BLUE ROGOR (DIMETHOATE 400 g/l EC)

Version	Revision Date:	SDS Number:	Date of last issue: 26.03.2025
1.2	28.03.2025	50000650	Date of first issue: 17.02.2023

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

1.1 Product identifier

Product name BLUE ROGOR (DIMETHOATE 400 g/l EC)

Other means of identification

Product code 50000650

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

Use of the Substance/Mixture : Can be used as insecticide only.

Recommended restrictions on use : Use as recommended by the label.

1.3 Details of the supplier of the safety data sheet

Supplier Address

FMC Agricultural Solutions A/S
Thyborønvej 78
DK-7673 Harboøre
Denmark

Telephone: +45 9690 9690
Telefax: +45 9690 9691
E-mail address: SDS-Info@fmc.com .

1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:
Denmark: +45-69918573 (CHEMTREC)

Medical emergency:
Denmark: +45 82 12 12 12

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3	H226: Flammable liquid and vapour.
Acute toxicity, Category 4	H302: Harmful if swallowed.

Acute toxicity, Category 4	H332: Harmful if inhaled.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitisation, Sub-category 1B	H317: May cause an allergic skin reaction.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Warning

Hazard statements :
H226 Flammable liquid and vapour.
H302 + H332 Harmful if swallowed or if inhaled.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H410 Very toxic 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.
P260 Do not breathe mist or vapours.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Hazardous components which must be listed on the label:

cyclohexanone
dimethoate (ISO)
Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics

Additional Labelling

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

For special phrases (SP) and safety intervals, consult the label.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
dimethoate (ISO)	60-51-5 200-480-3 015-051-00-4	Self-react. E; H242 Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 4; H312 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 1 Acute toxicity estimate Acute inhalation toxicity (dust/mist): 1,6 mg/l	39
cyclohexanone	108-94-1 203-631-1 606-010-00-7	Flam. Liq. 3; H226 Acute Tox. 4; H332	>= 30 - < 50
Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics	128601-23-0	Flam. Liq. 3; H226 STOT SE 3; H335 (Respiratory system) STOT SE 3; H336 (Central nervous system)	>= 2,5 - < 10

		Asp. Tox. 1; H304 Aquatic Chronic 2; H411 EUH066	
alkoxylated short fatty alcohol	Not Assigned		>= 2,5 - < 10
maleic anhydride	108-31-6 203-571-6 607-096-00-9 01-2119472428-31-0132	Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Resp. Sens. 1; H334 Skin Sens. 1A; H317 STOT RE 1; H372 (Respiratory system) EUH071 specific concentration limit Skin Sens. 1A; H317 >= 0,001 % Acute toxicity estimate Acute oral toxicity: 1.090 mg/kg	>= 0,1 - <= 1

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

Protection of first-aiders : Avoid inhalation, ingestion and contact with skin and eyes.

If inhaled : Remove to fresh air.
Call a physician or poison control centre immediately.
If unconscious, place in recovery position and seek medical advice.

In case of skin contact : If on clothes, remove clothes.
If on skin, rinse well with water.
Wash off with soap and plenty of water.
Get medical attention immediately if irritation develops and persists.

In case of eye contact	:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	:	On contact, the first symptoms to appear may be irritation. Symptoms of cholinesterase inhibition: nausea, headache, vomiting, cramps, weakness, blurred vision, pin-point pupils, tightness in chest, laboured breathing, nervousness, sweating, watering of eyes, drooling or frothing of mouth and nose, muscle spasms and coma. Symptoms of poisoning may not appear for several hours. Keep under medical supervision for at least 48 hours.
Risks	:	Harmful if swallowed or if inhaled. May cause an allergic skin reaction. Causes serious eye irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. This substance is a reversible cholinesterase-inhibiting pesticide, which elicits symptoms in humans typical of cholinesterase inhibition including headache, light-headedness, weakness, abdominal cramps, nausea, excessive salivation, perspiration and blurred vision. More severe signs of cholinesterase inhibition include tearing, pin-point pupils, excessive respiratory secretions, cyanosis, convulsions, generalized tremor and coma. Excessive cholinesterase inhibition may result.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	:	This product is a cholinesterase inhibitor affecting the central and peripheral nervous systems producing respiratory depression. Much information on (acetyl)cholinesterase inhibition by organophosphate insecticides and its treatment can be found on the internet. Decontamination procedures such as whole body washing, gastric lavage and administration of activated charcoal are often required. ANTIDOTE: If symptoms of cholinesterase inhibition (see subsection 4.2.) are present, administer atropine sulphate, which often is a lifesaving antidote, in large doses, TWO to FOUR mg intravenously or intramuscularly as soon as possi-

ble. Repeat at 5 to 10 minute intervals until signs of atropinisation appear and maintain full atropinisation until the chemical product is fully metabolised.

Obidoxime chloride (Toxogonin), alternatively pralidoxime chloride (2-PAM), may be administered as an adjunct to, but not a substitute for atropine sulphate. Treatment with oxime should be maintained as long as atropine sulphate is administered.
At first sign of pulmonary oedema the patient should be given supplementary oxygen and treated symptomatically.

Relapse can occur after initial improvement. VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS, DEPENDING ON THE SEVERITY OF POISONING.
If any of the signs of cholinesterase inhibition occurs, call a doctor (physician), clinic or hospital immediately. Explain that the victim has been exposed to an organophosphorus insecticide.
Describe his/her condition and the extent of exposure. Immediately remove the exposed person from the area where the product is present.

Show this safety data sheet or product label to your doctor.
Immediate medical attention is required in case of ingestion.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Dry chemical, CO2, water spray or regular foam.
Unsuitable extinguishing media	:	Do not spread spilled material with high-pressure water streams.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses. The product may decompose rapidly when heated, which can result in explosion.
Hazardous combustion products	:	Fire may produce irritating, corrosive and/or toxic gases. Oxides of phosphorus Nitrogen oxides (NOx) Carbon oxides Sulphur oxides

5.3 Advice for firefighters

Special protective equipment	:	Firefighters should wear protective clothing and self-contained

for firefighters		breathing apparatus.
Specific extinguishing methods	:	Remove undamaged containers from fire area if it is safe to do so. Use a water spray to cool fully closed containers.
Further information	:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in cases of fire, cans should be stored separately in closed containments.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Evacuate personnel to safe areas. Use personal protective equipment. If it can be safely done, stop the leak. Do not touch or walk through the spilled material. Never return spills in original containers for re-use. Mark the contaminated area with signs and prevent access to unauthorized personnel. Only qualified personnel equipped with suitable protective equipment may intervene. For disposal considerations see section 13.

6.2 Environmental precautions

Environmental precautions	:	If the product contaminates rivers and lakes or drains inform respective authorities. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Never return spills in original containers for re-use. Collect as much of the spill as possible with a suitable absorbent material. Pick up and transfer to properly labelled containers.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

The product is flammable. Formation of explosive vapour-air mixtures is possible. Fire prevention measures should be taken.
Handle with extreme care.
Never return unused material to storage receptacle.
Keep away from flames and sparks.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures : General industrial hygiene practice. Avoid contact with skin, eyes and clothing. Do not inhale aerosol.

When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Further information on stor- : Recommended storage temperature 20 - 25°C. Store in

age conditions — closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. A warning sign reading “POISON” is recommended. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available.

Advice on common storage : Do not store near acids.

Recommended storage temperature : 25 °C

7.3 Specific end use(s)

Specific use(s) : The product is an approved pesticide and can only be used for the purposes for which it is approved, according to the conditions contained in the label approved by the competent authorities.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
cyclohexanone	108-94-1	STEL	20 ppm 81,6 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	10 ppm 40,8 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		S	20 ppm 81,6 mg/m3	DK OEL
	Further information: Means that the substance can be absorbed through the skin., Guiding list of organic solvents.			
		GV	10 ppm 41 mg/m3	DK OEL
	Further information: Means that the substance can be absorbed through the skin., Guiding list of organic solvents.			
maleic anhydride	108-31-6	GV	0,1 ppm 0,4 mg/m3	DK OEL
		S	0,2 ppm 0,8 mg/m3	DK OEL

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
cyclohexanone	Workers	Inhalation	Long-term systemic effects	40 mg/m3
	Workers	Inhalation	Acute systemic effects	80 mg/m3
	Workers	Inhalation	Long-term local effects	40 mg/m3
	Workers	Inhalation	Acute local effects	80 mg/m3
	Workers	Dermal	Long-term systemic effects	4 mg/kg
	Workers	Dermal	Acute systemic effects	4 mg/kg
	Consumers	Inhalation	Long-term systemic effects	10 mg/m3
	Consumers	Inhalation	Acute systemic effects	20 mg/m3
	Consumers	Inhalation	Long-term local effects	20 mg/m3
	Consumers	Inhalation	Acute local effects	40 mg/m3
	Consumers	Dermal	Long-term systemic effects	1 mg/kg
	Consumers	Dermal	Acute systemic effects	1 mg/kg
	Consumers	Oral	Long-term systemic effects	1,5 mg/kg
	Consumers	Oral	Acute systemic effects	1,5 mg/kg
Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics	Workers	Inhalation	Long-term systemic effects	150 mg/m3
	Workers	Dermal	Long-term systemic effects	25 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	32 mg/m3
	Consumers	Dermal	Long-term systemic effects	11 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	11 mg/kg bw/day
maleic anhydride	Workers	Inhalation	Long-term systemic effects	0,190 mg/m3
	Workers	Inhalation	Acute systemic effects	0,800 mg/m3
	Workers	Inhalation	Long-term local effects	0,320 mg/m3
	Workers	Dermal	Long-term systemic effects	0,200 mg/kg bw/day
	Workers	Dermal	Acute systemic effects	0,200 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0,050 mg/m3
	Consumers	Inhalation	Long-term local ef-	0,080 mg/m3

			fects	
	Consumers	Dermal	Long-term systemic effects	0,100 mg/kg bw/day
	Consumers	Dermal	Acute systemic effects	0,100 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	0,060 mg/kg bw/day
	Consumers	Oral	Acute systemic effects	0,100 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
cyclohexanone	Fresh water	0,033 mg/l
	Intermittent use (freshwater)	0,329 mg/l
	Marine water	0,003 mg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	0,249 mg/kg dry weight (d.w.)
	Marine sediment	0,025 mg/kg dry weight (d.w.)
	Soil	0,03 mg/kg dry weight (d.w.)
maleic anhydride	Fresh water	0,075 - 0,100 mg/l
	Marine water	0,0075 - 0,010 mg/l
	Intermittent use (freshwater)	0,4281 - 0,750 mg/l
	Sewage treatment plant	4,46 - 44,6 mg/l
	Fresh water sediment	0,060 - 0,334 mg/kg
	Marine sediment	0,006 - 0,0334 mg/kg
	Soil	0,010 - 0,0415 mg/kg
	Oral	6,67 mg/kg

8.2 Exposure controls

Personal protective equipment

Eye/face protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Hand protection
Material : Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Protective measures : Plan first aid action before beginning work with this product.
Always have on hand a first-aid kit, together with proper instructions.
Wear suitable protective equipment.
When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instructions for use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Form	:	liquid
Colour	:	blue
Odour	:	Faint, mercaptanic-like, acetone-like
Odour Threshold	:	No data available
Melting point/ range	:	< 0 °C
Boiling point/boiling range	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	48 °C Method: closed cup
Decomposition temperature	:	No data available
pH	:	3,14 (25 °C) Concentration: 10 g/l
Viscosity		
Viscosity, dynamic	:	6,4 mPa.s (20 °C) 4 mPa,s (40 °C)
Viscosity, kinematic	:	No data available
Solubility(ies)		
Water solubility	:	emulsifiable
Partition coefficient: n-octanol/water	:	Not available for this mixture.
Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	1.060 g/l (20 °C)
Relative vapour density	:	No data available
Particle characteristics		
Particle size	:	Not applicable

9.2 Other information

Explosives	:	Not explosive

Oxidizing properties	:	Non-oxidizing
Flammability (liquids)	:	Sustains combustion
Self-ignition	:	310 °C
Evaporation rate	:	No data available
Surface tension	:	42,1 mN/m, 20 °C
Molecular weight	:	Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.
Heating may cause a fire or explosion.

10.2 Chemical stability

The product (dimethoate) may decompose rapidly when heated, which can result in explosion. It is recommended never to heat the product above 35°C. Direct local heating such as electric heating or by steam must be avoided.

The decomposition is dependent on time as well as temperature due to self-accelerating exothermic and autocatalytic reactions. The reactions involve rearrangements and polymerisation releasing volatile malodorous and inflammable compounds such as dimethyl sulphide and methyl mercaptan.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

Vapours may form explosive mixture with air.
Hazardous decomposition products formed under fire conditions.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.
Temperatures greater than recommended storage temperature.
Heating of the product will produce harmful and irritant vapours.
Avoid shock and friction.

10.5 Incompatible materials

Materials to avoid : Avoid strong acids, bases, and oxidizers

10.6 Hazardous decomposition products

See subsection 5.2.

SECTION 11: Toxicological information

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

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

Acute oral toxicity	:	LD50 (Rat): 386 mg/kg Method: OECD Test Guideline 425
Acute inhalation toxicity	:	LC50 (Rat): ca. 1,6 mg/l Exposure time: 4 h Test atmosphere: dust/mist Remarks: Based on data from a similar product.
Acute dermal toxicity	:	LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 402 Assessment: The component/mixture is minimally toxic after single contact with skin.

Components:

dimethoate (ISO):

Acute oral toxicity	:	LD50 (Rat, male and female): 348 - 423 mg/kg Method: OECD Test Guideline 425 Symptoms: hypoactivity, Tremors LD50 (Rat, female): 300 - 2.000 mg/kg Method: OECD Test Guideline 423 Symptoms: hypoactivity, Tremors GLP: yes Assessment: The component/mixture is moderately toxic after single ingestion. LD50 (Mouse, male and female): 160 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC50 (Rat): ca. 1,6 mg/l Exposure time: 4 h Test atmosphere: dust/mist LC50 (Rat): 3 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 (Rat, female): > 2.000 mg/kg Symptoms: Tremors Assessment: The component/mixture is minimally toxic after single contact with skin. Remarks: no mortality

LD50 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: The component/mixture is minimally toxic after single contact with skin.
Remarks: no mortality

cyclohexanone:

Acute inhalation toxicity : LC50 (Rat, male and female): > 6,2 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The component/mixture is moderately toxic after short term inhalation.

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

Acute oral toxicity : LD50 (Rat, female): 3.492 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 6,193 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): > 3.160 mg/kg

alkoxylated short fatty alcohol:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

maleic anhydride:

Acute oral toxicity : LD50 (Rat, male and female): 1.090 mg/kg
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit, female): 2.620 mg/kg

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product:

Species : Rabbit
Assessment : No skin irritation
Method : OECD Test Guideline 404
Result : No skin irritation

Components:

dimethoate (ISO):

Species : Rabbit
Assessment : Not classified as irritant
Method : OECD Test Guideline 404

Result : slight or no skin irritation.

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Mild skin irritation

Assessment : Repeated exposure may cause skin dryness or cracking.

maleic anhydride:

Species : Rabbit
Exposure time : 4 h
Result : Corrosive after 3 minutes to 1 hour of exposure

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Species : Rabbit
Assessment : Irritating to eyes.
Method : OECD Test Guideline 405
Result : Irritation to eyes, reversing within 21 days

Components:

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

Species : Rabbit
Result : No eye irritation

maleic anhydride:

Species : Rabbit
Result : Irreversible effects on the eye

Respiratory or skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Product:

Test Type : Local lymph node assay (LLNA)
Species : Mouse
Method : OECD Test Guideline 429
Result : The product is a skin sensitiser, sub-category 1B.

Components:

dimethoate (ISO):

Test Type	:	Maximisation Test
Exposure routes	:	Dermal
Species	:	Guinea pig
Assessment	:	Not a skin sensitizer.
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.
GLP	:	yes

Test Type	:	Local lymph node test
Assessment	:	Not a skin sensitizer.
Method	:	OECD Test Guideline 429
Result	:	Does not cause skin sensitisation.

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406

alkoxylated short fatty alcohol:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	negative

maleic anhydride:

Test Type	:	Local lymph node assay (LLNA)
Exposure routes	:	Dermal
Species	:	Mouse
Assessment	:	The product is a skin sensitiser, sub-category 1A.
Method	:	OECD Test Guideline 429

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Components:

dimethoate (ISO):

Genotoxicity in vitro	:	Test Type: Ames test Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative
Genotoxicity in vivo	:	Test Type: unscheduled DNA synthesis assay Species: Rat Cell type: Liver cells Result: positive

Test Type: dominant lethal test
Species: Mouse
Method: OECD Test Guideline 478
Result: negative
GLP: yes

Test Type: Micronucleus test
Species: Mouse
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Test Type: chromosome aberration assay
Species: Rat
Result: negative

cyclohexanone:

Genotoxicity in vitro : Test Type: in vitro DNA damage and/or repair study
Test system: human diploid fibroblasts
Method: OECD Test Guideline 482
Result: negative

Test Type: reverse mutation assay
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo : Test Type: chromosome aberration assay
Species: Rat (male and female)
Application Route: inhalation (vapour)
Method: OECD Test Guideline 475
Result: negative

Test Type: dominant lethal test
Species: Rat (male and female)
Application Route: inhalation (vapour)
Method: OECD Test Guideline 478
Result: negative

Species: Drosophila melanogaster (vinegar fly) (male and female)
Application Route: Inhalation
Method: OECD Test Guideline 477
Result: negative

Germ cell mutagenicity- Assessment : Weight of evidence does not support classification as a germ cell mutagen.

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

Genotoxicity in vitro	:	Test Type: reverse mutation assay Metabolic activation: with and without metabolic activation Result: negative
Genotoxicity in vivo	:	Test Type: Bone marrow chromosome aberration Species: Rat Result: negative

maleic anhydride:

Genotoxicity in vitro	:	Test Type: reverse mutation assay Method: OECD Test Guideline 471 Result: negative Test Type: In vitro mammalian cell gene mutation test Method: OECD Test Guideline 476 Result: negative Remarks: Based on data from similar materials
Genotoxicity in vivo	:	Test Type: Bone marrow chromosome aberration Species: Rat (male and female) Application Route: Inhalation Method: OECD Test Guideline 475 Result: negative
Germ cell mutagenicity- Assessment	:	Weight of evidence does not support classification as a germ cell mutagen.

Carcinogenicity

Based on available data, the classification criteria are not met.

Components:

cyclohexanone:

Species	:	Rat
Application Route	:	Oral
Exposure time	:	104 weeks
Dose	:	(462 and 910 mg/kg/d
LOAEL	:	3.300 ppm
Result	:	positive
Carcinogenicity - Assessment	:	Weight of evidence does not support classification as a carcinogen

maleic anhydride:

Species	:	Rat, male and female
Application Route	:	Oral
Exposure time	:	2 Years
Dose	:	0, 10, 32, 100 mg/kg body weight
NOEL	:	10 mg/kg body weight
Method	:	OECD Test Guideline 451

Result	:	negative
Carcinogenicity - Assessment	:	Weight of evidence does not support classification as a carcinogen

Reproductive toxicity

Based on available data, the classification criteria are not met.

Components:

dimethoate (ISO):

Effects on fertility	:	Test Type: Two-generation study Species: Rat Dose: 1, 15, 65 parts per million General Toxicity F1: LOAEL: 15 ppm Symptoms: Effects on mating performance GLP: yes Test Type: Two-generation study Species: Rat Dose: 0.2, 1, 6.5 mg/kg bw/day General Toxicity - Parent: NOAEL: 1 mg/kg body weight Early Embryonic Development: NOAEL: 6,5 mg/kg body weight Method: OECD Test Guideline 416 GLP: yes Test Type: one-generation reproductive toxicity Species: Rat Application Route: Oral Dose: 6.5 mg/kg bw/day General Toxicity - Parent: LOAEL: 6,5 mg/kg bw/day Symptoms: Effects on mating performance Method: OECD Test Guideline 415 GLP: yes

cyclohexanone:

Effects on fertility	:	Test Type: Two-generation study Species: Rat Application Route: inhalation (vapour) Dose: 1.02, 2.04, 4.1 mg/l General Toxicity - Parent: NOAEC: 4,1 mg/l General Toxicity F1: NOAEC: 2,04 mg/l General Toxicity F2: NOAEC: 2,04 mg/l Result: negative
Effects on foetal development	:	Species: Rabbit Application Route: Oral Dose: 50, 250, 500 mg/kg b.w. General Toxicity Maternal: NOAEL: 250 mg/kg body weight Teratogenicity: NOAEL: 500 mg/kg body weight Method: OECD Test Guideline 414

Result: No teratogenic effects

Reproductive toxicity - Assessment : Animal testing did not show any effects on fertility.

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

Effects on fertility : Test Type: Three-generation study
Species: Rat
Application Route: Inhalation
Result: negative

Effects on foetal development : Test Type: Pre-natal
Species: Rat
Application Route: inhalation (vapour)
Method: OECD Test Guideline 414
Result: negative
Remarks: Based on data from similar materials

maleic anhydride:

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Application Route: Oral
Dose: 0, 20, 55, and 150 milligram per kilogram
General Toxicity - Parent: LOAEL: 20 mg/kg body weight
Fertility: NOEL: 55 mg/kg body weight
Method: OECD Test Guideline 416
Result: negative

Effects on foetal development : Species: Rat
Application Route: Oral
Duration of Single Treatment: 15 d
General Toxicity Maternal: NOAEL: >= 140 mg/kg body weight
Teratogenicity: NOAEL: >= 140 mg/kg body weight
Embryo-foetal toxicity: NOAEL: >= 140 mg/kg body weight
Method: OECD Test Guideline 414
Result: negative

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

STOT - single exposure

Based on available data, the classification criteria are not met.

Product:

Assessment : May cause drowsiness or dizziness.

Components:

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

Assessment : May cause respiratory irritation., May cause drowsiness or

dizziness.

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Product:

Assessment : May cause damage to organs through prolonged or repeated exposure.

Components:

cyclohexanone:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

maleic anhydride:

Exposure routes : inhalation (dust/mist/fume)
Target Organs : Respiratory system
Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

Repeated dose toxicity

Components:

dimethoate (ISO):

Species : Rat
LOAEL : 2.5 mg/kg bw/day
Exposure time : 90 days
Symptoms : cholinesterase inhibition

Species : Rat
NOAEL : 0.06 - 0.08 mg/kg bw/day
LOAEL : 3.22 - 3.78 mg/kg bw/day
Exposure time : 90d
Symptoms : cholinesterase inhibition

cyclohexanone:

Species : Rat, male and female
NOAEL : 143 mg/kg
Application Route : Oral
Exposure time : 90 d
Dose : 40, 143 and 407 mg/kg b.w.
Method : OECD Test Guideline 408

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

Species : Rat, males
NOAEC : 1,8 mg/l
Application Route : inhalation (vapour)

Exposure time	:	12 months
Remarks	:	Based on data from similar materials

maleic anhydride:

Species	:	Dog, male and female
NOAEL	:	60 mg/kg
Application Route	:	Oral
Exposure time	:	90 d
Dose	:	0, 20, 40, or 60 mg/kg bw/day
Method	:	OECD Test Guideline 409

Species	:	Rat, male and female
NOEL	:	10 mg/kg
Application Route	:	Oral
Exposure time	:	2 years
Dose	:	0, 10, 32, and 100 mg/kg bw/day
Method	:	OECD Test Guideline 452

Species	:	Rat, male and female
LOAEC	:	0,0011 mg/l
Application Route	:	Inhalation
Exposure time	:	6 months
Target Organs	:	Respiratory system

Aspiration toxicity

Based on available data, the classification criteria are not met.

Components:

dimethoate (ISO):

The substance does not have properties associated with aspiration hazard potential.

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

May be fatal if swallowed and enters airways.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Components:

dimethoate (ISO):

Assessment	:	The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Neurological effects

Components:

dimethoate (ISO):

Remarks : Neurotoxity observed in animals studies

Further information

Product:

Remarks : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Concentrations substantially above the TLV value may cause narcotic effects.
Solvents may degrease the skin.

Components:

dimethoate (ISO):

Remarks : Dimethoate is rapidly absorbed and excreted following oral administration. It is extensively metabolised. Dimethoate and its metabolites are primarily found in the liver and kidneys. There is no evidence for accumulation.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 8,9 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	IC50 (Pseudokirchneriella subcapitata (green algae)): 246 mg/l Exposure time: 72 h
Toxicity to terrestrial organisms	:	LC50: 0,37 µg/bee Exposure time: 48 h End point: Acute contact toxicity Species: Apis mellifera (bees) LC50: 0,29 µg/bee

Exposure time: 48 h
End point: Acute oral toxicity
Species: Apis mellifera (bees)

Components:

dimethoate (ISO):

Toxicity to fish : NOEC (Cyprinodon variegatus (sheepshead minnow)): 2,4 mg/l
Test Type: Early-life Stage
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,48 - 0,66 mg/l
Exposure time: 48 h
Test Type: static test

NOEC (Daphnia magna (Water flea)): 0,04 mg/l
Exposure time: 21 d

LC50 (Mysidopsis bahia (opossum shrimp)): 15 mg/l
Exposure time: 96 h
Test Type: static test
Method: US EPA Test Guideline OPP 72-3
GLP: yes

EC50 (Daphnia magna (Water flea)): 1,6 - 2,5 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
GLP: yes

NOEC (Crassostrea virginica (atlantic oyster)): 46 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (green algae)): 117 mg/l
End point: Growth inhibition
Exposure time: 72 h
Method: OECD Test Guideline 201

EC50 (Pseudokirchneriella subcapitata (algae)): > 95 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

EC50 (Navicula pelliculosa (Diatom)): > 98 mg/l
Exposure time: 72 h
Method: US EPA Test Guideline OPPTS 850.5400
GLP: yes

NOEC (Lemna gibba (duckweed)): 41,5 mg/l
Exposure time: 7 d
Test Type: Static renewal test
Method: OECD Test Guideline 221

		GLP: yes
M-Factor (Acute aquatic toxicity)	:	1
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,4 mg/l Exposure time: 21 d Species: Oncorhynchus mykiss (rainbow trout) NOEC: 2,4 mg/l Species: Cyprinodon variegatus (sheepshead minnow) Test Type: Early-life Stage GLP: yes NOEC: 1,25 mg/l Species: Oncorhynchus mykiss (rainbow trout) Test Type: Early Life-Stage Method: OECD Test Guideline 210 GLP: yes LOEC: 96 mg/l Exposure time: 21 d Species: Pimephales promelas (fathead minnow) Method: OECD Test Guideline 229 GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,04 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) NOEC: 0,14 mg/l Exposure time: 32 d Species: Americamysis bahia (mysid shrimp) Test Type: flow-through test GLP: yes
Toxicity to soil dwelling organisms	:	LC50: 31 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207 GLP:yes NOEC: 2,87 mg/kg Exposure time: 28 d End point: reproduction Species: Eisenia fetida (earthworms) GLP:yes
Toxicity to terrestrial organisms	:	LD50: 44 mg/kg End point: Acute oral toxicity Species: Anas platyrhynchos (Mallard duck) Method: US EPA Test Guideline OPPTS 850.2100

NOEC: 35,4 ppm
End point: Reproduction Test
Species: Anas platyrhynchos (Mallard duck)
Method: OECD Test Guideline 206
GLP:yes

LD50: 17,3 mg/kg
End point: Acute oral toxicity
Species: Colinus virginianus (Bobwhite quail)
Method: EPA OPP 71-2 (Avian Dietary Toxicity Test)
GLP:yes

NOEC: 10,1 ppm
End point: Reproduction Test
Species: Colinus virginianus (Bobwhite quail)
Method: OECD Test Guideline 206
GLP:yes

LD50: 12 µg/bee
End point: Acute contact toxicity
Species: Apis mellifera (bees)
Method: OECD Test Guideline 214
GLP:yes

LD50: 4 µg/bee
End point: Acute oral toxicity
Species: Apis mellifera (bees)
Method: OECD Test Guideline 213
GLP:yes

Ecotoxicology Assessment

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

cyclohexanone:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 527 - 732 mg/l
Exposure time: 96 h
Test Type: flow-through test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials

NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to microorganisms : EC50 (activated sludge): > 1.000 mg/l
Exposure time: 30 min
Method: OECD Test Guideline 209

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 9,2 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: water accommodated fractions (WAF)

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 3,2 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : NOELR (Pseudokirchneriella subcapitata (green algae)): 0,22 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

EL50 (Pseudokirchneriella subcapitata (green algae)): 7,9 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (activated sludge): > 99 mg/l
Exposure time: 10 min
Method: OECD Test Guideline 209

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

alkoxylated short fatty alcohol:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

maleic anhydride:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 42,81 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants	:	EC10 (Pseudokirchneriella subcapitata (green algae)): 11,8 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials EC50 (Pseudokirchneriella subcapitata (green algae)): 74,35 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials
Toxicity to microorganisms	:	EC10 (Pseudomonas putida): 44,6 mg/l Exposure time: 18 h Method: DIN 38 412 Part 8
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 10 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)

12.2 Persistence and degradability

Components:

dimethoate (ISO):

Biodegradability	:	Result: Not readily biodegradable.

cyclohexanone:

Biodegradability	:	Result: Readily biodegradable. Method: OECD Test Guideline 301F

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 78 % Exposure time: 28 d Method: OECD Test Guideline 301F

alkoxylated short fatty alcohol:

Biodegradability	:	Result: Not readily biodegradable.

maleic anhydride:

Biodegradability	:	Inoculum: activated sludge, non-adapted Result: Readily biodegradable. Biodegradation: > 90 % Exposure time: 25 d Method: OECD Test Guideline 301B Remarks: Based on data from similar materials

12.3 Bioaccumulative potential

Components:

dimethoate (ISO):

Bioaccumulation	:	Species: Salmo gairdneri Bioconcentration factor (BCF): > 1.000 Remarks: The product/substance has a potential to bioaccumulate. See section 9 for octanol-water partition coefficient.
Partition coefficient: n-octanol/water	:	Pow: 5,7 (20 °C) log Pow: 0,75 (20 °C) Method: OECD Test Guideline 107

cyclohexanone:

Partition coefficient: n-octanol/water	:	log Pow: 0,86 (25 °C)

Aromatic hydrocarbons, C9; Alkylbenzenes; C9-aromatics:

Partition coefficient: n-octanol/water	:	log Pow: 2,92 - 3,59 Method: QSAR

maleic anhydride:

Bioaccumulation	:	Remarks: Bioaccumulation is unlikely.
Partition coefficient: n-octanol/water	:	log Pow: -2,61

12.4 Mobility in soil

Components:

dimethoate (ISO):

Distribution among environmental compartments	:	Remarks: Highly mobile in soils
Stability in soil	:	Remarks: Not expected to adsorb on soil.

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

dimethoate (ISO):

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Components:

dimethoate (ISO):

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.

Components:

dimethoate (ISO):

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dimethoate is rapidly hydrolysed at pH > 8.0
According to the Waste Framework Directive (2008/98/EC), possibilities for reuse or reprocessing should first be considered. If this is not possible, the material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing.

Do not contaminate water, foodstuffs, feed or seed by storage

or disposal. Do not discharge to sewer systems.
The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.
It is recommended to consider possible ways of disposal in the following order:
1. Reuse or recycling should first be considered. If offered for recycling, containers must be emptied and triply rinsed (or equivalent). Do not discharge rinsing water to sewer systems.
2. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.
3. Delivery of the packaging to a licensed service for disposal of hazardous waste.
4. Disposal in a landfill or burning in open air should only occur as a last resort. For disposal in a landfill, containers should be emptied completely, rinsed and punctured to make them unusable for other purposes. If burned, stay out of smoke.

SECTION 14: Transport information

14.1 UN number or ID number

ADN : UN 1993

ADR : UN 1993

RID : UN 1993

IMDG : UN 1993

IATA : UN 1993

14.2 UN proper shipping name

ADN : FLAMMABLE LIQUID, N.O.S.
(Cyclohexanone, Solvent naphtha (petroleum), light aromatic, Dimethoate)

ADR : FLAMMABLE LIQUID, N.O.S.
(Cyclohexanone, Solvent naphtha (petroleum), light aromatic, Dimethoate)

RID : FLAMMABLE LIQUID, N.O.S.
(Cyclohexanone, Solvent naphtha (petroleum), light aromatic, Dimethoate)

IMDG : FLAMMABLE LIQUID, N.O.S.
(Cyclohexanone, Solvent naphtha (petroleum), light aromatic,

Dimethoate)

IATA : Flammable liquid, n.o.s.
(Cyclohexanone, Solvent naphtha (petroleum), light aromatic, Dimethoate)

14.3 Transport hazard class(es)

		Class	Subsidiary risks
ADN	:	3	
ADR	:	3	
RID	:	3	
IMDG	:	3	
IATA	:	3	

14.4 Packing group

ADN

Packing group	:	III
Classification Code	:	F1
Hazard Identification Number	:	30
Labels	:	3

ADR

Packing group	:	III
Classification Code	:	F1
Hazard Identification Number	:	30
Labels	:	3
Tunnel restriction code	:	(D/E)

RID

Packing group	:	III
Classification Code	:	F1
Hazard Identification Number	:	30
Labels	:	3

IMDG

Packing group	:	III
Labels	:	3
EmS Code	:	F-E, S-E

IATA (Cargo)

Packing instruction (cargo aircraft)	:	366
Packing instruction (LQ)	:	Y344
Packing group	:	III
Labels	:	Flammable Liquids

IATA (Passenger)

Packing instruction (passenger aircraft)	:	355
Packing instruction (LQ)	:	Y344
Packing group	:	III
Labels	:	Flammable Liquids

14.5 Environmental hazards

ADN
Environmentally hazardous : yes

ADR
Environmentally hazardous : yes

RID
Environmentally hazardous : yes

IMDG
Marine pollutant : yes

IATA (Passenger)
Environmentally hazardous : yes

IATA (Cargo)
Environmentally hazardous : yes

14.6 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.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3 cyclohexanone (Number on list 3)
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EU) No 2024/590 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	cyclohexanone dimethoate (ISO)
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	P5c	FLAMMABLE LIQUIDS
	E1	ENVIRONMENTAL HAZARDS
	P5c	

Other regulations:
When evaluating a workplace, measures must be taken to ensure that employees are not exposed to conditions that may pose a risk during pregnancy or breastfeeding (cf. The Danish Working Environment Authority's Executive Order on The Performance of Work)

Young people under the age of 18 are not allowed to use or be exposed to the product professionally. Young people above the age of 15 are, however, except from this rule if the product is a necessary part of their education.

The components of this product are reported in the following inventories:

TCSI	:	Not in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
AIIC	:	Not in compliance with the inventory
DSL	:	This product contains chemical substance(s) exempt from CEPA DSL Inventory requirements. It is regulated as a pesticide subject to Pest Control Products Act (PCPA) requirements. Read the PCPA label, authorized under the Pest Control Products Act, prior to using or handling this pest control product.
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

15.2 Chemical safety assessment

A chemical safety assessment is not required for this product (mixture).

SECTION 16: Other information

Full text of H-Statements

H226	:	Flammable liquid and vapour.
H242	:	Heating may cause a fire.
H302	:	Harmful if swallowed.
H304	:	May be fatal if swallowed and enters airways.
H312	:	Harmful in contact with skin.
H314	:	Causes severe skin burns and eye damage.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H332	:	Harmful if inhaled.
H334	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	:	May cause respiratory irritation.
H336	:	May cause drowsiness or dizziness.
H372	:	Causes damage to organs through prolonged or repeated exposure if inhaled.
H410	:	Very toxic to aquatic life with long lasting effects.
H411	:	Toxic to aquatic life with long lasting effects.
EUH066	:	Repeated exposure may cause skin dryness or cracking.
EUH071	:	Corrosive to the respiratory tract.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Eye Dam.	:	Serious eye damage
Flam. Liq.	:	Flammable liquids
Resp. Sens.	:	Respiratory sensitisation
Self-react.	:	Self-reactive substances and mixtures
Skin Corr.	:	Skin corrosion
Skin Sens.	:	Skin sensitisation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure
2000/39/EC	:	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
DK OEL	:	Denmark. Occupational Exposure Limits
2000/39/EC / TWA	:	Limit Value - eight hours
2000/39/EC / STEL	:	Short term exposure limit
DK OEL / S	:	Exposure period of 15 minutes
DK OEL / GV	:	Long term exposure limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regula-

tion (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; 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; 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 Concentration 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:		**Classification procedure:**
Flam. Liq. 3	H226	Based on product data or assessment
Acute Tox. 4	H302	Based on product data or assessment
Acute Tox. 4	H332	Based on product data or assessment
Eye Irrit. 2	H319	Based on product data or assessment
Skin Sens. 1B	H317	Based on product data or assessment
Aquatic Chronic 1	H410	Calculation method

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Prepared by

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