according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version 1.2

Revision Date: 02/25/2025

SDS Number: 50000663

Date of last issue: 12/03/2024 Date of first issue: 05/30/2024

SECTION 1. IDENTIFICATION

Product identifier

Product name CYGON® 400 g/L EC

Other means of identification

Product code 50000663

Chemical nature Mixture

Product Registration Num-

ber

35268

Recommended use of the chemical and restrictions on use

Recommended use Can be used as insecticide only.

Restrictions on useUse as recommended by the label.

Manufacturer or supplier's details

Manufacturer FMC Corporation

2929 WALNUT ST

PHILADELPHIA PA 19104

USA

Web: https://ag.fmc.com/ca/en

SDS-Info@fmc.com

Supplier Address FMC of Canada Limited

6755 Mississauga Road, Suite 204

Mississauga, ON L5N 7Y2

Canada

Emergency telephone

For leak, fire, spill or accident emergencies, call:

1 800 / 424-9300 (CHEMTREC - U.S.A.) 1 703 / 741-5970 (CHEMTREC - International) 1 703 / 527-3887 (CHEMTREC - Alternate)

Medical emergency:

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

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

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Flammable liquids : Category 3

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Eye irritation : Category 2A

Respiratory sensitization : Category 1

Skin sensitization : Sub-category 1B

Aspiration hazard : Category 1

GHS label elements

Hazard pictograms







Signal Word : DANGER

Hazard Statements : H226 Flammable liquid and vapor.

H302 + H332 Harmful if swallowed or if inhaled. H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing diffi-

culties if inhaled.

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/ equip-

ment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P261 Avoid breathing mist or vapors. P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of

the workplace.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

P284 Wear respiratory protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER/ doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

all contaminated clothing. Rinse skin with water.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

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

P331 Do NOT induce vomiting.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

Very toxic to aquatic life with long lasting effects.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
cyclohexanone	cyclohexanone	108-94-1	>= 30 - < 60 *
dimethoate (ISO)	dimethoate (ISO)	60-51-5	>= 30 - < 60 *
	•	64742-95-6	>= 5 - < 10 *
maleic anhydride	maleic anhy- dride	108-31-6	>= 0.1 - < 1 *

^{*} Actual concentration or concentration range is withheld as a trade secret

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this material safety data sheet to the doctor in attend-

ance.

Symptoms of poisoning may appear several hours later.

Do not leave the victim unattended.

If inhaled : 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 ambu-

lance.

If not breathing, give artificial respiration.

If unconscious, place in recovery position and seek medical

advice.

In case of skin contact : Take off all contaminated clothing immediately.

Wash contaminated clothing before re-use.

Wash off immediately with plenty of water for at least 15

minutes.

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 : If accidentally swallowed obtain immediate medical attention.

Rinse mouth with water. Drink 1 or 2 glasses of water.

Do not give milk or alcoholic beverages.

Keep respiratory tract clear. Do NOT induce vomiting.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and

delayed

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, labored breathing, nervousness, sweating,

watering of eyes, drooling or frothing of mouth and nose, muscle spasms and coma.

Active ingredient is a cholinesterase inhibitor affecting the central and peripheral nervous systems producing respiratory

depression. Harmful if swallowed or if inhaled.

May be fatal if swallowed and enters airways.

May cause an allergic skin reaction.

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficul-

ties if inhaled.

Protection of first-aiders : First Aid responders should pay attention to self-protection

and use the recommended protective clothing

Avoid inhalation, ingestion and contact with skin and eyes. If potential for exposure exists refer to Section 8 for specific

personal protective equipment.

Notes to physician

This product contains a reversible cholinesterase inhibitor. Atropine sulfate is antidotal. Support respiration as needed with removal of secretions, maintenance of a patent airway and, if necessary, artificial ventilation. If cyanosis is absent: Adults - start treatment by giving 2 mg atropine intravenously or intramuscularly, if necessary, and repeat with 0.4 - 2.0 mg atropine at 15 minute intervals until atropinization occurs (tachycardia, flushed skin, dry mouth, mydriasis); Children under 12 - initial dose = 0.05 mg/kg body weight and repeat dose = 0.02 - 0.05 mg/kg body weight. Start 2-PAM at the same time, following manufacturer's recommended dosages and administration. Morphine, reserpine,phenothiazines and theophylline are probably contraindicated.

At first sign of pulmonary edema, the patient should be given supplemental oxygen and treated symptomatically. Observe patient to ensure that these symptoms do not recur as atropinization wears off. If in eyes, instill one drop of homatropine. At first sign of pulmonary oedema the patient should be given supplementary oxygen and treated symptomatically. 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.

Decontamination procedures such as whole body washing, gastric lavage and administration of activated charcoal are often required.

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.

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

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

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 possible. Repeat at 5 to 10 minute intervals until signs of atropinisation appear and maintain full atropinisation until the chemical

product is fully metabolised.

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.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing

media

High volume water jet

Specific hazards during fire

fighting

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 prod-

ucts

Hydrogen cyanide

phosphorus oxides Nitrogen oxides (NOx)

Carbon oxides Sulfur oxides

Further information : 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 case of fire, cans should be stored sepa-

rately in closed containments.

Use a water spray to cool fully closed containers.

Special protective equipment:

for fire-fighters

Firefighters should wear protective clothing and self-contained

breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas.

Beware of vapors accumulating to form explosive concentra-

tions. Vapors can accumulate in low areas.

Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 12/03/2024

 1.2
 02/25/2025
 50000663
 Date of first issue: 05/30/2024

Only qualified personnel equipped with suitable protective

equipment may intervene.

For disposal considerations see section 13.

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up

Never return spills in original containers for re-use. Pick up and transfer the spilled material to a properly labeled container without creating dust. For spills on concrete or other non-porous surfaces, the area can be cleaned using a small quantity of soap and water. Do not allow the cleaning solution to enter drains. Use an inert absorbent material to soak up the cleaning solution and transfer it to the properly labeled container. When the spill occurs on soil, the only effective way to decontaminate the area is to remove the top 5 to 7 centimeters of soil.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion

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 vapors).

Keep away from open flames, hot surfaces and sources of

ignition.

Advice on safe handling

Avoid formation of aerosol.

Do not breathe vapors/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 ap-

plication 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 sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Melting of dimethoate may induce explosion and should never be used for emptying drums. Do not heat dimethoate above 35°C. Heat only indirectly and with solvent present. Local heating with for e.g. electric heating equipment or steam may significantly increase the risk of explosion and should never

take place.

Before further processing takes place, it is recommended to

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

solve dimethoate at ambient temperature in the solvent to be used in the formulation. If necessary, solvent preheated to 35°C can be used. Circulation of the solvent may speed up

the solving.

Wear personal protective equipment.

Conditions for safe storage : 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.

Materials to avoid : Do not store near acids.

Recommended storage tem-

perature

< 25 °C

Further information on stor-

age stability

No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
cyclohexanone	108-94-1	TWA	20 ppm 80 mg/m3	CA AB OEL
		STEL	50 ppm 200 mg/m3	CA AB OEL
		TWA	20 ppm	CA BC OEL
		STEL	50 ppm	CA BC OEL
		TWAEV	25 ppm 100 mg/m3	CA QC OEL
		TWA	20 ppm	ACGIH
		STEL	50 ppm	ACGIH
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified	64742-95-6	TWAEV	200 mg/m3	CA QC OEL
		TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
maleic anhydride	108-31-6	TWA	0.1 ppm 0.4 mg/m3	CA AB OEL
		TWA	0.1 ppm	CA BC OEL
		TWAEV (in- halable frac-	0.01 mg/m3	CA QC OEL

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 12/03/2024

 1.2
 02/25/2025
 50000663
 Date of first issue: 05/30/2024

tion and va- pour)		
TWA (Inhal-	0.01 mg/m3	ACGIH
able fraction		
and vapor)		

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sam- pling time	Permissible concentration	Basis
cyclohexanone	108-94-1	1,2- Cyclohex- anediol	Urine	End of shift at end of work- week	80 mg/l	ACGIH BEI
		Cyclohexa- nol	Urine	End of shift (As soon as possible after exposure ceases)	8 mg/l	ACGIH BEI
dimethoate (ISO)	60-51-5	Acetylcho- linesterase activity	In red blood cells	End of shift	70 % of an individual's baseline	ACGIH BEI
		Butyrylcho- linesterase activity	In serum or plasma	End of shift	60 % of an individual's baseline	ACGIH BEI

Personal protective equipment

Respiratory protection

No personal respiratory protective equipment normally re-

quired.

In the case of respirable dust, use self-contained breathing

apparatus.

The filter class for the respirator must be suitable for the max-

imum expected contaminant concentration

(gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-

contained breathing apparatus must be used.

Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release

(dust).

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. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

the product is used, such as the danger of cuts, abrasion,

and the contact time.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal processing

problems.

Ensure that eyewash stations and safety showers are close

to the workstation location.

Skin and body protection : Impervious clothing

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

Dust impervious protective suit

Remove and wash contaminated clothing before re-use.

Protective measures : Always have on hand a first-aid kit, together with proper in-

structions.

Plan first aid action before beginning work with this product.

Wear suitable protective equipment.

Ensure that eye flushing systems and safety showers are

located close to the working place.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Color : colorless

light yellow

Odor : bitter almond

Odor Threshold : not determined

pH : 3.12

(1% solution in water)

Melting point/freezing point : < 0 °C

Initial boiling point and boiling :

range

not determined

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

Flash point : ca. 48 °C

Method: closed cup

Flammability (liquids) : Sustains combustion

Upper explosion limit / Upper

flammability limit

not determined

Lower explosion limit / Lower

flammability limit

not determined

Vapor pressure : not determined

Relative vapor density : not determined

Density : 1.06 g/cm3 (20 °C)

Solubility(ies)

Water solubility : emulsifiable

Partition coefficient: n-

octanol/water

not determined

Autoignition temperature : 310 °C

Decomposition temperature : not determined

Viscosity

Viscosity, dynamic : ca. 6.4 mPa.s (20 °C)

ca. 4.0 mPa.s (40 °C)

Viscosity, kinematic : not determined

Explosive properties : Not explosive

Oxidizing properties : Non-oxidizing

Particle size : not determined

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reac- : No decomposition if stored and applied as directed.

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

tions Vapors may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Heating of the mixture will evolve flammable, toxic or harmful

and irritant vapours.

Incompatible materials : Strong alkalis, amines and strong oxidising compounds. The

product can corrode metals (but does not meet the criteria for

classification).

Hazardous decomposition

products

See subsection 5.2.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed or if inhaled.

Product:

Acute oral toxicity : LD50 (Rat): ca. 550 mg/kg

Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat): 3 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: FIFRA 81.03

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

Method: OECD Test Guideline 402

Components:

cyclohexanone:

Acute oral toxicity : LD50 (Rat): 1,890 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 6.2 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Assessment: The component/mixture is moderately toxic after

short term inhalation.

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

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

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

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Acute oral toxicity : LD50 (Rat, female): 3,492 mg/kg

Method: OECD Test Guideline 401

LD50 (Rat, male): 6,984 mg/kg Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat, male and female): > 6.193 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: no mortality

Acute dermal toxicity : LD50 (Rabbit, male and female): > 3,160 mg/kg

Assessment: The component/mixture is minimally toxic after

single contact with skin.

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

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

Skin corrosion/irritation

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

Product:

Method : OECD Test Guideline 404

Result : No skin irritation

Remarks : Based on data from a similar product.

Remarks : May cause skin irritation and/or dermatitis.

Components:

cyclohexanone:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

dimethoate (ISO):

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 404
Result : slight or no skin irritation.

GLP : yes

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Mild skin irritation

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:

Result : Moderate eye irritation
Method : OECD Test Guideline 405

Remarks : Based on data from a similar product.

Remarks : May cause irreversible eye damage.

Components:

cyclohexanone:

Result : Irreversible effects on the eye

Method : Hen egg chorioallantoic membrane bioassay

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

dimethoate (ISO):

Species : Rabbit

Result : Mild eye irritation
Assessment : Mild eye irritation
Method : EPA OPP 81-4

Species: RabbitResult: Eye irritationAssessment: Irritating to eyes.

Method : OECD Test Guideline 405

GLP : yes

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Species : Rabbit

Result : No eye irritation

maleic anhydride:

Species : Rabbit

Result : Irreversible effects on the eye

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Product:

Method : OECD Test Guideline 429

Result : Probability or evidence of low to moderate skin sensitization

rate in humans

Remarks : Causes sensitization.

Components:

dimethoate (ISO):

Test Type : Maximization Test

Routes of exposure : Dermal Species : Guinea pig

Assessment : Not a skin sensitizer.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitization.

GLP : yes

Test Type : Local lymph node test
Assessment : Not a skin sensitizer.
Method : OECD Test Guideline 429

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

Result : Does not cause skin sensitization.

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Test Type : Maximization Test Routes of exposure : Skin contact Species : Guinea pig

Method : OECD Test Guideline 406
Result : Not a skin sensitizer.

maleic anhydride:

Test Type : Local lymph node assay (LLNA)

Routes of exposure : Dermal Species : Mouse

Assessment : The product is a skin sensitizer, sub-category 1A.

Method : OECD Test Guideline 429

Germ cell mutagenicity

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

Product:

Germ cell mutagenicity -

Weight of evidence does not support classification as a germ

Assessment

cell mutagen.

Components:

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 (vapor) Method: OECD Test Guideline 475

Result: negative

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

Result: negative

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: 1.2 02/25/2025

SDS Number: 50000663

Date of last issue: 12/03/2024 Date of first issue: 05/30/2024

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.

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

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Genotoxicity in vitro : Test Type: in vitro DNA damage and/or repair study

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Result: negative

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 (male and female) Application Route: Inhalation

Result: negative

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

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.

Product:

Carcinogenicity - Assessment

Weight of evidence does not support classification as a car-

cinogen

Components:

cyclohexanone:

Species : Rat
Application Route : Oral
Exposure time : 104 week

Exposure time : 104 weeks

Dose : (462 and 910 mg/kg/d

LOAEL : 3,300 ppm Result : positive

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Carcinogenicity - Assess-

ment

: Limited evidence of carcinogenicity in animal studies

maleic anhydride:

Species : Rat, male and female

Application Route : Oral Exposure time : 2 Years

Dose : 0, 10, 32, 100 mg/kg body weight

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

NOEL : 10 mg/kg body weight
Method : OECD Test Guideline 451

Result : negative

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

Reproductive toxicity

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

Product:

Reproductive toxicity - As-

sessment

: Weight of evidence does not support classification for repro-

ductive toxicity

Components:

cyclohexanone:

Effects on fertility : Test Type: Two-generation study

Species: Rat

Application Route: inhalation (vapor)

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 fetal 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 - As-

sessment

Animal testing did not show any effects on fertility.

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

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

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

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Effects on fertility : Test Type: Three-generation study

Species: Rat

Application Route: inhalation (vapor)
Fertility: NOAEC Mating/Fertility: 7.5 mg/l

Result: negative

Remarks: Based on data from similar materials

Effects on fetal development : Species: Mouse

Application Route: inhalation (vapor)

General Toxicity Maternal: LOAEC: 500 part per million

Symptoms: Maternal effects.

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 fetal 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-fetal toxicity.: NOAEL: >= 140 mg/kg body weight

Method: OECD Test Guideline 414

Result: negative

Reproductive toxicity - As-

sessment

Weight of evidence does not support classification for repro-

ductive toxicity

STOT-single exposure

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

Product:

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

Components:

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

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

dizziness.

STOT-repeated exposure

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

Components:

cyclohexanone:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

dimethoate (ISO):

Target Organs : Nervous system

Assessment : Causes damage to organs through prolonged or repeated

exposure.

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

maleic anhydride:

Routes of exposure : 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:

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

dimethoate (ISO):

Species : Rat

LOAEL : 2.5 mg/kg bw/day

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 02/25/2025 50000663 Date of first issue: 05/30/2024 1.2

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

cholinesterase inhibition Symptoms

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Species Rat, male and female

NOAEC 0.8 - 0.9 mg/l **Application Route** Inhalation Test atmosphere vapor

Remarks Based on data from similar materials

Species Rat, male NOAEL 600 mg/kg

Application Route Oral

Based on data from similar materials Remarks

maleic anhydride:

Species Dog, male and female

NOAEL 60 mg/kg Application Route Oral 90 d Exposure time

0, 20, 40, or 60 mg/kg bw/day Dose 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**

Rat, male and female Species

LOAEC 0.0011 mg/l Application Route : Inhalation Exposure time 6 months

Target Organs Respiratory system

Aspiration toxicity

May be fatal if swallowed and enters airways.

Product:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

Components:

dimethoate (ISO):

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

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks : Solvents may degrease the skin.

Components:

dimethoate (ISO):

Remarks : Dimethoate is rapidly absorbed and excreted following oral

administration. It is extensively metabolized. Dimethoate and its metabolites are primarily found in the liver and kidneys.

There is no evidence for accumulation.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): > 100 mg/l

Exposure time: 96 h

Remarks: (Data on the product itself)

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 8.9 mg/l

Exposure time: 48 h

Remarks: (Data on the product itself)

EC50 (Daphnia magna (Water flea)): 2.0 mg/l

Exposure time: 48 h Remarks: Active ingredient

NOEC (Daphnia magna (Water flea)): 0.04 mg/l

Exposure time: 21 Days Remarks: Active ingredient

Toxicity to algae/aquatic

plants

IC50 (Pseudokirchneriella subcapitata (green algae)): 246

mg/l

Exposure time: 72 h

Remarks: (Data on the product itself)

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): 31 mg/kg dry weight

(d.w.)

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

Exposure time: 14 d

Remarks: Information refers to the main ingredient.

Toxicity to terrestrial organ-

isms

LC50 (Apis mellifera (bees)): 0.29 µg/bee

Exposure time: 48 h

End point: Acute oral toxicity

Remarks: (Data on the product itself)

LC50 (Apis mellifera (bees)): 0.37 µg/bee

Exposure time: 48 h

End point: Acute contact toxicity Remarks: (Data on the product itself)

LD50 (Colinius virginianus): 10.5 mg/kg

Remarks: Active ingredient

Components:

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

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

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version 1.2

Revision Date: 02/25/2025

SDS Number: 50000663

Date of last issue: 12/03/2024 Date of first issue: 05/30/2024

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

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): 0.4 mg/l

Exposure time: 21 d

NOEC (Cyprinodon variegatus (sheepshead minnow)): 2.4

mg/l

Test Type: Early-life Stage

GLP: yes

NOEC (Oncorhynchus mykiss (rainbow trout)): 1.25 mg/l

Test Type: Early Life-Stage

Method: OECD Test Guideline 210

GLP: yes

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

LOEC (Pimephales promelas (fathead minnow)): 96 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 229

GLP: yes

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.04 mg/l

Exposure time: 21 d

NOEC (Americamysis bahia (mysid shrimp)): 0.14 mg/l

Exposure time: 32 d

Test Type: flow-through test

GLP: yes

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): 31 mg/kg

Exposure time: 14 d

Method: OECD Test Guideline 207

GLP: yes

NOEC (Eisenia fetida (earthworms)): 2.87 mg/kg

Exposure time: 28 d End point: reproduction

GLP: yes

Toxicity to terrestrial organ-

isms

LD50 (Anas platyrhynchos (Mallard duck)): 44 mg/kg

End point: Acute oral toxicity

Method: US EPA Test Guideline OPPTS 850.2100

NOEC (Anas platyrhynchos (Mallard duck)): 35.4 ppm

End point: Reproduction Test Method: OECD Test Guideline 206

GLP: yes

LD50 (Colinus virginianus (Bobwhite quail)): 17.3 mg/kg

End point: Acute oral toxicity

Method: EPA OPP 71-2 (Avian Dietary Toxicity Test)

GLP: yes

NOEC (Colinus virginianus (Bobwhite quail)): 10.1 ppm

End point: Reproduction Test Method: OECD Test Guideline 206

GLP: yes

LD50 (Apis mellifera (bees)): 12 µg/bee End point: Acute contact toxicity

Method: OECD Test Guideline 214

GLP: yes

LD50 (Apis mellifera (bees)): 4 µg/bee

End point: Acute oral toxicity Method: OECD Test Guideline 213

GLP: yes

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Toxicity to fish : NOEC (Oncorhynchus mykiss (rainbow trout)): 4.5 mg/l

Exposure time: 96 h
Test Type: semi-static test

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

LL50 (Pimephales promelas (fathead minnow)): 8.2 mg/l

Exposure time: 96 h
Test Type: semi-static test

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EL50 (Daphnia magna (Water flea)): 4.5 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

EL50 (Pseudokirchneriella subcapitata (microalgae)): 3.1 mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to fish (Chronic tox-

icity)

NOELR (Pimephales promelas (fathead minnow)): 2.6 mg/l

Exposure time: 14 d

Method: OECD Test Guideline 204

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOELR (Daphnia magna (Water flea)): 2.6 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Toxicity to microorganisms : EC50 (Tetrahymena pyriformis): 15.41 mg/l

Exposure time: 40 h

Test Type: Growth inhibition

Remarks: The value is given based on a SAR/AAR approach

using OECD Toolbox, DEREK, VEGA QSAR models

(CAESAR models), etc.

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

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

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

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

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 daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 10 mg/l

Exposure time: 21 d

Toxicity to microorganisms : EC10 (Pseudomonas putida): 44.6 mg/l

Exposure time: 18 h Method: DIN 38 412 Part 8

Persistence and degradability

Components:

cyclohexanone:

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301F

dimethoate (ISO):

Biodegradability : Result: Not readily biodegradable.

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha -unspecified:

Biodegradability : Concentration: 49.2 mg/l

Result: Inherently biodegradable. Biodegradation: 77.05 %

Exposure time: 28 d

Method: OECD Test Guideline 301F

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

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 02/25/2025 50000663 Date of first issue: 05/30/2024 1.2

Bioaccumulative potential

Components:

cyclohexanone:

Partition coefficient: n-

octanol/water

log Pow: 0.86 (25 °C)

dimethoate (ISO):

Bioaccumulation Species: Salmo gairdneri

Bioconcentration factor (BCF): > 1,000

Remarks: The product/substance has a potential to bioaccu-

mulate.

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

maleic anhydride:

Bioaccumulation Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

log Pow: -2.61

Mobility in soil

Components:

dimethoate (ISO): Distribution among environ-

mental compartments

Remarks: Highly mobile in soils

Stability in soil Remarks: Not expected to adsorb on soil.

Other adverse effects

Product:

Additional ecological infor-

mation

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 infor-

mation

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal 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.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 1993

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

(Cyclohexanone, Solvent naphtha (petroleum), light aromatic,

Dimethoate)

Class : 3
Packing group : III
Labels : 3
Environmentally hazardous : yes

IATA-DGR

UN/ID No. : UN 1993

Proper shipping name : Flammable liquid, n.o.s.

(Cyclohexanone, Solvent naphtha (petroleum), light aromatic,

Dimethoate)

366

Class : 3 Packing group : III

Labels : Flammable Liquids

Packing instruction (cargo :

aircraft)

Packing instruction (passen: 355

ger aircraft)

Environmentally hazardous : yes

IMDG-Code

UN number : UN 1993

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

(Cyclohexanone, Solvent naphtha (petroleum), light aromatic,

Dimethoate)

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

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

TDG

UN number : UN 1993

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

(Cyclohexanone, Solvent naphtha (petroleum), light aromatic,

Dimethoate)

Class : 3
Packing group : III
Labels : 3
ERG Code : 128
Marine pollutant : no

Remarks : Display "inhalation hazard" mark on package in accordance

with TDG 4.23.

Special precautions for user

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

SECTION 15. REGULATORY INFORMATION

NPRI Components : Solvent naphtha (petroleum), light arom.; Low boiling point

naphtha -unspecified maleic anhydride

The ingredients 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

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 12/03/2024

 1.2
 02/25/2025
 50000663
 Date of first issue: 05/30/2024

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

Canadian lists

No substances are subject to a Significant New Activity Notification.

PMRA/PCPA Information

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. The following is the hazard information required on the pest control product label:, Read the label, authorized under the Pest Control Products Act, prior to using or handling the pest control product

CAUTION

Avoid breathing dust or spray mist., Avoid contact with skin, eyes and clothing., Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet., Very toxic to aquatic life with long lasting effects., There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)

CA AB OEL : Canada. Alberta, Occupational Health and Safety Code (table

2: OEL)

CA BC OEL : Canada. British Columbia OEL

CA QC OEL : Québec. Regulation respecting occupational health and safe-

ty, Schedule 1, Part 1: Permissible exposure values for air-

borne contaminants

ACGIH / TWA : 8-hour, time-weighted average ACGIH / STEL : Short-term exposure limit

CA AB OEL / TWA : 8-hour Occupational exposure limit
CA AB OEL / STEL : 15-minute occupational exposure limit

CA BC OEL / TWA : 8-hour time weighted average CA BC OEL / STEL : short-term exposure limit

CA QC OEL / TWAEV : Time-weighted average exposure value

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

Version Revision Date: SDS Number: Date of last issue: 12/03/2024 1.2 02/25/2025 50000663 Date of first issue: 05/30/2024

Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. You can contact FMC Corporation to insure that this document is the most current available from FMC Corporation. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. The user is responsible for determining whether the product is fit for a particular purpose and suitable for the user's conditions and methods of use. Since the conditions and methods of use are beyond the control of FMC Corporation, FMC Corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

CA / EN

Prepared by:

FMC Corporation

FMC and the FMC Logo are trademarks of FMC Corporation and/or an affiliate.

© 2021-2025 FMC Corporation. All Rights Reserved.

according to the Hazardous Products Regulations



CYGON® 400 g/L EC

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 12/03/2024

 1.2
 02/25/2025
 50000663
 Date of first issue: 05/30/2024

End of Material Safety Data Sheet