

1 Identification

1.1 Product identifier

· **Trade name:** *Marshall Emulsifiable Concentrate*

· **CAS Number:**

Quizalofop P-Ethyl (96 g/L) : 100646-51-3

Registration number PCP Registration No.: 33681

Group 1 Herbicide

· **Application of the substance / the mixture** *Agricultural herbicide*

1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

Nissan Chemical Industries, Ltd. (Nissan)

c/o Nissan Chemical America Corporation

10777 Westheimer

Houston, TX 77042

2012 0002 2012 05 07

Distributed by:

Winfield United Canada, ULC

101-302 Wellman Lane

Saskatoon, Saskatchewan

Canada S7T 0J1

1-888-975-4769

· **Information department:** *sds@gowanco.com*

1.4 Emergency telephone number:

Chemtrec® Emergency Telephone 24 - Hours: (Spills, leak or fire) Inside U.S. & Canada: (800) 424-9300

Outside the U.S. & Canada: +011 (703) 527-3887

For medical emergency (ProPharma Group®): (888) 478-0798

2 Hazard identification

2.1 Classification of the substance or mixture

· **Classification according to Regulation (EC) No 1272/2008**



GHS05 Corrosion

Serious Eye Damage - Category 1

H318 Causes serious eye damage.



GHS09 Environment

Aquatic Chronic 2

H411 Toxic to aquatic life with long lasting effects.



GHS07

Acute Toxicity (Inhalation) - Category 4 H332 Harmful if inhaled.

Skin Irritation - Category 2

H315 Causes skin irritation.

Aquatic Acute 2

H401 Toxic to aquatic life.

(Contd. on page 2)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Marshall Emulsifiable Concentrate

(Contd. of page 1)

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

· Hazard pictograms



GHS05 GHS07 GHS09

· Signal word Danger

· Hazard statements

H332 Harmful if inhaled.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H401 Toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

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

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

P310 Immediately call a poison center/doctor.

P321 Specific treatment (see on this label).

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

P332+P313 If skin irritation occurs: Get medical advice/attention.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Hazard description:

DANGER – CORROSIVE TO EYES

WARNING - SKIN IRRITANT

POTENTIAL SKIN SENSITIZER

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 3

Fire = 0

Reactivity = 0

HAZARD INDEX:

4 Severe Hazard

3 Serious Hazard

2 Moderate Hazard

1 Slight Hazard

0 Minimal Hazard

(Contd. on page 3)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Marshall Emulsifiable Concentrate

(Contd. of page 2)

- 2.3 Other hazards
- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/Information on ingredients

- 3.2 Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 91-20-3	naphthalene ⚠ Carcinogenicity – Category 2, H351; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Toxicity (Oral) - Category 4, H302; Flammable Liquids - Category 4, H227	<11.0% w/w
CAS: 100646-51-3	Quizalofop-p-ethyl ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Toxicity (Oral) - Category 4, H302; Acute Toxicity (Dermal) – Category 4, H312	10.3% w/w
CAS: 872-50-4	M-Pyrol ⚠ Reproductive Toxicity - Category 1B, H360; ⚠ Skin Irritation - Category 2, H315; Eye Irritation - Category 2A, H319; Specific Target Organ Toxicity - Single Exposure - Category 3, H335; Flammable Liquids - Category 4, H227	<8.0% w/w

4 First-aid measures

- 4.1 Description of first aid measures
- General information:
 - Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
 - You may also contact 1-888-478-0798 for emergency medical treatment information.
- After inhalation:
 - Move person to fresh air.
 - If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
 - Call poison control center or doctor for further treatment advice.
- After skin contact:
 - Take off contaminated clothing.
 - Rinse skin immediately with plenty of water for 15-20 minutes.
 - Call a poison control center or doctor for treatment advice.
- After eye contact:
 - Hold eye open and rinse slowly and gently with water for 15-20 minutes.
 - Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes.
 - Call a poison control center or doctor for treatment advice.
- After swallowing:
 - Call a poison control center or doctor immediately for treatment advice.
 - Do not induce vomiting unless told to do so by the poison control center or doctor.
 - Do not give anything by mouth to an unconscious person.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed
 - Vomiting may cause aspiration pneumonia. Treat symptomatically.

CA/EN

(Contd. on page 4)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Marshall Emulsifiable Concentrate

(Contd. of page 3)

5 Fire-fighting measures

- **5.1 Extinguishing media**
 - **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
Vapor forms explosive mixture with air. Heating can release vapors which can be ignited.
- **5.3 Advice for firefighters**
 - **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
May be harmful if swallowed, inhaled or absorbed through skin. Causes eye irritation. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing vapours or spray mist. Use adequate ventilation. When using, do not eat, drink or smoke. Wash skin thoroughly with soap and water after handling. Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, school and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 days following application for scouting activities in camelina. For all other crops, do not enter or allow worker entry into treated area during the REI of 12 hours.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow product to reach sewage system or any water course.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling**
DANGER – CORROSIVE TO EYES. WARNING - SKIN IRRITANT. POTENTIAL SKIN SENSITIZER.
May be harmful if swallowed, inhaled or absorbed through skin. Causes eye irritation. Do not get in eyes or on clothing. Avoid contact with skin. Avoid breathing vapours or spray mist. Use adequate ventilation. When using, do not eat, drink or smoke. Wash skin thoroughly with soap and water after handling.
 - **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
 - **Information about storage in one common storage facility:** Store away from foodstuffs.
 - **Further information about storage conditions:** Protect from frost.
- **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 5)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Marshall Emulsifiable Concentrate

(Contd. of page 4)

· 8.1 Control parameters

· Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

· Breathing equipment: Not required.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Material of gloves Chemical-resistant gloves.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

- Form: Liquid
- Color: Amber colored
- Odor: Aromatic
- Odor threshold: Not determined.

· pH-value: 5.6

· Change in condition

- Melting point/Melting range: Undetermined.
- Boiling point/Boiling range: Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not self-igniting.

· Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

· Lower: Not determined.

(Contd. on page 6)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Marshall Emulsifiable Concentrate

(Contd. of page 5)

· Upper:	Not determined.
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	1.02 g/cm ³ (8.5119 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Emulsifiable.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable under normal conditions
 - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· 11.1 Information on toxicological effects

- **Acute toxicity:**
Harmful if inhaled.

· LD/LC50 values that are relevant for classification:

Oral	LD50	5,900 mg/kg (rat) (Male)
	LD50	4,100 mg/kg (rat) (Female)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50/4 h	2.6 mg/l (rat)

· **Primary irritant effect:**

- **on the skin:**
Causes skin irritation.

- **on the eye:**
Causes serious eye damage.

- **Sensitization:** Based on available data, the classification criteria are not met.

· **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

CAS: 91-20-3	naphthalene	2B
--------------	-------------	----

(Contd. on page 7)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Marshall Emulsifiable Concentrate

(Contd. of page 6)

· NTP (National Toxicology Program)

CAS: 91-20-3 naphthalene

R

12 Ecological information

· 12.1 Toxicity

This product contains a petroleum distillate, which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning of equipment. This product is toxic to fish. Overspray or drift to fish-bearing water must be avoided. Overspray or drift onto important wildlife habitats such as shelterbelts, wetlands, sloughs or dry slough borders and woodlots should be avoided.

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:** Not known to be hazardous to water.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

· 13.1 Waste treatment methods

· **Recommendation:**

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean up of spills.

· **Uncleaned packagings:**

· **Recommendation:**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple or pressure rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

14 Transport information

· 14.1 UN-Number

· DOT/TDG

Void

· ADR

Marine Pollutants Exemption (TDG 1.45.1)

· ADN

Void

· IMDG, IATA

UN3082

· 14.2 UN proper shipping name

· DOT/TDG

Void

· ADR, ADN

Void

(Contd. on page 8)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Marshall Emulsifiable Concentrate

(Contd. of page 7)

<ul style="list-style-type: none"> · IMDG · IATA 	<p><i>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., MARINE POLLUTANT</i></p> <p><i>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.</i></p>
--	---

· 14.3 Transport hazard class(es)

· 14.3 DOT, ADR, ADN

· Class

Void

· **IMDG, IATA**

· Class

9 Miscellaneous dangerous substances and articles

· Label

9

· 14.4 Packing group

· DOT/TDG, ADR

Void

· **IMDG, IATA**

III

· 14.5 Environmental hazards:

· Marine pollutant:

Yes

Symbol (fish and tree)

· Special marking (IATA):

Symbol (fish and tree)

· 14.6 Special precautions for user

Not applicable

· EMS Number:

F-A,S-F

· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

· UN "Model Regulation":

Canada TDG:

Marine Pollutants Exemption (TDG 1.45.1)

US DOT and Europe ADR

Not regulated

15 Regulatory information

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

· SARA Title III

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

CAS: 91-20-3 naphthalene

CAS: 872-50-4 M-Pyrol

· TSCA (Toxic Substances Control Act):

CAS: 91-20-3 naphthalene

CAS: 872-50-4 M-Pyrol

(Contd. on page 9)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 01/29/2020

Reviewed on 01/29/2020

Trade name: Marshall Emulsifiable Concentrate

(Contd. of page 8)

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

CAS: 91-20-3	naphthalene
CAS: 872-50-4	M-Pyrol

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

CAS: 91-20-3	naphthalene
--------------	-------------

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials:**

Read the label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

- H227 Combustible liquid.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H360 May damage fertility or the unborn child.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

· **Department issuing SDS:** Supply Chain

· **Contact:** sds@gowanco.com

· **Date of the latest revision of the safety data sheet** 01/29/2020 / -

· **Abbreviations and acronyms:**

- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative

· *** Data compared to the previous version altered.**