according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 09/04/2023 10622383-00010 Date of first issue: 07/09/2013 2.18

SECTION 1. IDENTIFICATION

: ENGINE WASH, Concentrated, 20 L Product name

Product code 893.01320

Other means of identification: No data available

Manufacturer or supplier's details

Company name of supplier Würth Canada Limited

345 Hanlon Creek Blvd Address

GUELPH, ON N1C 0A1

Telephone : +1 (905) 564 6225

+1 (905) 564 3671 Telefax

Emergency telephone Emergencies involving a spill, fire, explosion or exposure:

> CHEMTREC (24/7): 1-800-424-9300 Transport related emergencies:

CANUTEC (24/7): 1-613-996-6666 or * 666 (cell)

Urgences impliquant un déversement, incendie, explosion ou

exposition:

CHEMTREC (24/7): 1-800-424-9300

Urgences liées au transport:

CANUTEC (24/7): 1-613-996-6666 ou * 666 (cellulaire)

E-mail address prodsafe@wurth.ca

Recommended use of the chemical and restrictions on use

Recommended use Cleaning agent

Detergent

Restrictions on use Not applicable

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Skin irritation Category 2

Eye irritation Category 2A

GHS label elements

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

Hazard pictograms :

<u>(!</u>)

Signal Word : Warning

Hazard Statements : H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary Statements : Prevention:

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves, eye protection and face protec-

tion.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of 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.

P332 + P313 If skin irritation occurs: Get medical attention. P337 + P313 If eye irritation persists: Get medical attention. P362 + P364 Take off contaminated clothing and wash it before

reuse.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	Common	CAS-No.	Concentration (% w/w)
	Name/Synonym		
Sodium etasulfate	Sulfuric acid, mono(2- ethylhexyl) es- ter, sodium salt (1:1)	126-92-1	>= 5 - < 10 *
withtriethanolamine, di-	hydroxyethyl)-N-	94095-35-9	>= 5 - < 10 *
2,2',2"-Nitrilotriethanol	Triethanolamine	102-71-6	>= 1 - < 5 *
Alcohols, C9-16, eth- oxylated	Ethoxylated C9- 16 alcohols	97043-91-9	>= 1 - < 5 *

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

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact : In case of contact, immediately flush skin with plenty of water

for at least 15 minutes while removing contaminated clothing

and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention.

If swallowed : If swallowed, DO NOT induce vomiting.

Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Most important symptoms

and effects, both acute and

delayed

Causes skin irritation.

Causes serious eye irritation.

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

and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

Specific hazards during fire

fighting

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

ucts

Metal oxides Carbon oxides

Nitrogen oxides (NOx)

Sulfur oxides

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 09/04/2023 10622383-00010 Date of first issue: 07/09/2013 2.18

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

Special protective equipment :

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec: :

tive equipment and emer-

gency procedures

Use personal protective equipment.

Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

Environmental precautions Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g., by containment or

oil barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for

containment and cleaning up

Soak up with inert absorbent material.

For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine

which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation Use only with adequate ventilation.

Advice on safe handling Do not get on skin or clothing.

Avoid inhalation of vapor or mist.

Do not swallow. Do not get in eyes.

Wash skin thoroughly after handling.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as-

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

sessment

Take care to prevent spills, waste and minimize release to the

environment.

Conditions for safe storage Keep in properly labeled containers.

Store in accordance with the particular national regulations.

Materials to avoid Do not store with the following product types:

Strong oxidizing agents

Gases

Recommended storage tem- : > 5 °C

perature

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2,2',2"-Nitrilotriethanol	102-71-6	TWA	5 mg/m³	CA AB OEL
		TWA	5 mg/m³	CA BC OEL
		TWA	0.5 ppm	CA ON OEL
			3.1 mg/m³	
_		TWAEV	5 mg/m³	CA QC OEL
		TWA	5 mg/m³	ACGIH

Engineering measures Ensure adequate ventilation, especially in confined areas.

Minimize workplace exposure concentrations.

Personal protective equipment

Respiratory protection If adequate local exhaust ventilation is not available or expo-

sure assessment demonstrates exposures outside the re-

commended guidelines, use respiratory protection.

Filter type Combined particulates and organic vapor type

Hand protection

Material Natural Rubber : >= 480 min Break through time Glove thickness >= 0.5 mmProtective index : Class 6

Remarks Choose gloves to protect hands against chemicals depending

> on the concentration specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of

workday.

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

Eye protection : Wear the following personal protective equipment:

Safety goggles

Skin and body protection : Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Hygiene measures : If exposure to chemical is likely during typical use, provide

eye flushing systems and safety showers close to the wor-

king place.

When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : blue

Odor : characteristic

Odor Threshold : No data available

pH : 8.4

Concentration: 100 %

Melting point/freezing point : No data available

Initial boiling point and boiling :

range

100 °C

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapor pressure : 23 hPa (20 °C)

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

Relative vapor density : No data available

Density : 1.035 g/cm³ (20 °C)

Solubility(ies)

Water solubility : completely miscible

Partition coefficient: n-

octanol/water

: Not applicable

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : ca. 13 mm²/s (40 °C)

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Particle size : Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

Can react with strong oxidizing agents.

Conditions to avoid : None known.

Incompatible materials : Oxidizing agents

Hazardous decomposition

products

No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

Acute toxicity

Not classified based on available information.

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg

Method: Calculation method

Components:

Sodium etasulfate:

Acute oral toxicity : LD50 (Rat): 2,840 mg/kg

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

Method: OECD Test Guideline 402

Remarks: Based on data from similar materials

9-Octadecenoic acid (Z)-, reaction products withtriethanolamine, di-Me sulfate-quaternized:

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

Method: Directive 67/548/EEC, Annex V, B.1.

Assessment: The substance or mixture has no acute oral tox-

icity

Remarks: Based on data from similar materials

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

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on data from similar materials

2,2',2"-Nitrilotriethanol:

Acute oral toxicity : LD50 (Rat): 6,400 mg/kg

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

Alcohols, C9-16, ethoxylated:

Acute oral toxicity : LD50 (Rat): > 300 - 2,000 mg/kg

Remarks: Based on data from similar materials

Skin corrosion/irritation

Causes skin irritation.

Components:

Sodium etasulfate:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

Remarks : Based on data from similar materials

9-Octadecenoic acid (Z)-, reaction products withtriethanolamine, di-Me sulfate-quaternized:

Species : Rabbit

Method : OECD Test Guideline 404

Result : Skin irritation

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

Remarks : Based on data from similar materials

2,2',2"-Nitrilotriethanol:

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Alcohols, C9-16, ethoxylated:

Species : Rabbit

Result : No skin irritation

Remarks : Based on data from similar materials

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

Sodium etasulfate:

Species : Rabbit

Result : Irreversible effects on the eye

Remarks : Based on data from similar materials

9-Octadecenoic acid (Z)-, reaction products withtriethanolamine, di-Me sulfate-quaternized:

Species : Rabbit

Result : Irritation to eyes, reversing within 21 days

Method : OECD Test Guideline 405

Remarks : Based on data from similar materials

2,2',2"-Nitrilotriethanol:

Species : Rabbit

Result : No eye irritation

Alcohols, C9-16, ethoxylated:

Species : Rabbit

Result : Irreversible effects on the eye

Remarks : Based on data from similar materials

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Components:

Sodium etasulfate:

Test Type : Local lymph node assay (LLNA)

Routes of exposure : Skin contact

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

Species : Mouse Result : negative

Remarks : Based on data from similar materials

9-Octadecenoic acid (Z)-, reaction products withtriethanolamine, di-Me sulfate-quaternized:

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

Remarks : Based on data from similar materials

2,2',2"-Nitrilotriethanol:

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

Method : OECD Test Guideline 406

Result : negative

Alcohols, C9-16, ethoxylated:

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

Remarks : Based on data from similar materials

Germ cell mutagenicity

Not classified based on available information.

Components:

Sodium etasulfate:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Genotoxicity in vivo : Test Type: Rodent dominant lethal test (germ cell) (in vivo)

Species: Mouse

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

9-Octadecenoic acid (Z)-, reaction products withtriethanolamine, di-Me sulfate-quaternized:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

Remarks: Based on data from similar materials

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

Remarks: Based on data from similar materials

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: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 474

Result: negative

Remarks: Based on data from similar materials

2,2',2"-Nitrilotriethanol:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Alcohols, C9-16, ethoxylated:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Remarks: Based on data from similar materials

Carcinogenicity

Not classified based on available information.

Components:

Sodium etasulfate:

Species : Rat
Application Route : Ingestion
Exposure time : 2 Years
Result : negative

Remarks : Based on data from similar materials

2,2',2"-Nitrilotriethanol:

Species : Rat

Application Route : Skin contact Exposure time : 103 weeks Result : negative

Reproductive toxicity

Not classified based on available information.

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

Components:

Sodium etasulfate:

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: Ingestion

Result: negative

Remarks: Based on data from similar materials

9-Octadecenoic acid (Z)-, reaction products withtriethanolamine, di-Me sulfate-quaternized:

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 414

Result: negative

Remarks: Based on data from similar materials

2,2',2"-Nitrilotriethanol:

Effects on fertility : Test Type: Two-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 416

Result: negative

Effects on fetal development : Test Type: Reproduction/Developmental toxicity screening

test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 421

Result: negative

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Components:

2,2',2"-Nitrilotriethanol:

Assessment : No significant health effects observed in animals at concentra-

tions of 200 mg/kg bw or less., No significant health effects observed in animals at concentrations of 0.2 mg/l/6h/d or less.

Repeated dose toxicity

Components:

Sodium etasulfate:

Species : Rat

NOAEL : > 100 mg/kg Application Route : Ingestion

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

Exposure time : 13 Weeks

Remarks : Based on data from similar materials

Species : Mouse

NOAEL : > 100 mg/kg

Application Route : Skin contact

Exposure time : 13 Weeks

Remarks : Based on data from similar materials

9-Octadecenoic acid (Z)-, reaction products withtriethanolamine, di-Me sulfate-quaternized:

Species : Rat

NOAEL : > 100 mg/kg
Application Route : Ingestion
Exposure time : 28 Days

Method : OECD Test Guideline 407

Remarks : Based on data from similar materials

2,2',2"-Nitrilotriethanol:

Species : Rat

NOAEL : >= 1,000 mg/kg

Application Route : Ingestion Exposure time : 90 Days

Species : Rat

NOAEL : >= 0.5 mg/l

Application Route : inhalation (dust/mist/fume)

Exposure time : 28 Days

Method : OECD Test Guideline 412

Species : Rat
NOAEL : 125 mg/kg
Application Route : Skin contact
Exposure time : 90 Days

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Sodium etasulfate:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 483 mg/l

Exposure time: 48 h

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version **Revision Date:** SDS Number: Date of last issue: 06/06/2023 09/04/2023 10622383-00010 Date of first issue: 07/09/2013 2.18

Method: Directive 67/548/EEC, Annex V, C.2.

Toxicity to algae/aquatic

plants

ErC50 (Desmodesmus subspicatus (green algae)): > 511 mg/l

Exposure time: 72 h

Method: Directive 67/548/EEC, Annex V, C.3.

EC10 (Desmodesmus subspicatus (green algae)): 199 mg/l

Exposure time: 72 h

Method: Directive 67/548/EEC, Annex V, C.3.

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): > 1 mg/l

Exposure time: 42 d

Remarks: Based on data from similar materials

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia): > 1 mg/l Exposure time: 21 d

Method: OECD Test Guideline 211

Remarks: Based on data from similar materials

Toxicity to microorganisms EC50: > 100 mg/l

Exposure time: 3 h

Remarks: Based on data from similar materials

9-Octadecenoic acid (Z)-, reaction products withtriethanolamine, di-Me sulfate-quaternized:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): > 1 - 10 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l

Exposure time: 48 h

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

ErC50 (Desmodesmus subspicatus (green algae)): > 1 - 10

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

EC10 (Desmodesmus subspicatus (green algae)): > 1 - 10

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to microorganisms EC50 (Pseudomonas putida): > 100 mg/l

> Exposure time: 30 min Method: DIN 38 412 Part 8

Remarks: Based on data from similar materials

2,2',2"-Nitrilotriethanol:

Toxicity to fish LC50 (Pimephales promelas (fathead minnow)): 11,800 mg/l

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

Exposure time: 96 h

Toxicity to daphnia and other : aquatic invertebrates

EC50 (Ceriodaphnia dubia (water flea)): 609.88 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

ErC50 (Desmodesmus subspicatus (green algae)): 512 mg/l

Exposure time: 72 h

Test substance: Neutralized product

EC10 (Desmodesmus subspicatus (green algae)): 26 mg/l

Exposure time: 72 h

Test substance: Neutralized product

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 16 mg/l

Exposure time: 21 d

Toxicity to microorganisms : IC50: > 1,000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Alcohols, C9-16, ethoxylated:

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l

Exposure time: 48 h

Remarks: Based on data from similar materials

Toxicity to fish (Chronic tox-

icity)

EC10: > 0.1 - 1 mg/l

Remarks: Based on data from similar materials

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

EC10: > 0.1 - 1 mg/l

Remarks: Based on data from similar materials

Persistence and degradability

Components:

Sodium etasulfate:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 89.3 % Exposure time: 28 d

9-Octadecenoic acid (Z)-, reaction products withtriethanolamine, di-Me sulfate-quaternized:

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301B

Remarks: Based on data from similar materials

2,2',2"-Nitrilotriethanol:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 96 % Exposure time: 19 d

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

Alcohols, C9-16, ethoxylated:

Biodegradability Result: rapidly biodegradable

Remarks: Based on data from similar materials

Bioaccumulative potential

Components:

Sodium etasulfate:

Partition coefficient: n-

log Pow: -0.248 octanol/water

Method: OECD Test Guideline 123

2,2',2"-Nitrilotriethanol:

Bioaccumulation Species: Cyprinus carpio (Carp)

Bioconcentration factor (BCF): < 3.9

Partition coefficient: n-

octanol/water

log Pow: -1.9

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues Do not dispose of waste into sewer.

Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste

handling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

Version Revision Date: SDS Number: Date of last issue: 06/06/2023 2.18 09/04/2023 10622383-00010 Date of first issue: 07/09/2013

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

Not applicable for product as supplied.

Domestic regulation

TDG

Not regulated as a dangerous good

Special precautions for user

Not applicable

SECTION 15. REGULATORY INFORMATION

Volatile organic compounds

(VOC) content

CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999 -

Guidelines for VOC in Consumer Products

VOC content: 25.2 % / 45 g/l

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

DSL : All chemical substances in this product comply with the CEPA

1999 and NSNR and are on or exempt from listing on the

Canadian Domestic Substances List (DSL).

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

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

2: OEL)

CA BC OEL : Canada. British Columbia OEL

CA ON OEL : Ontario Table of Occupational Exposure Limits made under

the Occupational Health and Safety Act.

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
CA AB OEL / TWA : 8-hour Occupational exposure limit
CA BC OEL / TWA : 8-hour time weighted average
CA ON OEL / TWA : Time-Weighted Average Limit (TWA)
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 - 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 Chemi-

according to the Hazardous Products Regulations



ENGINE WASH, Concentrated, 20 L

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cal 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

Sources of key data used to

compile the Material Safety

Data Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

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CA / Z8