588-03-6 EC : - Index No. : -	0.00255	Acute Toxicity - Oral, Category 2, H300	-
O,O-diethyl {[(ethanesulfonyl)methyl]sulfanyl}phosphonothioate CAS : 2588-04-7 EC : 634-800-1 Index No. : -	0.00255	Acute Toxicity - Oral, Category 2, H300	-
Coumaphos CAS : 56-72-4 EC : 200-285-3 Index No. : 015-038-00-3	0.00636	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 4, H312; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Phosfolan CAS : 947-02-4 EC : 213-423-2 Index No. : 015-111-00-X	0.00382	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 1, H310	-
Phosphamidon CAS : 13171-21-6 EC : 236-116-5 Index No. : 015-022-00-6	0.00636	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 3, H311; Germ cell mutagenicity, Category 2, H341; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Aldicarb CAS : 116-06-3 EC : 204-123-2 Index No. : 006-017-00-X	0.00636	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 3, H311; Acute Toxicity - Inhalation, Category 2, H330; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Aldoxycarb CAS : 1646-88-4 EC : 216-710-0 Index No. : -	0.00636	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 2, H310; Acute Toxicity - Inhalation, Category 2, H330; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400	-
ALDICARB-SULFOXIDE CAS : 1646-87-3 EC : - Index No. : -	0.00636	Acute Toxicity - Oral, Category 2, H300; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400	-
Monocrotophos CAS : 6923-22-4 EC : 230-042-7 Index No. : 015-072-00-9	0.00382	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 3, H311; Acute Toxicity - Inhalation, Category 2, H330; Germ cell mutagenicity, Category 2, H341; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Demeton CAS : 8065-48-3	0.00255	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 1, H310;	-

EC : - Index No. : 015-118-00-8		Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400	
Ethoprophos CAS : 13194-48-4 EC : 236-152-1 Index No. : 015-107-00-8	0.00255	Acute Toxicity - Oral, Category 3, H301; Acute Toxicity - Dermal, Category 1, H310; Sensitization - skin, Category 1, H317; Acute Toxicity - Inhalation, Category 2, H330; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Terbufos Sulfone CAS : 56070-16-7 EC : - Index No. : -	0.00255	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 2, H310; Acute Toxicity - Inhalation, Category 1, H330	-
TERBUFOS-SULFOXIDE CAS : 10548-10-4 EC : - Index No. : -	0.00255	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 2, H310; Acute Toxicity - Inhalation, Category 1, H330	-
Isocarbophos CAS : 24353-61-5 EC : 246-192-1 Index No. : -	0.00636	Acute Toxicity - Oral, Category 2, H300; Acute Toxicity - Dermal, Category 3, H311	-
Chlordimeform CAS : 6164-98-3 EC : 228-200-5 Index No. : 650-007-00-3	0.00255	Acute Toxicity - Oral, Category 4, H302; Acute Toxicity - Dermal, Category 4, H312; Carcinogenicity, Category 2, H351; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400; Hazardous to the aquatic environment - long-term (chronic) hazard, Category 1, H410	-
Isofenphos-methyl CAS : 99675-03-3 EC : - Index No. : -	0.00255	Acute Toxicity - Oral, Category 3, H301; Acute Toxicity - Dermal, Category 3, H311; Hazardous to the aquatic environment - short-term (acute) hazard, Category 1, H400	-

4 First-aid measures

4.1 Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Skin contact	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
Ingestion	Rinse mouth. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Give plenty of water to drink. Refer for medical attention.
Inhalation	Fresh air, rest. Artificial respiration may be needed. Refer for medical attention.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

4.2 Most important symptoms/effects, acute and delayed

1	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

4.3 Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Small fire: dry chemical, CO_2 or alcohol-resistant foam; Large fire: alcohol-resistant foam; Fire involving tanks, rail tank cars or highway tanks: Fight fire from maximum distance or use unmanned master stream devices or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out.
Unsuitable extinguishing media	Use of water spray when fighting fire may be inefficient.

5.2 Specific hazards arising from the substance or mixture

1	Will form explosive mixtures with air.
2	Fire exposed containers may vent contents through pressure relief valves thereby increasing fire intensity and/or vapour concentration.
3	Vapours may travel to source of ignition and flash back.
4	Liquid and vapour are flammable.
5	May emit poisonous fumes on fire.
6	Development of hazardous combustion gases or vapor possible in the event of fire.
7	May expansion or decompose explosively when heated or involved in fire.

5.3 Advice for firefighters

1	As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

1	Avoid breathing vapours and contacting with skin and eye.
2	Beware of vapours accumulating to form explosive concentrations.
3	Vapours can accumulate in low areas.
4	Emergency personnel wear positive pressure self-contained breathing apparatus. Wear protective and anti-static clothing. Wear chemical impermeable gloves.
5	Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
6	Do not touch or walk through spilled material.
7	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
8	Use personal protective equipment,do not breathe gas/mist/vapour/spray.
9	Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
10	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

1	Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

1	It is recommended that emergency personnel wear positive pressure self-contained breathing apparatus and wear anti-static clothing.
2	In case of small amount of spillage, use clean non sparking tools to collect absorption materials.
3	In case of large amount of spillage, construct cofferdam or dig a hole to collect the spillage. Use foam cover to reduce evaporation. Water spray mist can reduce evaporation, but can not reduce the flammability of the leakage in the restricted space.
4	Collect absorbent material using a clean, non-sparking tool.
5	Cover with anti-solvent foam to reduce evaporation.
6	Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
7	Water spray reduces evaporation but does not reduce the flammability of spills in confined spaces.
8	Do not touch or cross spills.
9	It is recommended that emergency personnel wear positive pressure self-contained breathing apparatus and wear anti-virus suits.
10	Spray water disperses the vapor and dilutes the liquid spill.
11	Do not touch broken containers and spills before putting on appropriate protective clothing.
12	Cut off the source of the leak as much as possible.
13	Keep leaks in a ventilated place.
14	Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
15	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.
16	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container.
17	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

6.4 Reference to other sections

1	Personal Protective Equipment advice is contained in Section 8 of the SDS.
2	Disposal considerations advice is contained in Section 13 of the SDS.

7 Handling and storage

7.1 Precautions for safe handling

◆ Protective measures

1	Handling is performed in a well ventilated place.
2	Wear suitable protective equipment.
3	Avoid contact with skin and eyes.

◆ Measures to prevent fire

1	Use only non-sparking tools.
2	To prevent fire caused by electrostatic discharge steam, equipment on all metal parts should be grounded.
3	Use explosion proof equipment.
4	Keep away from heat/sparks/open flames/ hot surfaces.

◆ Measures to prevent aerosol and dust generation

1	Not applicable.

◆ Advice on general occupational hygiene

1	Wash hands and face after using the substances.
2	Replace the contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

7.3 Specific end use(s)

1	In addition to use mentioned in the Section 1.2, unforeseen other specific end uses.

8 Exposure controls/personal protection

8.1 Control parameters

◆Occupational exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m³	ppm	mg/m³
Acetonitrile	Permissible exposure standards for workers in the workplace	40	67	60	100.5
	European Union	40	70	-	-
	France	40	70	-	-
	Germany (AGS)	10	17	20	34
	Germany (DFG)	10	17	20	34
	Italy	20	35	-	-
Methamidophos	Israel	-	1	-	-
Fenamiphos	France	-	0.1	-	-
	Austria	-	0.1(inhalable aerosol)	-	0.2(inhalable aerosol)
	Belgium	0.004	0.05	-	-
	Denmark	-	0.1	-	0.2
	Ireland	-	0.05	-	-
	New Zealand	-	0.1	-	-
Fonofos	France	-	0.1	-	-
	Austria	-	0.1	-	0.2
	Belgium	0.01	0.1	-	-
	Denmark	-	0.1	-	0.2
	Ireland	-	0.1	-	-
	Poland	-	0.1	-	-
Sulfotep	European Union	-	0.1	-	-
	France	-	0.1	-	-
	Germany (AGS)	0.01	0.13	0.02	0.26

	Germany (DFG)	0.01	0.13	0.02	0.26
	Italy	-	0.1	-	-
	United Kingdom	-	0.1	-	-
Carbofuran	Permissible exposure standards for workers in the workplace	-	0.1	-	0.3
	France	-	0.1	-	-
	Austria	-	0.1(inhalable aerosol)	-	0.2(inhalable aerosol)
	Belgium	-	0.1	-	-
	Denmark	-	0.1	-	0.2
	Ireland	-	0.1	-	-
Cadusafos	USA - ACGIH	-	0.001(inhalable fraction and vapor)	-	-
Phorate	Permissible exposure standards for workers in the workplace	-	0.05	-	0.15
	France	-	0.1	-	-
	United Kingdom	-	0.05	-	0.2
	Austria	-	0.5	-	0.1
	Belgium	-	0.05	-	-
	Denmark	-	0.05	-	0.1
Coumaphos	Belgium	0.003	0.05	-	-
	Ireland	-	0.05	-	-
	Spain	-	0.05	-	-
	Canada - Ontario	-	0.05	-	-
	USA - ACGIH	-	0.05(inhalable fraction and vapor)	-	-
Aldicarb	USA - ACGIH	-	0.005(inhalable fraction and vapor)	-	-
Monocrotophos	France	-	0.25	-	-
	Austria	-	0.25(inhalable aerosol)	-	0.5(inhalable aerosol)
	Belgium	-	0.05	-	-
	Denmark	-	0.25	-	0.5
	Hungary	-	0.25	-	-
	Ireland	-	0.05	-	-
Demeton	Permissible exposure standards for workers in the	0.01	0.11	0.03	0.33

	workplace				
	France	0.01	0.1	-	-
	Germany (AGS)	0.01	0.1	-	-
	Austria	0.01	0.1	0.1	1
	Belgium	-	0.05	-	-
	Denmark	0.01	0.1	0.02	0.2

◆ Biological limit values

Component	Standard	Biological monitoring index	Biological limits value	Sampling time	Remark
Carbofuran	USA -ACGIH	Acetylcholinesterase activity(Hemoglobin adducts)	70%	End of shift	
		Butyrylcholinesterase activity(Serum or Plasma)	60%	End of shift	
Phorate	USA -ACGIH	Acetylcholinesterase activity(Hemoglobin adducts)	70%	End of shift	
		Butyrylcholinesterase activity(Serum or Plasma)	60%	End of shift	
Aldicarb	USA -ACGIH	Acetylcholinesterase activity(Hemoglobin adducts)	70%	End of shift	
		Butyrylcholinesterase activity(Serum or Plasma)	60%	End of shift	
Monocrotophos	USA -ACGIH	Acetylcholinesterase activity(Hemoglobin adducts)	70%	End of shift	
		Butyrylcholinesterase activity(Serum or Plasma)	60%	End of shift	

◆ Monitoring methods

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 300 and GBZ/T 160 series standard Determination of toxic substances in workplace air.

◆ Derived No effect level (DNEL)

Component	Route of exposure	DNEL for Workers			
		Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Acetonitrile	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Methamidophos	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Fenamiphos	Inhalation	No data available	No data available	No data available	0.023 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
FenaMiphos sulfone	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
FenaMiphos sulfoxide	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Fonofos	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Sulfotep	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Carbofuran	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
CARBOFURAN-3-HYDROXY	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Ethametsulfuron methyl ester	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Metsulfuron methyl	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Chlorsulfuron	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available

	Dermal	No data available	No data available	No data available	No data available
Cadusafos	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Isazofos	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Phorate	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
O,O-diethyl-s-(ethyl sulfoxidomethyl) dithiophosphate emulsion	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
O,O-diethyl {[(ethanesulfonyl) methyl]sulfanyl}phosphonothioate	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Coumaphos	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Phosfolan	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Phosphamidon	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Aldicarb	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Aldoxycarb	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
ALDICARB-SULFOXIDE	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Monocrotophos	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available

Demeton	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Ethoprophos	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Terbufos Sulfone	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
TERBUFOS-SULFOXIDE	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Isocarbophos	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Chlordimeform	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Isofenphos-methyl	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available

◆ Predicted No Effect Concentration (PNEC)

Component	A	B	C	D	E	F	G	H
Acetonitrile	10 mg/L	1 mg/L	32 mg/L	40.5 mg/kg sediment dw	4.05 mg/kg sediment dw	No hazard identified	2.23 mg/kg soil dw	No potential for bioaccumulation

Note 1:

A: Freshwater; B: Seawater; C: Sewage treatment plant; D: Sediment (freshwater); E: Sediment (seawater); F: Air; G: Soil; H: Secondary poisoning(Hazard for Predators).

Note 2:

The PNEC values of the remaining components not shown in the product are not available yet.

8.2 Exposure controls

8.2.1 Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Use explosion-proof electrical/ventilating/lighting/equipment.
4	Set up emergency exit and necessary risk-elimination area.

8.2.2 Personal protection equipment

General requirement	
Eye protection	Must wear appropriate safety goggles.
Hand protection	Must wear anti static chemical protective gloves.
Respiratory protection	Must wear appropriate personal respiratory protective equipment.
Skin and body protection	Must wear anti static chemical protective clothing and anti static shoes.

8.2.3 Environmental exposure controls

Environmental exposure controls	No information available

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Colorless to light yellow liquid
Colour	Colorless to light yellow liquid
Odor	No information available
Odor threshold	No information available
pH	No information available
Melting point/freezing point(°C)	-46 (Acetonitrile)
Initial boiling point and boiling range(°C)	82 (Acetonitrile)
Flash point(Closed cup,°C)	2 (Acetonitrile)
Evaporation rate	No information available
Flammability	No information available
Upper/lower explosive limits[%(v/v)]	Upper limit：17 (Acetonitrile)；Lower limit：3 (Acetonitrile)
Vapor pressure	9.9kPa (25°C,Acetonitrile)
Vapor density(Air = 1)	1.4 (Acetonitrile)
Relative density(Water=1)	0.8 (Acetonitrile)
Solubility	1000000mg/L (25 °C,Acetonitrile)
n-octanol/water partition coefficient	-0.3 (Acetonitrile)
Auto-ignition temperature(°C)	524 (Acetonitrile)
Decomposition temperature(°C)	No information available
Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Particle characteristics	Not applicable

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Information with regard to physical hazard classes	No information available

9.2.2 Other safety characteristics

Other safety characteristics	No information available

10 Stability and reactivity

Stability and reactivity

10.1 Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
10.2 Chemical stability	Stable under proper operation and storage conditions.
10.3 Possibility of hazardous reactions	In contact with N-halogen compounds may cause a potensive explosive hazardous.
10.4 Conditions to avoid	Incompatible materials, heat, flame and spark.
10.5 Incompatible materials	N - halogenated compounds, sulfuric acid and strong oxidants.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 with amendment 2023/707

30 Mix pesticides and herbicides in acetonitrile	
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Causes serious eye irritation(Category 2)
Skin sensitization	Based on available data, the classification criteria are not met
Respiratory sensitization	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met

Acute toxicity

Component	LD_{50}(oral)	LD_{50}(dermal)	LC_{50}(inhalation,4h)
Aldoxycarb	20mg/kg(Rat)	200mg/kg(Rabbit)	0.14mg/L(Rat)
Carbofuran	8mg/kg(Rat)	885mg/kg(Rabbit)	No information available
Isazofos	27mg/kg(Rat)	755mg/kg(Rabbit)	0.103mg/L(Rat)
Chlordimeform	160mg/kg(Rat)	640mg/kg(Rabbit)	No information available
O,O-diethyl {[(ethanesulfonyl)methyl] sulfanyl}phosphonothioate	1.2mg/kg(Rat)	No information available	No information available
Ethametsulfuron methyl ester	> 5000mg/kg(Rat)	No information available	No information available
Demeton	1.7mg/kg(Rat)	24mg/kg(Rabbit)	No information available
Ethoprophos	26mg/kg(Rat)	2.4mg/kg(Rabbit)	No information available
Coumaphos	7.1mg/kg(Rat)	500mg/kg(Rabbit)	No information available
Metsulfuron methyl	>5000mg/kg(Rat)	> 2000mg/kg(Rabbit)	> 5mg/L(Rat)
Sulfotep	5mg/kg(Rat)	20mg/kg(Rabbit)	0.038mg/L(Rat)

Acetonitrile	2460mg/kg(Rat)	> 2000mg/kg(Rabbit)	4.748mg/L(Rabbit)
Monocrotophos	14mg/kg(Rat)	270mg/kg(Rabbit)	0.063mg/L(Rat)
Fonofos	3mg/kg(Rat)	25mg/kg(Rabbit)	No information available
O,O-diethyl-s-(ethyl sulfoxidomethyl) dithiophosphate emulsion	2mg/kg(Rat)	No information available	No information available
Isocarbophos	50mg/kg(Rat)	No information available	No information available
Phosfolan	8.9mg/kg(Rat)	23mg/kg(Rabbit)	No information available
Cadusafos	30mg/kg(Rat)	No information available	No information available
Chlorsulfuron	5545mg/kg(Rat)	3400mg/kg(Rabbit)	> 5.9mg/L(Rat)
Aldicarb	0.93mg/kg(Rat)	1400mg/kg(Rabbit)	No information available
Fenamiphos	15mg/kg(Rat)	178mg/kg(Rabbit)	0.091mg/L(Rat)
Phosphamidon	7mg/kg(Rat)	80mg/kg(Rabbit)	0.135mg/L(Rat)
Methamidophos	30mg/kg(Rat)	118mg/kg(Rabbit)	0.162mg/L(Rat)
CARBOFURAN-3-HYDROXY	18mg/kg(Rat)	No information available	No information available
Phorate	2mg/kg(Rat)	99mg/kg(Rabbit)	No information available
ALDICARB-SULFOXIDE	0.49mg/kg(Rat)	No information available	No information available

Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP
Acetonitrile	Not Listed	Not Listed
Methamidophos	Not Listed	Not Listed
Fenamiphos	Not Listed	Not Listed
FenaMiphos sulfone	Not Listed	Not Listed
FenaMiphos sulfoxide	Not Listed	Not Listed
Fonofos	Not Listed	Not Listed
Sulfotep	Not Listed	Not Listed
Carbofuran	Not Listed	Not Listed
CARBOFURAN-3-HYDROXY	Not Listed	Not Listed
Ethametsulfuron methyl ester	Not Listed	Not Listed
Metsulfuron methyl	Not Listed	Not Listed
Chlorsulfuron	Not Listed	Not Listed
Cadusafos	Not Listed	Not Listed
Isazofos	Not Listed	Not Listed
Phorate	Not Listed	Not Listed
O,O-diethyl-s-(ethyl sulfoxidomethyl) dithiophosphate emulsion	Not Listed	Not Listed

O,O-diethyl {[(ethanesulfonyl)methyl] sulfanyl}phosphonothioate	Not Listed	Not Listed
Coumaphos	Not Listed	Not Listed
Phosfolan	Not Listed	Not Listed
Phosphamidon	Not Listed	Not Listed
Aldicarb	Category 3	Not Listed
Aldoxycarb	Not Listed	Not Listed
ALDICARB-SULFOXIDE	Not Listed	Not Listed
Monocrotophos	Not Listed	Not Listed
Demeton	Not Listed	Not Listed
Ethoprophos	Not Listed	Not Listed
Terbufos Sulfone	Not Listed	Not Listed
TERBUFOS-SULFOXIDE	Not Listed	Not Listed
Isocarbophos	Not Listed	Not Listed
Chlordimeform	Category 3	Not Listed
Isofenphos-methyl	Not Listed	Not Listed

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Component	Endocrine disrupting properties
Acetonitrile	No information available
Methamidophos	No information available
Fenamiphos	No information available
FenaMiphos sulfone	No information available
FenaMiphos sulfoxide	No information available
Fonofos	No information available
Sulfotep	No information available
Carbofuran	No information available
CARBOFURAN-3-HYDROXY	No information available
Ethametsulfuron methyl ester	No information available
Metsulfuron methyl	No information available
Chlorsulfuron	No information available
Cadusafos	No information available
Isazofos	No information available
Phorate	No information available
O,O-diethyl-s-(ethyl sulfoxidomethyl)	No information available

dithiophosphate emulsion	
O,O-diethyl {[(ethanesulfonyl)methyl]sulfanyl}phosphonothioate	No information available
Coumaphos	No information available
Phosfolan	No information available
Phosphamidon	No information available
Aldicarb	No information available
Aldoxycarb	No information available
ALDICARB-SULFOXIDE	No information available
Monocrotophos	No information available
Demeton	No information available
Ethoprophos	No information available
Terbufos Sulfone	No information available
TERBUFOS-SULFOXIDE	No information available
Isocarbophos	No information available
Chlordimeform	No information available
Isofenphos-methyl	No information available

11.2.2 Other Information

Other Information	See Section 11.1

12 Ecological information

12.1 Toxicity

Acute aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
Carbofuran	LC_{50} : 0.48mg/L (96h)(Fish)	EC_{50} : 0.04mg/L (48h)(Crustaceans)	ErC_{50} : 7.9mg/L (96h)(Algae)
Chlordimeform	LC_{50} : 13.2mg/L (96h)(Fish)	No information available	No information available
Ethametsulfuron methyl ester	LC_{50} : > 126mg/L (96h)(Fish)	EC_{50} : > 108mg/L (48h)(Crustaceans)	ErC_{50} : 0.421mg/L (72h)(Algae)
Demeton	LC_{50} : 0.525mg/L (96h)(Fish)	EC_{50} : 0.01mg/L (48h)(Crustaceans)	No information available
Ethoprophos	LC_{50} : 0.958mg/L (96h)(Fish)	EC_{50} : 0.09mg/L (48h)(Crustaceans)	No information available
Coumaphos	LC_{50} : 0.876mg/L (96h)(Fish)	EC_{50} : 0.000146mg/L (48h)(Crustaceans)	No information available
Metsulfuron methyl	No information available	No information available	ErC_{50} : 9.91mg/L (96h)(Algae)
Sulfotep	LC_{50} : 0.178mg/L (96h)(Fish)	EC_{50} : 0.0025mg/L (48h)(Crustaceans)	No information available
Acetonitrile	LC_{50} : > 100mg/L	EC_{50} : > 1000mg/L	ErC_{50} : >700mg/L

	(96h)(Fish)	(48h)(Crustaceans)	(72h)(Algae)
Fonofos	LC_{50} : 0.028mg/L (96h)(Fish)	EC_{50} : 0.00837mg/L (48h)(Crustaceans)	No information available
Chlorsulfuron	LC_{50} : 40mg/L (96h)(Fish)	EC_{50} : 370mg/L (48h)(Crustaceans)	ErC_{50} : 0.75mg/L (96h)(Algae)
Aldicarb	LC_{50} : 0.5mg/L (96h)(Fish)	EC_{50} : 0.06mg/L (48h)(Crustaceans)	No information available
Fenamiphos	LC_{50} : 0.0721mg/L (96h)(Fish)	EC_{50} : 0.00175mg/L (48h)(Crustaceans)	ErC_{50} : 38.5mg/L (96h)(Algae)
Phosphamidon	LC_{50} : 7.8mg/L (96h)(Fish)	EC_{50} : 0.01mg/L (48h)(Crustaceans)	No information available
Methamidophos	LC_{50} : 51mg/L (96h)(Fish)	EC_{50} : 0.02mg/L (48h)(Crustaceans)	No information available
Phorate	LC_{50} : 0.0101mg/L (96h)(Fish)	EC_{50} : 0.01mg/L (48h)(Crustaceans)	No information available

Chronic aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
Ethametsulfuron methyl ester	NOEC : 5.4mg/L(Fish)	No information available	No information available
Acetonitrile	NOEC : 102mg/L(Fish)	NOEC : >960mg/L(Crustaceans)	NOEC : 700mg/L(Algae)

12.2 Persistence and degradability

Component	Persistence (water/soil)	Persistence (air)
Methamidophos	High	High
Fenamiphos	High	High
Fonofos	High	High
Sulfotep	High	High
Carbofuran	High	High
Metsulfuron methyl	High	High
Chlorsulfuron	High	High
Phorate	High	High
Coumaphos	High	High
Phosfolan	High	High
Phosphamidon	High	High
Aldicarb	High(Half-life = 635 days)	Low(Half-life = 0.4 days)
Monocrotophos	High	High
Demeton	High	High
Ethoprophos	High	High
Isocarbophos	High	High
Chlordimeform	High	High

12.3 Bioaccumulative potential

Component	Bioaccumulative potential	Comments
Methamidophos	Low	Log Kow=-0.66
Fenamiphos	Low	Log Kow=3.3
Fonofos	Medium	Log Kow=3.94
Sulfotep	Medium	Log Kow=3.99
Carbofuran	Low	Log Kow=2.32
Metsulfuron methyl	Low	Log Kow=1.7626
Chlorsulfuron	Low	Log Kow=2.5719
Phorate	Low	Log Kow=3.9
Coumaphos	Medium	Log Kow=4.13
Phosfolan	Low	Log Kow=1.1673
Phosphamidon	Low	Log Kow=0.8
Aldicarb	Low	Log Kow=1.36
Monocrotophos	Low	Log Kow=-0.2
Demeton	Low	Log Kow=2.0926
Ethoprophos	Low	Log Kow=3.59
Isocarbophos	Low	Log Kow=2.7071
Chlordimeform	Low	Log Kow=2.89

12.4 Mobility in soil

Component	log Koc	Remark
Acetonitrile	0.653	
Methamidophos	0.585	
Fenamiphos	2.028	
Fonofos	2.922	
Sulfotep	3.587	
Carbofuran	1.850	
Ethametsulfuron methyl ester	2.344	
Metsulfuron methyl	2.592	
Chlorsulfuron	3.131	
Phorate	2.647	
Coumaphos	3.580	
Phosfolan	2.488	
Phosphamidon	3.363	
Aldicarb	1.512	
Monocrotophos	2.365	

Demeton	2.478	
Ethoprophos	2.212	
Isocarbophos	2.493	
Chlordimeform	3.490	

12.5 Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
Acetonitrile	Not PBT/vPvB
Methamidophos	Insufficient information, temporarily unable to evaluate
Fenamiphos	Insufficient information, temporarily unable to evaluate
FenaMiphos sulfone	Insufficient information, temporarily unable to evaluate
FenaMiphos sulfoxide	Insufficient information, temporarily unable to evaluate
Fonofos	Insufficient information, temporarily unable to evaluate
Sulfotep	Insufficient information, temporarily unable to evaluate
Carbofuran	Insufficient information, temporarily unable to evaluate
CARBOFURAN-3-HYDROXY	Insufficient information, temporarily unable to evaluate
Ethametsulfuron methyl ester	Insufficient information, temporarily unable to evaluate
Metsulfuron methyl	Insufficient information, temporarily unable to evaluate
Chlorsulfuron	Insufficient information, temporarily unable to evaluate
Cadusafos	Insufficient information, temporarily unable to evaluate
Isazofos	Insufficient information, temporarily unable to evaluate
Phorate	Insufficient information, temporarily unable to evaluate
O,O-diethyl-s-(ethyl sulfoxidomethyl) dithiophosphate emulsion	Insufficient information, temporarily unable to evaluate
O,O-diethyl {[(ethanesulfonyl)methyl]sulfanyl}phosphonothioate	Insufficient information, temporarily unable to evaluate
Coumaphos	Insufficient information, temporarily unable to evaluate
Phosfolan	Insufficient information, temporarily unable to evaluate
Phosphamidon	Insufficient information, temporarily unable to evaluate
Aldicarb	Insufficient information, temporarily unable to evaluate
Aldoxycarb	Insufficient information, temporarily unable to evaluate
ALDICARB-SULFOXIDE	Insufficient information, temporarily unable to evaluate
Monocrotophos	Insufficient information, temporarily unable to evaluate
Demeton	Insufficient information, temporarily unable to evaluate
Ethoprophos	Insufficient information, temporarily unable to evaluate
Terbufos Sulfone	Insufficient information, temporarily unable to evaluate
TERBUFOS-SULFOXIDE	Insufficient information, temporarily unable to evaluate

Isocarbophos	Insufficient information, temporarily unable to evaluate
Chlordimeform	Insufficient information, temporarily unable to evaluate
Isofenphos-methyl	Insufficient information, temporarily unable to evaluate

12.6 Endocrine disrupting properties

Component	Endocrine disrupting properties
Acetonitrile	No information available
Methamidophos	No information available
Fenamiphos	No information available
FenaMiphos sulfone	No information available
FenaMiphos sulfoxide	No information available
Fonofos	No information available
Sulfotep	No information available
Carbofuran	No information available
CARBOFURAN-3-HYDROXY	No information available
Ethametsulfuron methyl ester	No information available
Metsulfuron methyl	No information available
Chlorsulfuron	No information available
Cadusafos	No information available
Isazofos	No information available
Phorate	No information available
O,O-diethyl-s-(ethyl sulfoxidomethyl) dithiophosphate emulsion	No information available
O,O-diethyl {[(ethanesulfonyl)methyl]sulfanyl}phosphonothioate	No information available
Coumaphos	No information available
Phosfolan	No information available
Phosphamidon	No information available
Aldicarb	No information available
Aldoxycarb	No information available
ALDICARB-SULFOXIDE	No information available
Monocrotophos	No information available
Demeton	No information available
Ethoprophos	No information available
Terbufos Sulfone	No information available
TERBUFOS-SULFOXIDE	No information available
Isocarbophos	No information available

Chlordimeform	No information available
Isofenphos-methyl	No information available

12.7 Other adverse effects

	No information available

13 Disposal considerations

13.1 Waste treatment methods

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section waste chemicals and contaminated packaging.

14 Transport information

Label and Mark

Transporting Label	

IMDG-CODE

14.1 UN number	3021
14.2 UN proper shipping name	PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S. , flashpoint less than 23℃
14.3 Transport hazard class	3+6.1
14.4 Packing group	Ⅱ
14.5 Environmental hazards (Yes or no)	No

IATA-DGR

14.1 UN number	3021
14.2 UN proper shipping name	PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S., flash point less than 23℃
14.3 Transport hazard class	3+6.1
14.4 Packing group	Ⅱ
14.5 Environmental hazards (Yes or no)	No

UN-ADR

14.1 UN number	3021
14.2 UN proper shipping name	PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S., flash point less than 23℃
14.3 Transport hazard class	3+6.1
14.4 Packing group	Ⅱ
14.5 Environmental hazards (Yes or no)	No

Special precautions for user

	Transit should be anti-exposure, rain, high temperature. Strictly prohibited

	shipping or transportation with acids, alkalis, oxidants, food and food additives etc. Shipment of the goods vehicle exhaust pipe must be equipped with fire retardant devices, prohibit using mechanical equipment and tools of which easy to produce sparks. Transit should be anti-exposure, anti-rain, anti-high temperature. Transportation used tank (tank) cars should be grounded chain, tank can be installed to reduce the partition hole static electricity shocks. Strictly prohibited shipping or transportation with oxidants, acids, food and food additives etc. When bulk transport, Prohibit the use of cement or wooden boats. Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before transport, should be preceded by checking whether container integrity, sealing. The transport unit must be placarded and marked in accordance with relevant transporting requirements.

Maritime transport in bulk according to IMO instruments

◆ Transport in bulk according to Annex II of MARPOL and the IBC code

	Not Available

◆ Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

	Not Available

◆ Transport in bulk in accordance with the IGC Code

	Not Available

15 Regulatory information

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

International chemical inventory

Component	A	B	C	D	E	F	G	H	I	J	K	L	M
Acetonitrile	√	√	√	√	√	√	√	√	√	√	√	√	√
Methamidophos	√	√	×	×	×	×	√	√	×	×	√	√	√
Fenamiphos	√	√	×	×	×	×	√	×	√	×	√	√	√
FenaMiphos sulfone	×	×	×	×	×	×	×	×	×	×	×	√	√
FenaMiphos sulfoxide	×	×	×	×	×	×	×	×	×	×	×	√	×
Fonofos	√	√	×	×	×	×	√	×	×	×	√	√	√
Sulfotep	√	√	×	×	√	√	√	×	×	×	√	√	√
Carbofuran	√	√	√	×	×	√	√	×	√	×	√	√	√
CARBOFURAN-3-HYDROXY	×	×	×	×	×	×	×	×	×	×	×	√	√
Ethametsulfuron methyl ester	×	×	×	×	×	×	×	×	×	×	×	√	×
Metsulfuron methyl	√	×	×	×	√	×	×	×	×	×	√	√	√
Chlorsulfuron	√	√	×	×	√	×	×	×	×	×	×	√	√
Cadusafos	×	×	×	×	×	×	√	×	×	×	√	√	√
Isazofos	×	√	×	×	×	×	√	×	×	×	√	√	√
Phorate	√	√	×	×	×	×	√	×	×	×	√	√	√
O,O-diethyl-s-(ethyl sulfoxidomethyl)	√	×	×	×	×	×	×	×	×	×	×	√	×

dithiophosphate emulsion													
O,O-diethyl {[(ethanesulfonyl)methyl]sulfanyl}phosphonothioate	×	×	×	×	×	×	×	×	×	×	×	√	×
Coumaphos	√	√	×	×	√	√	√	×	√	×	√	√	√
Phosfolan	√	√	√	×	×	×	√	×	×	×	×	√	×
Phosphamidon	√	√	×	×	×	×	√	×	×	×	×	√	√
Aldicarb	√	√	√	×	√	√	√	×	×	×	√	√	√
Aldoxycarb	×	√	×	×	×	×	√	×	×	×	√	√	√
ALDICARB-SULFOXIDE	×	×	×	×	×	×	×	×	×	×	×	√	√
Monocrotophos	√	√	×	×	×	√	√	×	×	×	√	√	√
Demeton	√	×	×	×	×	×	√	×	×	×	√	√	×
Ethoprophos	√	√	×	×	×	×	√	×	×	×	√	√	√
Terbufos Sulfone	×	×	×	×	×	×	×	×	×	×	×	×	×
TERBUFOS-SULFOXIDE	×	×	×	×	×	×	×	×	×	×	×	×	√
Isocarbophos	×	√	×	×	×	×	×	×	×	×	×	√	√
Chlordimeform	√	√	×	×	×	×	√	×	√	×	√	√	√
Isofenphos-methyl	×	×	×	×	×	×	×	×	×	×	×	√	√

【A】 China Inventory of Existing Chemical Substances(IECSC)
【B】 European Inventory of Existing Commercial Chemical Substances(EC inventory)
【C】 United States Toxic Substances Control Act Inventory(TSCA)
【D】 Canadian Domestic Substances List(DSL)
【E】 New Zealand Inventory of Chemicals(NZIoC)
【F】 Philippines Inventory of Chemicals and Chemical Substances(PICCS)
【G】 Korea Existing Chemicals Inventory(KECL)
【H】 Australian. Inventory of Industrial Chemical (AIICS)
【I】 Japan Inventory of Existing & New Chemical Substances(ENCS)
【J】 Thailand Existing Chemicals Inventory(TECI)
【K】 Mexico National Inventory of Chemical Substances (INSQ)
【L】 Russia Inventory of Existing Substances (DRAFT)
【M】 Inventory of Existing Chemical Substances in Taiwan, China (TCSI)

List of Chemical Substances under International Conventions

Component	A	B	C
Acetonitrile	×	×	×
Methamidophos	×	×	√
Fenamiphos	×	×	×
FenaMiphos sulfone	×	×	×
FenaMiphos sulfoxide	×	×	×
Fonofos	×	×	×
Sulfotep	×	×	×
Carbofuran	×	×	√
CARBOFURAN-3-HYDROXY	×	×	×

Ethametsulfuron methyl ester	×	×	×
Metsulfuron methyl	×	×	×
Chlorsulfuron	×	×	×
Cadusafos	×	×	×
Isazofos	×	×	×
Phorate	×	×	√
O,O-diethyl-s-(ethyl sulfoxidomethyl) dithiophosphate emulsion	×	×	×
O,O-diethyl {[(ethanesulfonyl)methyl] sulfanyl}phosphonothioate	×	×	×
Coumaphos	×	×	×
Phosfolan	×	×	×
Phosphamidon	×	×	√
Aldicarb	×	×	√
Aldoxycarb	×	×	×
ALDICARB-SULFOXIDE	×	×	×
Monocrotophos	×	×	√
Demeton	×	×	×
Ethoprophos	×	×	×
Terbufos Sulfone	×	×	×
TERBUFOS-SULFOXIDE	×	×	×
Isocarbophos	×	×	×
Chlordimeform	×	×	√
Isofenphos-methyl	×	×	×

【A】 The Montreal Protocol on Substances that Deplete the Ozone Layer
【B】 Stockholm Convention on Persistent Organic Pollutants (POPs)
【C】 Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade

European chemical inventory

Component	A	B	C	D	E	F	G	H	I
Acetonitrile	×	×	×	√	√	×	×	×	×
Methamidophos	×	×	×	√	×	×	×	×	×
Fenamiphos	×	×	×	√	√	×	×	×	×
FenaMiphos sulfone	×	×	×	×	×	×	×	×	×
FenaMiphos sulfoxide	×	×	×	×	×	×	×	×	×
Fonofos	×	×	×	√	×	×	×	×	×
Sulfotep	×	×	×	√	×	×	×	×	×

Carbofuran	×	×	×	√	×	×	×	×	×
CARBOFURAN-3-HYDROXY	×	×	×	×	×	×	×	×	×
Ethametsulfuron methyl ester	×	×	×	√	√	×	×	×	×
Metsulfuron methyl	×	×	×	√	×	×	×	×	×
Chlorsulfuron	×	×	×	√	×	×	×	×	×
Cadusafos	×	×	×	√	×	×	×	×	×
Isazofos	×	×	×	√	×	×	×	×	×
Phorate	×	×	×	√	×	×	×	×	×
O,O-diethyl-s-(ethyl sulfoxidomethyl) dithiophosphate emulsion	×	×	×	×	×	×	×	×	×
O,O-diethyl {[(ethanesulfonyl) methyl]sulfanyl}phosphonothioate	×	×	×	×	×	×	×	×	×
Coumaphos	×	×	×	√	×	×	×	×	×
Phosfolan	×	×	×	√	×	×	×	×	×
Phosphamidon	×	×	×	√	×	×	×	×	×
Aldicarb	×	×	×	√	×	×	×	×	×
Aldoxycarb	×	×	×	√	×	×	×	×	×
ALDICARB-SULFOXIDE	×	×	×	×	×	×	×	×	×
Monocrotophos	×	×	×	√	×	×	×	×	×
Demeton	×	×	×	×	×	×	×	×	×
Ethoprophos	×	×	×	√	√	×	×	×	×
Terbufos Sulfone	×	×	×	×	×	×	×	×	×
TERBUFOS-SULFOXIDE	×	×	×	×	×	×	×	×	×
Isocarbophos	×	×	×	√	×	×	×	×	×
Chlordimeform	×	×	×	√	×	×	×	×	×
Isofenphos-methyl	×	×	×	×	×	×	×	×	×

[A] Candidate list of Substances of Very High Concern for authorization under EU REACH regulation
[B] Substances requiring authorisation under EU REACH regulation
[C] Substances restricted under EU REACH
[D] Pre-registered substances under EU REACH
[E] Registered substances under EU REACH
[F] Substance Evaluation – CoRAP under EU REACH
[G] List of priority substances under EU water policy （Directive 2455/2001/EC）
[H] Substances subject to POPs Regulation
[I] Substances proposed as POPs

Note:

"√" Indicates that the substance included in the regulations.
"×" No data or not included in the regulations.

German water hazard class(WGK)

Component	WGK	Remark
Acetonitrile	WGK 2	
Methamidophos	WGK 3	
Fenamiphos	WGK 3	
Sulfotep	WGK 3	
Carbofuran	WGK 3	
Phosphamidon	WGK 3	
Ethoprophos	WGK 3	

【WGK 1】 slightlyhazardous to water
【WGK 2】 obviouslyhazardous to water
【WGK 3】 highly hazardous to water
【nwg】 non-hazardous to water
【awg】 hazardous to water in general

German technical instructions on air quality control(TA LUFT)

Component	TA LUFT	Remark
Methamidophos	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Fenamiphos	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Fonofos	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Sulfotep	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Carbofuran	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Ethametsulfuron methyl ester	Chapter 5.2.5 Organic Substances, dust,including fine dust.To be treated as overall dust. The emissions of dust in the exhaust gas are not allowed to exceed the following values:Mass flow:0,20 kg/hr or Mass conc.:20 mg/m³ The mass per unit volume of 0,15 g/m³ in exhaust gas is not allowed to be exceeded also on observance or lower deviation of a mass flow of 0,20 kg/h.For emission sources that exceed the mass flow rate of 0.40 kg/h, the mass concentration in	

	waste gas the mass concentration must not exceed 10 mg/m³.	
Metsulfuron methyl	Chapter 5.2.5 Organic Substances, dust,including fine dust.To be treated as overall dust. The emissions of dust in the exhaust gas are not allowed to exceed the following values:Mass flow:0,20 kg/hr or Mass conc.:20 mg/m³ The mass per unit volume of 0,15 g/m³ in exhaust gas is not allowed to be exceeded also on observance or lower deviation of a mass flow of 0,20 kg/h.For emission sources that exceed the mass flow rate of 0.40 kg/h, the mass concentration in waste gas the mass concentration must not exceed 10 mg/m³.	
Chlorsulfuron	Chapter 5.2.5 Organic Substances, dust,including fine dust.To be treated as overall dust. The emissions of dust in the exhaust gas are not allowed to exceed the following values:Mass flow:0,20 kg/hr or Mass conc.:20 mg/m³ The mass per unit volume of 0,15 g/m³ in exhaust gas is not allowed to be exceeded also on observance or lower deviation of a mass flow of 0,20 kg/h.For emission sources that exceed the mass flow rate of 0.40 kg/h, the mass concentration in waste gas the mass concentration must not exceed 10 mg/m³.	
Isazofos	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Phorate	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Coumaphos	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Phosfolan	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Phosphamidon	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Aldicarb	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the	

	exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Demeton	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Ethoprophos	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	
Chlordimeform	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m³	

German technical rules for hazardous substances(TRGS)

Component	TRGS	Remark
Acetonitrile	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 402|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 720|TRGS 721|TRGS 722|TRGS 723|TRGS 724	
Methamidophos	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 523	
Fenamiphos	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Fonofos	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 523	
Sulfotep	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 402|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 523	
Carbofuran	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 523	
Ethametsulfuron methyl ester	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 500|TRGS 509|TRGS 510	
Metsulfuron methyl	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 500|TRGS 509|TRGS 510	
Chlorsulfuron	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 500|TRGS 509|TRGS 510	
Isazofos	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510	
Phorate	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS	

	500|TRGS 509|TRGS 510|TRGS 523	
Coumaphos	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510	
Phosfolan	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 523	
Phosphamidon	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 523	
Aldicarb	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510	
Demeton	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 402|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800	
Ethoprophos	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 523	
Chlordimeform	TRGS 201|TRGS 400|TRGS 555|TRGS 600|TRGS 401|TRGS 500|TRGS 509|TRGS 510|TRGS 800|TRGS 523	

15.2 Chemical safety assessment

	No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16 Other information

Information on revision

Creation Date	2026/01/07
Revision Date	-
Reason for revision	-

Reference

[1] IPCS: The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home.
[2] IARC, website: http://www.iarc.fr/.
[3] OECD: The Global Portal to Information on Chemical Substances, website: https://www.echemportal.org/echemportal/.
[4] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple.
[5] NLM: ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp.
[6] EPA: Integrated Risk Information System, website: http://cfpub.epa.gov/iris/.
[7] U.S. Department of Transportation: ERG, website: http://www.phmsa.dot.gov/hazmat/library/erg.
[8] Germany GESTIS-database on hazard substance, website: http://gestis-en.itrust.de/.

Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG-CODE	International Maritime Dangerous Goods CODE
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association

NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC_{50}	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD_{50}	Lethal Dose 50%	NTP	National Toxicology Program
EC_{50}	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
EC_X	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
P_{OW}	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment
ED	Endocrine disruptor		

Disclaimer

This Safety Data Sheet (SDS) was prepared according to REACH Regulation The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.