SAFETY DATA SHEET



Date of issue/Date of revision 22 August 2024

Version 8

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

Product code : 00153454

Product name : SIGMA ECOFLEET 290 REDBROWN

Other means of

identification

: Not available.

Product type : Liquid.

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

Product use : Antifouling products

Professional applications, Used by spraying.

Uses advised against: Product is not intended, labelled or packaged for consumer use.

Supplier's details : PPG Coatings (Thailand) Co., Ltd.

15 Rama 9 Road, Kwaeng Huamark, Khet Bangkapi, Bangkok 10240 Thailand

T: 662-319-4190 #224 F: 662-319-4189

Emergency telephone number (with hours of

operation)

: CHEMTREC 001-800-13-203-9987 (CCN 17704)

Section 2. Hazards identification

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY (oral) - Category 4
ACUTE TOXICITY (dermal) - Category 5
ACUTE TOXICITY (inhalation) - Category 4
SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

SKIN SENSITIZATION - Category 1B CARCINOGENICITY - Category 2

AQUATIC HAZARD (ACUTE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 1

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Section 2. Hazards identification

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 6.4%

Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 13.5%

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 23.9%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 8%

GHS label elements

Hazard pictograms











Version 8

Signal word

Hazard statements

: Danger

: Mammable liquid and vapor.

Harmful if swallowed or if inhaled.

May be harmful in contact with skin.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing cancer.

Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves, protective clothing and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use nonsparking tools. Take action to prevent static discharges. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response

: Collect spillage. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage

: Store locked up. Store in a well-ventilated place. Keep cool.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

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Product name SIGMA ECOFLEET 290 REDBROWN

Section 2. Hazards identification

Other hazards which do not : Prolonged or repeated contact may dry skin and cause irritation.

result in classification

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

CAS number : Not applicable.

Ingredient name	%	CAS number
dicopper oxide	25- <50	1317-39-1
xylene	10- <20	1330-20-7
rosin	10- <20	8050-09-7
zinc oxide	10- <20	1314-13-2
4-methylpentan-2-one	5- <10	108-10-1
Propane, 1-(ethenyloxy)-2-methyl-, polymer with chloroethene	5- <10	25154-85-2
diuron (ISO)	3 - <5	330-54-1
ethylbenzene	1- <3	100-41-4
Talc , not containing asbestiform fibres	1- <3	14807-96-6
copper oxide	1- <3	1317-38-0
copper	0.3 - <1	7440-50-8

Occupational exposure limits, if available, are listed in Section 8.

SUB codes represent substances without registered CAS Numbers.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with running

water for at least 15 minutes, keeping eyelids open. Seek immediate medical

attention.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognized skin cleanser. Do NOT use solvents or thinners.

Ingestion: If swallowed, seek medical advice immediately and show this container or label.

Keep person warm and at rest. Do NOT induce vomiting.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Farmful if inhaled.

Skin contact: May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.

May cause an allergic skin reaction.

Ingestion : Harmful if swallowed.

Over-exposure signs/symptoms

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Product name SIGMA ECOFLEET 290 REDBROWN

Section 4. First aid measures

Eye contact : Adverse symptoms may include the following:

> pain watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

pain or irritation

redness drvness cracking

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

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

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it

is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

: Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

Specific hazards arising

from the chemical

: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products Decomposition products may include the following materials:

carbon oxides nitrogen oxides

halogenated compounds metal oxide/oxides

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Section 5. Fire-fighting measures

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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Section 7. Handling and storage

Precautions for safe handling

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

including any incompatibilities

Conditions for safe storage, : Store between the following temperatures: 0 to 35°C (32 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
øicopper oxide	ACGIH TLV (United States, 7/2023).
	[copper fume]
	TWA: 0.2 mg/m³ 8 hours. Form: Fume
xylene	Ministry of Labor (Thailand, 8/2017).
	[xylene (o-, m-, p- isomers)]
	TWA: 100 ppm 8 hours.
rosin	ACGIH TLV (United States, 7/2023). [resin
	acids] Skin sensitizer. Inhalation
	sensitizer.
	TWA: 0.001 mg/m³, (as total Resin acids) 8
	hours. Form: Inhalable fraction
zinc oxide	Ministry of Labor (Thailand, 8/2017).
	TWA: 5 mg/m³ 8 hours. Form: Fume
	TWA: 5 mg/m³ 8 hours. Form: Respirable
	dust
	TWA: 15 mg/m³ 8 hours. Form: inhalable
	dust
4-methylpentan-2-one	Ministry of Labor (Thailand, 8/2017).
	TWA: 100 ppm 8 hours.

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Section 8. Exposure controls/personal protection

diuron (ISO) Ministry of Labor (Thailand, 8/2017).

TWA: 10 mg/m³ 8 hours.

ethylbenzene Ministry of Labor (Thailand, 8/2017).

TWA: 100 ppm 8 hours.

Talc , not containing asbestiform fibres

Ministry of Labor (Thailand, 8/2017).

TWA: 2 mg/m³ 8 hours. Form: Respirable

dust

copper oxide ACGIH TLV (United States, 7/2023).

[copper fume]

TWA: 0.2 mg/m³ 8 hours. Form: Fume copper ACGIH TLV (United States, 7/2023).

[copper dusts and mists]

TWA: 1 mg/m³, (as Cu) 8 hours. Form:

Dust and mist

ACGIH TLV (United States, 7/2023).

[copper fume]

TWA: 0.2 mg/m³ 8 hours. Form: Fume

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye protection

Skin protection

Hand protection

: Chemical splash goggles and face shield.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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Section 8. Exposure controls/personal protection

Gloves : butyl rubber

Body protection Personal protective equipment for the body should be selected based on the task

being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static

discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be

selected based on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

: Respirator selection must be based on known or anticipated exposure levels, the Respiratory protection

hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is

necessary.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Brownish-red. Odor : Characteristic. **Odor threshold** : Not available. pH : insoluble in water.

Melting point : May start to solidify at the following temperature: -84.7°C (-120.5°F) This is based

on data for the following ingredient: 4-methylpentan-2-one. Weighted average:

-91.18°C (-132.1°F)

: >37.78°C (>100°F) **Boiling point**

: Closed cup: 24°C (75.2°F) Flash point

Evaporation rate : Highest known value: 1.7 (4-methylpentan-2-one) Weighted average:

1.12compared with butyl acetate

Flammability (solid, gas)

Lower and upper explosive

(flammable) limits

: Greatest known range: Lower: 1.4% Upper: 7.5% (4-methylpentan-2-one)

: Highest known value: 2.1 kPa (15.8 mm Hg) (at 20°C) (4-methylpentan-2-one). Vapor pressure

Weighted average: 1.37 kPa (10.28 mm Hg) (at 20°C)

Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.61 (Air = 1) Vapor density

1.76 Relative density

Media Result Solubility(ies)

: liquid

cold water Not soluble

Partition coefficient: n-

octanol/water

Not applicable.

Auto-ignition temperature : Lowest known value: 432°C (809.6°F) (xylene).

Decomposition temperature: Stable under recommended storage and handling conditions (see Section 7).

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Section 9. Physical and chemical properties

Viscosity : Kinematic (40°C): >21 mm²/s

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: The product is stable.

Possibility of hazardous reactions

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: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition

products.

Incompatible materials: Keep away from the following materials to prevent strong exothermic reactions:

oxidizing agents, strong alkalis, strong acids.

Hazardous decomposition products

: Depending on conditions, decomposition products may include the following materials: carbon oxides nitrogen oxides halogenated compounds metal oxide/

oxides

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
dicopper oxide	LC50 Inhalation Dusts and mists	Rat	3.34 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	500 mg/kg	-
xylene	LD50 Dermal	Rabbit	1.7 g/kg	-
	LD50 Oral	Rat	4.3 g/kg	-
rosin	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	7600 mg/kg	-
zinc oxide	LC50 Inhalation Dusts and mists	Rat	>5700 mg/m ³	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
4-methylpentan-2-one	LC50 Inhalation Vapor	Rat	11 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	2.08 g/kg	-
diuron (ISO)	LD50 Dermal	Rat	>5 g/kg	-
	LD50 Oral	Rat	1 g/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	17.8 g/kg	-
	LD50 Oral	Rat	3.5 g/kg	-
copper oxide	LD50 Oral	Rat	>2000 mg/kg	-
copper	LC50 Inhalation Dusts and mists	Rat	>5.11 mg/l	4 hours

Conclusion/Summary

: There are no data available on the mixture itself.

Irritation/Corrosion

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Product name SIGMA ECOFLEET 290 REDBROWN

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
x ylene	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	

Conclusion/Summary

Skin
: There are no data available on the mixture itself.
Eyes
: There are no data available on the mixture itself.
Respiratory
: There are no data available on the mixture itself.

Sensitization

Conclusion/Summary

Skin : There are no data available on the mixture itself.Respiratory : There are no data available on the mixture itself.

Mutagenicity

Conclusion/Summary: There are no data available on the mixture itself.

Carcinogenicity

Conclusion/Summary: There are no data available on the mixture itself.

Reproductive toxicity

Conclusion/Summary: There are no data available on the mixture itself.

Teratogenicity

Conclusion/Summary: There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
4-methylpentan-2-one	Category 3	-	Narcotic effects
Talc , not containing asbestiform fibres	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	•	Route of exposure	Target organs
diuron (ISO)	Category 2	-	-
ethylbenzene	Category 2	-	hearing organs

Aspiration hazard

Name	Result
4-methylpentan-2-one	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 2 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Not available.

Potential acute health effects

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Product name SIGMA ECOFLEET 290 REDBROWN

Section 11. Toxicological information

Eye contact : Causes serious eye damage.

Inhalation : Farmful if inhaled.

Skin contact : May be harmful in contact with skin. Causes skin irritation. Defatting to the skin.

May cause an allergic skin reaction.

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness dryness cracking

blistering may occur

Ingestion : Adverse symptoms may include the following:

stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/

or dermatitis. Once sensitized, a severe allergic reaction may occur when

subsequently exposed to very low levels.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

Mutagenicity : No known significant effects or critical hazards.Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

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Section 11. Toxicological information

Route	ATE value
Ø ral	1191.2 mg/kg
Dermal	2922.05 mg/kg
Inhalation (vapors)	40.29 mg/l
Inhalation (dusts and mists)	3.02 mg/l

Other information

Prolonged or repeated contact may dry skin and cause irritation. Sanding and grinding dusts may be harmful if inhaled. Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
dicopper oxide	LC50 0.003 mg/l	Fish	96 hours
zinc oxide	Acute EC50 0.17 mg/l	Algae	72 hours
	Acute EC50 0.481 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Chronic NOEC 0.017 mg/l Fresh water	Algae	72 hours
4-methylpentan-2-one	Acute LC50 >179 mg/l	Fish	96 hours
diuron (ISO)	Acute EC50 0.031 mg/l	Algae	72 hours
	Acute EC50 0.022 mg/l	Algae	96 hours
	Acute EC50 0.018 mg/l	Aquatic plants	72 hours
	Acute EC50 1.4 mg/l	Daphnia	48 hours
	Acute LC50 14.7 mg/l	Fish	96 hours
	Chronic NOEC 0.0032 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 0.56 mg/l	Daphnia	21 days
	Chronic NOEC 0.41 mg/l	Fish	28 days
ethylbenzene	Acute EC50 1.8 mg/l Fresh water	Daphnia	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Ceriodaphnia dubia	-
copper	Acute LC50 810 ppb	Fish	96 hours
	Chronic EC10 8.1 µg/l	Daphnia - <i>Daphnia magna</i> - Neonate	21 days

Conclusion/Summary

: There are no data available on the mixture itself.

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
	OECD 301F -	83 % - Readily - 28 days 79 % - Readily - 10 days	-	-

Conclusion/Summary

: There are no data available on the mixture itself.

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Product name SIGMA ECOFLEET 290 REDBROWN

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
x ylene	-	-	Readily
4-methylpentan-2-one	-	-	Readily
ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
x ylene	3.12	7.4 to 18.5	Low
rosin	1.9 to 7.7	-	High
4-methylpentan-2-one	1.9	-	Low
diuron (ISO)	2.84	14.13	Low
ethylbenzene	3.6	79.43	Low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3
Packing group	III	III	III

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Product code 00153454 Date of issue 22 August 2024 **Version 8 Product name SIGMA ECOFLEET 290 REDBROWN Section 14. Transport information** Yes. The environmentally **Environmental** Yes. The environmentally Yes. hazards hazardous substance mark is hazardous substance mark is not required. not required. **Marine pollutant** Not applicable. (dicopper oxide) Not applicable.

Additional information

substances

UN : None identified.

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

: The environmentally hazardous substance mark may appear if required by other transportation **IATA**

regulations.

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

Transport in bulk according: Not applicable.

to IMO instruments

Section 15. Regulatory information

Harmful Chemicals List

Safety, health and environmental regulations specific for the product

: Listed

: No known specific national and/or regional regulations applicable to this product (including its ingredients).

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 16. Other information

History

Date of issue/Date of

Date of previous issue

: 22 August 2024

revision

5/17/2021

Version : 8 Prepared by : EHS

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Section 16. Other information

Key to abbreviations

: ADN = European Provisions concerning the International Carriage of Dangerous

Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of

Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

RID = The Regulations concerning the International Carriage of Dangerous Goods

by Rail

UN = United Nations

▼ Indicates information that has changed from previously issued version.

Notice to reader

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