# SAFETY DATA SHEET

#### Danadim (TM) Progress

This safety data sheet complies with the requirements of: Regulation (EC) No. 453/2010 and Regulation (EC) No. 1272/2008



**SDS #**: FO002130-1-A

Revision date: 2018-11-12

Format: EU Version 1

# Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Code(s) FO002130-1-A

Product Name Danadim (TM) Progress

Synonyms 3621-04, Dimethoate 400 g/l EC

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

Recommended Use: Insecticide

**Restrictions on Use:** Use as recommended by the label.

1.3. Details of the supplier of the safety data sheet

Supplier CHEMINOVA A/S, a subsidiary of FMC Corporation

Thyborønvej 78 DK-7673 Harboøre Denmark +45 9690 9690

SDS.Ronland@fmc.com

For further information, please contact:

Contact point (+45) 97 83 53 53 (24 h; for emergencies only)

1.4. Emergency telephone number

**Emergency telephone** Medical emergencies:

Austria: +43 1 406 43 43 Belgium: +32 70 245 245 Bulgaria: +359 2 9154 409

Cyprus: 1401

Czech Republic: +420 224 919 293, +420 224 915 402

Denmark: +45 82 12 12 12 France: +33 (0) 1 45 42 59 59 Finland: +358 9 471 977 Greece: 30 210 77 93 777 Hungary: +36 80 20 11 99

Ireland (Republic): +352 1 809 2166

Italy: +39 02 6610 1029

Lithuania: +370 523 62052, +370 687 53378

Luxembourg: +352 8002 5500 Netherlands: +31 30 274 88 88 Norway: +47 22 591300

Poland: +48 22 619 66 54, +48 22 619 08 97

Portugal: 808 250 143 (in Portugal only), +351 21 330 3284

Romania: +40 21318 3606 Slovakia: +421 2 54 77 4 166 Slovenia: +386 41 650 500 Spain: +34 91 562 04 20

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Sweden: +46 08-331231112

Switzerland: 145

United Kingdom: 0870 600 6266 (in the UK only)

U.S.A. & Canada: +1 800 / 331-3148

All other countries: +1 651 / 632-6793 (Collect)

# Section 2: HAZARDS IDENTIFICATION

# 2.1. Classification of the substance or mixture Regulation (EC) No 1272/2008

Aspiration toxicity	Category 1 (H304)
Acute toxicity - Oral	Category 4 (H302)
Acute toxicity - Inhalation (Vapors)	Category 4 (H332)
Serious eye damage/eye irritation	Category 2 (H319)
Skin sensitization	Category 1B (H317)
Chronic aquatic toxicity	Category 1 (H410)
FLAMMABLE LIQUIDS	Category 3 (H226)

#### 2.2. Label elements

#### **Hazard pictograms**









Signal Word Danger

#### **Hazard Statements**

H226 - Flammable liquid and vapor

H302 - Harmful if swallowed

H304 - May be fatal if swallowed and enters airways

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H410 - Very toxic to aquatic life with long lasting effects

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

# **Precautionary Statements**

P261: Avoid breathing vapors.

P280 - Wear protective gloves and eye/face protection

P303+P361+P352: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Wash with plenty of soap and water.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician

P501: Dispose of contents/container as hazardous waste.

# 2.3. Other hazards

None of the ingredients in the product meets the criteria for being PBT or vPvB.

# Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

The product is a mixture, not a substance.

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Chemical name	EC-No	CAS-No	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Dimethoate	200-480-3	60-51-5	37.142	Self-reactive substance type F (H242) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Acute Tox. 4 (H332) Aquatic Chronic 1 (H410)	No data available
Cyclohexanone	203-631-1	108-94-1	40-60	Acute Tox. 4 (H332) Flam. Liq. 3 (H226)	01-2119453616-35
Petroleum naphtha, light aromatic	918-668-5	64742-95-6	5-15	Flam. Liq. 3(H226) STOT SE 3(H335) STOT SE 3(H336) Asp. Tox. 1 (H304) Aquatic Chronic 2 (H411)	01-2119455851-35
Maleic anydride	203-571-6	108-31-6	0.1-1	Acute Tox. 4 (H302) Skin Corr. 1B (H314) Resp. Sens. 1 (H334) Skin Sens. 1 (H317)	01-2119472428-31

#### **Additional Information**

For the full text of the H- and EUH- phrases mentioned in this Section, see Section 16

# **Section 4: FIRST AID MEASURES**

#### 4.1. Description of first aid measures

**Eye Contact** Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove

contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison

control center or doctor for further treatment advice.

**Skin Contact** Immediately flush with plenty of water while removing contaminated clothing and/or shoes,

and thoroughly wash with soap and water. In the case of skin irritation or allergic reactions

see a physician.

Inhalation Move to fresh air. If experiencing any discomfort, immediately remove from exposure. Light

cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambulance.

Ingestion Rinse mouth with water and afterwards drink plenty of water or milk. Do NOT induce

vomiting. If vomiting does occur, rinse mouth and drink fluids again.

# 4.2. Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed

The first symptom 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.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Indication of immediate medical attention and special treatment needed, if necessary

This product contains a cholinesterase inhibitor affecting the central and peripheral nervous systems and producing respiratory depression. Decontamination procedures such as whole body washing, gastric lavage and administration of activated charcoal are often required. If symptoms are present, administer atropine sulphate in large doses. Two to four mg intravenously or intramuscularly, as soon as possible. Repeat at 5 to 10 minute intervals until signs of atropinization appear. Maintain full atropinization until all organophosphate is metabolized. Obidoxime chloride (Toxogonin), alternatively pralidoxime chloride (2-PAM), may be administered as an adjunct to, but not a substitute for atropine, which is a symptomatic and often life-saving antidote. Treatment with oxime should be maintained as long as atropine sulphate is administered. At first sign of pulmonary edema, the patient should be given supplemental oxygen and treated symptomatically. Continued absorption may occur and relapse may occur after initial improvement. VERY CLOSE SUPERVISION

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OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS, DEPENDING ON THE SEVERITY OF POISONING.

# **Section 5: FIRE FIGHTING MEASURES**

#### 5.1. Extinguishing media

# Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Small Fire** Dry chemical, Carbon dioxide (CO<sub>2</sub>).

Large Fire Water spray, Foam.

# Unsuitable extinguishing media

Avoid heavy hose streams.

#### 5.2. Special hazards arising from the substance or mixture

The essential breakdown products are volatile, toxic, malodorous, irritant and inflammable compounds such as dimethyl sulphide. methyl mercaptan, sulphur dioxide, carbon monoxide, carbon dioxide and phosphorus pentoxide.

#### 5.3. Advice for firefighters

Cool containers / tanks with water spray. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Dike to prevent runoff. As in any fire, wear self-contained breathing apparatus and full protective gear.

# **Section 6: ACCIDENTAL RELEASE MEASURES**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### **Personal Precautions**

It is recommended to have a predetermined plan for the handling of spills. Empty, closable vessels for the collection of spills should be available.

In case of large spill (involving 10 tonnes of the product or more):

Observe all safety precautions when cleaning up spills. Use personal protection equipment. Depending on the magnitude of the spill this may mean wearing respirator, face mask or eye protection, chemical resistant clothing, gloves and rubber boots. Stop the source of the spill immediately if safe to do so. Keep unprotected persons away from the spill area.

For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

# For emergency responders

Use personal protection recommended in Section 8.

# 6.2. Environmental precautions

Contain the spill to prevent any further contamination of surface, soil or water. Wash waters must be prevented from entering surface water drains. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body.

#### 6.3. Methods and material for containment and cleaning up

#### **Methods for Containment** It is recommended to consider possibilities to prevent damaging effects of spills, such as

bunding or capping. Use non-sparking tools and equipment. If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should immediately be swept up or preferably vacuumed up using equipment with high efficiency final filter. Transfer to suitable containers. Clean area with detergent and much water. Absorb wash liquid onto inert absorbent such as universal binder, Fuller's earth, bentonite or other absorbent clay and collect in suitable containers. The used containers should be

properly closed and labelled.

If appropriate, surface water drains should be covered. Minor spills on the floor or other Methods for cleaning up impervious surface should be swept up or preferably vacuumed up using equipment with

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high efficiency final filter. Transfer to suitable containers. Clean area with damp cloth and/or strong industrial detergent with much water. Absorb wash liquid onto a suitable absorbent such as universal binder, attapulgite, bentonite or other absorbent clays and transfer contaminated absorbent to suitable containers. The used containers should be properly closed and labelled.

spills which soak into the ground should be dug up and transferred to suitable containers. in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal.

Large spills which soak into the ground should be dug up and transferred to suitable containers. Large spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal.

#### 6.4. Reference to other sections

See Section 8 "Exposure Controls/Personal Protection" for specific details. See section 13 for disposal information.

#### Section 7: HANDLING AND STORAGE

#### 7.1. Precautions for safe handling

#### Handling

In an industrial environment it is recommended to avoid all personal contact with the product, if possible by using closed systems with remote system control. Otherwise it is recommended to handle the material by mechanical means as much as possible. Adequate ventilation or local exhaust ventilation is required. The exhaust gases should be filtered or treated otherwise. For personal protection in this situation, see section 8.

Remove contaminated clothing and shoes. Wash thoroughly after handling. Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks. Do not discharge to the environment. Do not contaminate water when disposing of equipment wash waters. Collect all waste material and remains from cleaning equipment, etc., and dispose of as hazardous waste. See section 13 for disposal.

# Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

#### 7.2. Conditions for safe storage, including any incompatibilities

#### Storage

Storage temperature: 8-25°C.

Store in a cool dry place away from direct light. Protect from cold. Crystallisation may occur at temperatures below -10°C. Store in 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.

Packaging material

The product is degraded by fluorinated packaging materials.

# 7.3. Specific end use(s)

#### Specific Use(s)

The product is a registered pesticide which may only be used for the applications it is registered for, in accordance with a label approved by the regulatory authorities.

# Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

# Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1. Control parameters

Aromatic hydrocarbons: 100 ppm (Total hydrocarbon) Trimethyl benzene: 25 ppm (TLV-TWA, ACGIH)

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Chemical name	Furonean Union	The United Kingdom	France	Snain	Germany

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	,	1		,	VC131011 1
Cyclohexanone	TWA 10 ppm	STEL 20 ppm	TWA 10 ppm	TWA 10 ppm	-
108-94-1	TWA 40.8 mg/m <sup>3</sup>	STEL 82 mg/m <sup>3</sup>	TWA 40.8 mg/m <sup>3</sup>	TWA 41 mg/m <sup>3</sup>	
	STEL 20 ppm	TWA 10 ppm	STEL 20 ppm	STEL 20 ppm	
	STEL 81.6 mg/m <sup>3</sup>	TWA 41 mg/m <sup>3</sup>	STEL 81.6 mg/m <sup>3</sup>	STEL 82 mg/m <sup>3</sup>	
	S*	Skin		S*	
Maleic anydride	-	STEL 3 mg/m <sup>3</sup>	STEL 1 mg/m <sup>3</sup>	TWA 0.1 ppm	-
108-31-6		TWA 1 mg/m <sup>3</sup>	All**	TWA 0.4 mg/m <sup>3</sup>	
		Sen+		S+	
Chemical name	Italy	Portugal	The Netherlands	Finland	Denmark
Cyclohexanone	TWA 10 ppm	TWA 10 ppm	Huid*	TWA 10 ppm	TWA 10 ppm
108-94-1	TWA 40.8 mg/m <sup>3</sup>	TWA 40.8 mg/m <sup>3</sup>	STEL 50 mg/m <sup>3</sup>	TWA 41 mg/m <sup>3</sup>	TWA 41 mg/m <sup>3</sup>
	STEL 20 ppm	STEL 20 ppm		STEL 20 ppm	H*
	STEL 81.6 mg/m <sup>3</sup>	STEL 81.6 mg/m <sup>3</sup>		STEL 82 mg/m <sup>3</sup>	
	Pelle*	C(A3)		iho*	
		P*			
Maleic anydride	-	TWA 0.1 ppm	-	TWA 0.1 ppm	TWA 0.1 ppm
108-31-6		S+		TWA 0.41 mg/m <sup>3</sup>	TWA 0.4 mg/m <sup>3</sup>
		C(A4)		Ceiling 0.2 ppm	
				Ceiling 0.81 mg/m <sup>3</sup>	
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Dimethoate	-	-	TWA 0.2 mg/m <sup>3</sup>	-	-
60-51-5			STEL 0.6 mg/m <sup>3</sup>		
Cyclohexanone	H*	SS-C**	TWA 40 mg/m <sup>3</sup>	TWA 10 ppm	TWA 10 ppm
108-94-1	STEL 20 ppm	H*	STEL 80 mg/m <sup>3</sup>	TWA 40 mg/m <sup>3</sup>	TWA 40.8 mg/m <sup>3</sup>
	STEL 80 mg/m <sup>3</sup>	TWA 25 ppm		S*	STEL 20 ppm
	TWA 5 ppm	TWA 100 mg/m <sup>3</sup>		STEL 20 ppm	STEL 81.6 mg/m <sup>3</sup>
	TWA 20 mg/m <sup>3</sup>	STEL 50 ppm		STEL 80 mg/m <sup>3</sup>	Skin
		STEL 200 mg/m <sup>3</sup>			
Maleic anydride	STEL 0.2 ppm	SS-C**	TWA 0.5 mg/m <sup>3</sup>	TWA 0.2 ppm	TWA 0.01 ppm
108-31-6	STEL 0.8 mg/m <sup>3</sup>	S+	STEL 1 mg/m <sup>3</sup>	TWA 0.8 mg/m <sup>3</sup>	STEL 0.03 ppm
	TWA 0.1 ppm	TWA 0.1 ppm		A+	Sensitizer
	TWA 0.4 mg/m <sup>3</sup>	TWA 0.4 mg/m <sup>3</sup>		STEL 0.6 ppm	
	Sa/Sah**	STEL 0.1 ppm		STEL 2.4 mg/m <sup>3</sup>	
	Sh/Sah**	STEL 0.4 mg/m <sup>3</sup>	l		

Chemical name	European Union	The United Kingdom	France	Spain	Germany
Cyclohexanone	-	2	=	80	-
108-94-1				8	
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Chemical name Cyclohexanone	Austria -	Switzerland 100	Poland -	Norway -	Ireland -

**Derived No Effect Level (DNEL)** 

dermal Dimethoate: 0.001 mg/kg bw/day

Cyclohexanone: 10 mg/kg bw/day Aromatic hydrocarbons: 25 mg/kg bw/day

**INHALATION** Cyclohexanone: 100 mg/m<sup>3</sup>

Aromatic hydrocarbons: 150 mg/m<sup>3</sup>

**Predicted No Effect Concentration** 

(PNEC)

Freshwater Dimethoate: 0.0008 mg/l

Cyclohexanone: 0.0329 mg/l

8.2. Exposure controls

**Engineering measures** Apply technical measures to comply with the occupational exposure limits (if listed above).

When working in confined spaces (tanks, containers, etc.), make sure there is an adequate source of air for breathing and wear the recommended equipment. Ventilate all transport

vehicles prior to discharge.

Personal protective equipment

**Eye/Face Protection**Wear face mask rather than goggles or safety glasses. The possibility of eye contact should

be excluded. The work area and storage formulation area must have emergency eyewash

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and showers.

Hand Protection Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the

outside of gloves with soap and water before reuse. Check regularly for leaks.

Skin and Body Protection Wear appropriate chemical resistant clothing to prevent skin contact depending on the

extent of exposure. During most normal work situations where exposure to the material cannot be avoided for a limited time span, waterproof pants and apron of chemical resistant material or coveralls of polyethylene (PE) will be sufficient. Coveralls of PE must be discarded after use if contaminated. In cases of appreciable or prolonged exposure,

coveralls of barrier laminate may be required.

Respiratory Protection The product does not automatically present an airborne exposure concern during normal

handling. In the event of an accidental discharge of the material which produces a heavy vapour or mist, workers should put on officially approved respiratory protection equipment

with a universal filter type including particle filter.

**Environmental exposure controls** Do not release to the environment.

# **Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

9.1. Information on basic physical and chemical properties

Physical State Liquid Appearance Liquid

Odor Aromatic, Almond

Color Blue

Odor threshold No information available

pH 3.14 at 25°C (1% solution in water)

Melting point/freezing point < 0 °C

Boiling Point/Range Dimethoate : decomposes

Cyclohexanone: 156°C

Aromatic hydrocarbons: 155 - 181°C

Flash point 48 °C Seta Closed Cup Evaporation Rate Cyclohexanone : 0.3

Aromatic hydrocarbons: 0.15

Cyclohexanone: 0.3

Vapor pressure

Aromatic hydrocarbons : 0.15

Flammability (solid, gas) Not applicable

Flammability Limit in Air

 Upper flammability limit:
 Cyclohexanone : 9.4 vol%

Aromatic hydrocarbons : 7.0 vol%

Lower flammability limit: Cyclohexanone : 1 vol%

Aromatic hydrocarbons: 0.8 vol%
Dimethoate: 1.35 x 10-4 Pa at 25°C
Cyclohexanone: 0.47 kPa at 20°C

Aromatic hydrocarbons : 0.20 kPa at 20°C

0.71 kPa at 38°C Cyclohexanone : 3.4

Vapor density

Cyclohexanone: 3.4

Aromatic hydrocarbons: > 1

Specific gravity

No information available

Water solubility Dimethoate Water: 39.8 g/l (25°C)

**Solubility in other solvents** Dimethoate: cyclohexanone 1220 g/l (25°C)

n-heptane 0.242 g/l (25°C) methanol 1590 g/l (25°C) xylene 313 g/l (25°C)

Partition coefficient Dimethoate : log Kow = 0.704

Cyclohexanone : log Kow = 0.86 at 25°C Aromatic hydrocarbons : log Kow = 3.4 - 4.1

Autoignition temperature 310° C

Decomposition temperature

Viscosity, kinematic

No information available
No information available

Viscosity, dynamic 6.4 mPa.s at 20°C, 4.0 mPa.s at 40°C

**Explosive properties** Not explosive.

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Oxidizing properties Non-oxidizing.

9.2. Other information

Softening point
Molecular weight
VOC content (%)
Relative density
Bulk density
No information available

# **Section 10: STABILITY AND REACTIVITY**

#### 10.1. Reactivity

To our knowledge, the product has no special reactivities.

#### 10.2. Chemical stability

Dimethoate is stable for a long period at temperatures not exceeding 25°C. At higher temperatures decomposition will take place and lower the quality of the product.

The decomposition is dependent on time as well as temperature due to self-accelerating exothermic and autocatalytic reactions. The reactions involve rearrangements and polymerisation.

At higher temperatures the released heat can raise the temperature further and accelerate the decomposition.

Tests have shown that, if dimethoate is heated to and kept at 40°C for 2 weeks, the content of active ingredient will be lowered by 6% or more and after 20 weeks at 40°C the content of active ingredient halved.

#### **Explosion data**

Sensitivity to Mechanical Impact None known. Sensitivity to Static Discharge None known.

#### 10.3. Possibility of hazardous reactions

#### **Hazardous polymerization**

Hazardous polymerization does not occur.

#### **Hazardous reactions**

None under normal processing.

#### 10.4. Conditions to avoid

Heating can release hazardous gases.

#### 10.5. Incompatible materials

Strong oxidizing agents, Strong acids, Strong bases.

# 10.6. Hazardous decomposition products

See Section 5 for more information.

# **Section 11: TOXICOLOGICAL INFORMATION**

#### 11.1. Information on toxicological effects

# **Acute toxicity**

#### **Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

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LD50 Oral 550 mg/kg (rat) (Method OECD 425) > 2000 mg/kg (rat) (Method: OECD 402) LD50 Dermal

~ 3 mg/L 4 hr (rat) (Based on a similar product) (Method FIFRA 81.03) LC50 Inhalation

Skin corrosion/irritation

Serious eye damage/eye irritation Sensitization

Mutagenicity Carcinogenicity No skin irritation. (Method: OECD 404).

Moderately irritating to eyes. (Method: OECD 405).

Weakly sensitizing. (Method OECD 429)

The product contains no ingredients known to be mutagenic. The product contains no ingredients known to be carcinogenic.

Reproductive toxicity STOT - single exposure The product contains no ingredients known to have adverse effects on reproduction. No specific effects after single exposure have been observed.

STOT - repeated exposure

Dimethoate: : 25 ppm (2.5 mg/kg bw/day- minor cholinesterase inhibition was found),

90-day, rat

LOEL: ~ 40 mg/kg bw/day.

On contact, the first symptoms to appear may be irritation. Symptoms of cholinesterase **Symptoms** 

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.

This product presents an aspiration pneumonia hazard. **Aspiration hazard** 

# Section 12: ECOLOGICAL INFORMATION

# 12.1. Toxicity

**Ecotoxicity** 

The ecotoxicity of the product is measured as:

- Fish Bluegill sunfish (Lepomis macrochirus)	96-h LC50: > 100 mg/l
- Invertebrates Daphnids (Daphnia magna)	48-h EC50: 8.9 mg/l
- Algae Green algae (Pseudokirchneriella subcapitata)	72-h IC50: 246 mg/l
- Bees Honeybee (Apis mellifera)	48-h LC50, contact: 0.37

µg/bee

48-h LC50, oral: 0.29 µg/bee

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other
			aquatic invertebrates
Dimethoate	72 h EC50: = 282.3 mg/L	96 h LC50: = 26.11 mg/L (Cyprinus	48 h EC50: = 5.44 mg/L (Daphnia
	(Pseudokirchneriella subcapitata)	carpio) static 96 h LC50: = 6 mg/L	magna) 48 h EC50: 0.48 - 0.66
	96 h EC50: = 36 mg/L	(Lepomis macrochirus) static 96 h	mg/L (Daphnia magna) Static
	(Pseudokirchneriella subcapitata)	LC50: 4.1 - 9.3 mg/L	21-day NOEC: 0.04 mg/l
	static 72 h EC50: = 35 mg/L	(Oncorhynchus mykiss) static 96 h	
	(Pseudokirchneriella subcapitata)	LC50: = 340 mg/L (Poecilia	
		reticulata) static	

#### 12.2. Persistence and degradability

Dimethoate: Biodegradable in water. Degradation occurs both aerobically and anaerobically, biologically as well as abiologically.

# 12.3. Bioaccumulative potential

See section 9 for n-octanol/water partition coefficient.

Dimethoate. Does not bioaccumulate.

# 12.4. Mobility in soil

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# Mobility in soil

Dimethoate: Potentially high mobility in soil, but is relatively unstable. Degradation products are not mobile in soil.

#### 12.5. Results of PBT and vPvB assessment

None of the ingredients in the product meets the criteria for being PBT or vPvB.

#### 12.6. Other adverse effects

Chemical name	•	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Dimethoate		Group II Chemical	-	-

# **Section 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

# Waste from residues / unused products

Remaining quantities of the material and empty but unclean packaging should be regarded as hazardous waste. Dispose of as hazardous waste in compliance with local and national regulations. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### **Contaminated Packaging**

It is recommended to consider possible ways of disposal in the following order:

- 1. Reuse or recycling should first be considered. Reuse is prohibited except by the authorisation holder. If offered for recycling, containers must be emptied and triply rinsed (or equivalent). Do not discharge rinsing water to sewer systems.
- 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

#### IMDG/IMO

**14.1 UN/ID no** 1993

**14.2 Proper Shipping Name** Flammable liquid, n.o.s (cyclohexanone, alkyl(C3-C4)benzenes and dimethoate)

 14.3 Hazard class
 3

 14.4 Packing Group
 III

 14.5 Marine Pollutant
 Yes

**Environmental Hazard** Marine Pollutant

**14.6 Special Provisions**Do not release to the environment

**14.7** Transport in bulk according to The product is not transported in bulk by ship.

Annex II of MARPOL 73/78 and the

**IBC Code** 

# <u>RID</u>

**14.1 UN/ID no** 1993

**14.2 Proper Shipping Name** Flammable liquid, n.o.s (cyclohexanone, alkyl(C3-C4)benzenes and dimethoate)

14.3 Hazard class 3 14.4 Packing Group III

14.5 Environmental Hazard Marine Pollutant

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**14.6 Special Provisions**Do not release to the environment

ADR/RID

**14.1 UN/ID no** 1993

**14.2 Proper Shipping Name** Flammable liquid, n.o.s (cyclohexanone, alkyl(C3-C4)benzenes and dimethoate)

14.3 Hazard class 3 14.4 Packing Group III

14.5 Environmental Hazard Marine Pollutant

**14.6 Special Provisions**Do not release to the environment

ICAO/IATA

**14.1 UN/ID no** 1993

**14.2 Proper Shipping Name** Flammable liquid, n.o.s (cyclohexanone, alkyl(C3-C4)benzenes and dimethoate)

14.3 Hazard class 3 14.4 Packing Group

14.5 Environmental Hazard Marine Pollutant

**14.6 Special Provisions**Do not release to the environment

# **Section 15: REGULATORY INFORMATION**

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

#### **European Union**

#### Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

#### **Persistent Organic Pollutants**

Not Applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

DANGEROUS FOR THE ENVIRONMENT

FLAMMABLE LIQUIDS

#### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not Applicable

# **International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Dimethoate 60-51-5	Х	X	X	X	X	X	X	Х
Cyclohexanone 108-94-1	Х	Х	X	X	Х	X	X	Х
Petroleum naphtha, light aromatic 64742-95-6	X	Х	Х		X	X	Х	Х
Maleic anydride 108-31-6	Х	Х	Х	Х	Х	X	Х	Х

#### 15.2. Chemical safety assessment

A chemical safety assessment is not required to be included for this product.

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# **Section 16: OTHER INFORMATION**

#### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of H-Statements referred to under sections 2 and 3

H226 - Flammable liquid and vapor 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 eve damage

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

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

H410 - Very toxic to aquatic life with long lasting effects H411 - Toxic to aquatic life with long lasting effects

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

<u>Legend</u>

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS: CAS (Chemical Abstracts Service)

Ceiling: Maximum limit value:

**DNEL:** Derived No Effect Level (DNEL)

**EINECS**: EINECS (European Inventory of Existing Chemical Substances)

GHS: Globally Harmonized System (GHS)

IATA: International Air Transport Association (IATA)
ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods (IMDG)

LC50: LC50 (lethal concentration)

LD50: LD50 (lethal dose)

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

STEL: Short term exposure limit

**SVHC**: Substances of Very High Concern for Authorization:

**TWA:** time weighted average

vPvB: very Persistent and very Bioaccumulative

Classification procedure

Flammable liquid: test data Acute oral toxicity: test data

Acute Inhalation Toxicity: Read Across Data

Eye irritation: test data Sensitisation – skin: test data Aspiration hazard: Test data

Hazards to the aquatic environment, chronic: calculation method

**Revision date:** 2018-11-12

Reason for revision: Format Change.

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Version 1

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End of Safety Data Sheet