

TERATOP® BLACK HL-BL

Version	Revision Date:	SDS Number:	Date of last issue: 04/06/2017
1.1	02/04/2019	400000002361	Date of first issue: 04/06/2017

SECTION 1. IDENTIFICATION

Product name : TERATOP® BLACK HL-BL

Manufacturer or supplier's details

Company name of supplier : Huntsman International LLC
Address : 2795 Slough Avenue
Mississauga, ON L4T 1G2,
Canada
Telephone : +1 905 678 9150

E-mail address of person responsible for the SDS : SDS@huntsman.com

Emergency telephone number : Chemtrec: (800) 424-9300 or (703) 527-3887

Recommended use of the chemical and restrictions on use

Recommended use : Textile dye

Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with the Hazardous Products Regulations**

Eye irritation : Category 2A

Skin sensitisation : Sub-category 1A

GHS label elements

Hazard pictograms :



Signal word : Warning

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

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water

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for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

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

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

Storage:

Not available

Disposal:

P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Lignin, alkali, reaction products with disodium sulfite and formaldehyde	105859-97-0	40 - 50
4-[[2-methoxy-4-[(4-nitrophenyl)azo]phenyl]azo]phenol	19800-42-1	10 - 20
1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone	3065-87-0	5 - 10
1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone	20241-76-3	5 - 10
1,5(or 1,8)-diamino-2-bromo-4,8(or 4,5)-dihydroxyanthraquinone	68134-65-6	5 - 10
Disperse Scarlet DRI 2398	1379419-91-6	2.5 - 5
N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide	69563-51-5	0.1 - 1

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Treat symptomatically.
Get medical attention if symptoms occur.

If inhaled : If inhaled, remove to fresh air.
Get medical attention if symptoms occur.

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In case of skin contact	: If on skin, rinse well with water.
In case of eye contact	: Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	: Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	: None known.
Notes to physician	: Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	: High volume water jet
Specific hazards during firefighting	: No information available.
Hazardous combustion products	: Carbon oxides Sulphur oxides Formaldehyde Nitrogen oxides (NOx)
Specific extinguishing methods	: No data is available on the product itself.
Further information	: No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Refer to protective measures listed in sections 7 and 8.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

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Methods and materials for containment and cleaning up : Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.

Advice on safe handling : Avoid formation of respirable particles.
Do not breathe vapours/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 application area.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Keep in properly labelled containers.

Materials to avoid : For incompatible materials please refer to Section 10 of this SDS.

Further information on storage stability : Keep in a dry place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines

Filter type : Particulates type

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

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Skin and body protection	: Dust impervious protective suit Choose body protection according to the amount and concentration of the dangerous substance at the work 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

Appearance	: powder
Colour	: black
Odour	: characteristic
Odour Threshold	: No data is available on the product itself.
pH	: 8.5 Concentration: 100 g/l
Freezing point	: No data is available on the product itself.
Melting point	: No data is available on the product itself.
Boiling point	: No data is available on the product itself.
Flash point	: No data is available on the product itself.
Evaporation rate	: No data is available on the product itself.
Flammability (solid, gas)	: Not expected to form explosive dust-air mixtures.
Flammability (liquids)	: No data is available on the product itself.
Upper explosion limit / Upper flammability limit	: No data is available on the product itself.
Lower explosion limit / Lower flammability limit	: No data is available on the product itself.
Vapour pressure	: No data is available on the product itself.
Relative vapour density	: No data is available on the product itself.
Relative density	: No data is available on the product itself.
Density	: 0.45 g/cm ³ Bulk density
Solubility(ies)	
Water solubility	: No data is available on the product itself.
Solubility in other solvents	: No data is available on the product itself.

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Partition coefficient: n-octanol/water	:	No data is available on the product itself.
Auto-ignition temperature	:	No data is available on the product itself.
Thermal decomposition	:	No data is available on the product itself.
Self-Accelerating decomposition temperature (SADT)	:	No data is available on the product itself.
Viscosity	:	No data is available on the product itself.
Explosive properties	:	No data is available on the product itself.
Oxidizing properties	:	No data is available on the product itself.
Particle size	:	No data is available on the product itself.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Dust may form explosive mixture in air.
Conditions to avoid	:	None known.
Incompatible materials	:	None known.
Hazardous decomposition products	:	carbon dioxide carbon monoxide Sulphur Oxides formaldehyde Nitrogen oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	:	No data is available on the product itself.
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Acute toxicity

Acute oral toxicity - Product	:	Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
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Acute inhalation toxicity	:	No data available
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Components:

4-[[2-methoxy-4-[(4-nitrophenyl)azo]phenyl]azo]phenol:

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Disperse Scarlet DRI 2398:

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Acute toxicity (other routes of administration) : No data available

Skin corrosion/irritation**Components:**

1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone:

Species: Rabbit
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

1,5(or 1,8)-diamino-2-bromo-4,8(or 4,5)-dihydroxyanthraquinone:

Species: Rabbit
Assessment: No skin irritation
Result: No skin irritation

Disperse Scarlet DRI 2398:

Species: Rabbit
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation

Species: human skin

Assessment: No skin irritation
Method: OECD Test Guideline 431
Result: No skin irritation

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Species: Rabbit
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation

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Serious eye damage/eye irritation**Components:**

Lignin, alkali, reaction products with disodium sulfite and formaldehyde:
Result: Eye irritation

1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone:

Species: Rabbit

Result: No eye irritation

Assessment: No eye irritation

Method: OECD Test Guideline 405

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Species: Rabbit

Result: Eye irritation

Method: OECD Test Guideline 405

1,5(or 1,8)-diamino-2-bromo-4,8(or 4,5)-dihydroxyanthraquinone:

Species: Rabbit

Result: No eye irritation

Assessment: No eye irritation

Method: No information available.

Disperse Scarlet DRI 2398:

Species: Rabbit

Result: No eye irritation

Assessment: No eye irritation

Method: OECD Test Guideline 405

Species: Not Assigned

Result: No eye irritation

Assessment: No eye irritation

Method: OECD Test Guideline 437

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Species: Rabbit

Result: No eye irritation

Assessment: No eye irritation

Method: OECD Test Guideline 405

Respiratory or skin sensitisation**Components:**

Lignin, alkali, reaction products with disodium sulfite and formaldehyde:
Species: Guinea pig
Result: Does not cause skin sensitisation.

1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone:

Exposure routes: Skin

Species: Guinea pig

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 406

Result: Causes sensitisation.

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Exposure routes: Skin

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Species: Guinea pig

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

Method: OECD Test Guideline 406

1,5(or 1,8)-diamino-2-bromo-4,8(or 4,5)-dihydroxyanthraquinone:

Test Type: Local lymph node assay (LLNA)

Species: Mouse

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

Method: OECD Test Guideline 429

Disperse Scarlet DRI 2398:

Exposure routes: Skin

Species: Mouse

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 429

Result: Does not cause skin sensitisation.

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Exposure routes: Skin

Species: Guinea pig

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 406

Result: May cause sensitisation by skin contact.

Components:

Disperse Scarlet DRI 2398:

Assessment: No skin irritation, No eye irritation
Does not cause skin sensitisation.

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Assessment: No skin irritation, No eye irritation
May cause sensitisation by skin contact.

Germ cell mutagenicity**Components:**

Lignin, alkali, reaction products with disodium sulfite and formaldehyde:

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: Positive results were obtained in some in vitro tests.

Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster fibroblasts
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative

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Disperse Scarlet DRI 2398:

Genotoxicity in vitro

: Method: OECD Test Guideline 471

Result: positive

Method: OECD Test Guideline 473

Result: negative

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Genotoxicity in vitro

: Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: positive

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster lung cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster lung cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Components:

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Genotoxicity in vivo

: Species: Mouse (male and female)

Method: OECD Test Guideline 474

Result: negative

Disperse Scarlet DRI 2398:

Genotoxicity in vivo

: Application Route: Oral

Exposure time: 48 h

Dose: 500 - 2000 mg/kg

Method: OECD Test Guideline 474

Result: negative

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Genotoxicity in vivo

: Test Type: Micronucleus test

Species: Mouse (male and female)

Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

Components:

Disperse Scarlet DRI 2398:

Germ cell mutagenicity-
Assessment

: Tests on bacterial or mammalian cell cultures did not show mutagenic effects., Animal testing did not show any mutagenic effects.

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N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:
Germ cell mutagenicity- : Animal testing did not show any mutagenic effects.
Assessment

Germ cell mutagenicity- : No data available
Assessment

Carcinogenicity

No data available

Carcinogenicity - : No data available
Assessment

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity

Effects on fertility : No data available

Effects on foetal : No data available
development

Reproductive toxicity - : No data available
Assessment

STOT - single exposure

No data available

STOT - repeated exposure**Components:**

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:
Exposure routes: Ingestion
Target Organs: Blood
Assessment: May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity**Components:**

Disperse Scarlet DRI 2398:
Species: Rat, male and female
NOAEL: 1000 mg/kg
Application Route: Ingestion
Exposure time: 672 h
Method: Subacute toxicity

Components:

Disperse Scarlet DRI 2398:

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Repeated dose toxicity - Assessment : No skin irritation, No eye irritation
No adverse effect has been observed in chronic toxicity tests.

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Repeated dose toxicity - Assessment : No skin irritation, No eye irritation

Aspiration toxicity

No data available

Experience with human exposure

General Information: No data available

Inhalation: No data available

Skin contact: No data available

Eye contact: No data available

Ingestion: No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Ingestion: No data available

Other health hazards

No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:**

Lignin, alkali, reaction products with disodium sulfite and formaldehyde:

Toxicity to fish : LC50: 520 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

4-[[2-methoxy-4-[(4-nitrophenyl)azo]phenyl]azo]phenol:

Toxicity to fish : LC100: ca. 300 mg/l
Exposure time: 96 h

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Method: No information available.

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 462 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

1,5(or 1,8)-diamino-2-bromo-4,8(or 4,5)-dihydroxyanthraquinone:

Toxicity to fish : LC50: > 500 mg/l
Exposure time: 48 h

Disperse Scarlet DRI 2398:

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Toxicity to fish : LC50 (Fish): 450 mg/l
Exposure time: 96 h

Components:

1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

1,5(or 1,8)-diamino-2-bromo-4,8(or 4,5)-dihydroxyanthraquinone:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Disperse Scarlet DRI 2398:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Components:

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Toxicity to algae/aquatic plants : NOEC (Lemna gibba (gibbous duckweed)): 100 mg/l
Exposure time: 7 d
Test Type: semi-static test
Method: OECD Test Guideline 221

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Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:
Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : No data available

Toxicity to fish (Chronic toxicity) : No data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : No data available

M-Factor (Chronic aquatic toxicity) : No data available

Components:

Lignin, alkali, reaction products with disodium sulfite and formaldehyde:

Toxicity to microorganisms : IC50: > 1,000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone:
Toxicity to microorganisms : IC50: > 320 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209
GLP: yes

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:
Toxicity to microorganisms : IC50: > 320 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

1,5(or 1,8)-diamino-2-bromo-4,8(or 4,5)-dihydroxyanthraquinone:
Toxicity to microorganisms : IC50: > 1,000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Disperse Scarlet DRI 2398:
Toxicity to microorganisms : EC50: > 1,000 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:
Toxicity to microorganisms : IC50: > 320 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

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Toxicity to soil dwelling organisms : No data available

Plant toxicity : No data available

Sediment toxicity : No data available

Toxicity to terrestrial organisms : No data available

Ecotoxicology Assessment**Components:**

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Acute aquatic toxicity : This product has no known ecotoxicological effects.

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Components:

1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone:

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Toxicity Data on Soil : No data available

Other organisms relevant to the environment : No data available

Persistence and degradability**Components:**

Lignin, alkali, reaction products with disodium sulfite and formaldehyde:

Biodegradability : Result: Not biodegradable
Biodegradation: < 10 %
Exposure time: 30 d
Method: OECD Test Guideline 301D

1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 28 d
Method: Inherent Biodegradability: Modified MITI Test (II)

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Biodegradability : Result: Not biodegradable
Biodegradation: 0 %
Exposure time: 28 d
Method: Inherent Biodegradability: Modified MITI Test (II)

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Biodegradability : Result: Not readily biodegradable.
Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Components:

Lignin, alkali, reaction products with disodium sulfite and formaldehyde:

Biochemical Oxygen : 21 mgO₂/g
Demand (BOD) Incubation time: 5 d

1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone:

Biochemical Oxygen : 0 mgO₂/g
Demand (BOD) Incubation time: 5 d
Method: Inherent Biodegradability: Modified MITI Test (II)

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Biochemical Oxygen : 0 mgO₂/g
Demand (BOD) Incubation time: 5 d
Method: Inherent Biodegradability: Modified MITI Test (II)

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Biochemical Oxygen : 0 mgO₂/g
Demand (BOD)

Components:

Lignin, alkali, reaction products with disodium sulfite and formaldehyde:

Chemical Oxygen Demand : 1415 mgO₂/g
(COD)

1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone:

Chemical Oxygen Demand : 666 mgO₂/g
(COD)

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Chemical Oxygen Demand : 666 mgO₂/g
(COD)

Disperse Scarlet DRI 2398:

Chemical Oxygen Demand : 617 mgO₂/g
(COD)

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Chemical Oxygen Demand : 1747 mgO₂/g
(COD)

BOD/COD : No data available

ThOD : No data available

BOD/ThOD : No data available

Dissolved organic carbon : No data available
(DOC)

Physico-chemical : No data available
removability

Stability in water : No data available

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Photodegradation : No data available

Impact on Sewage Treatment : No data available

Bioaccumulative potential

Bioaccumulation : No data available

Components:

Lignin, alkali, reaction products with disodium sulfite and formaldehyde:

Partition coefficient: n-octanol/water : log Pow: < 3 (20 °C)

1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone:

Partition coefficient: n-octanol/water : log Pow: 4.27
Method: Calculation method

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Partition coefficient: n-octanol/water : log Pow: 4.27
Method: Calculation method

1,5(or 1,8)-diamino-2-bromo-4,8(or 4,5)-dihydroxyanthraquinone:

Partition coefficient: n-octanol/water : log Pow: 0.84
Method: Calculation method

Disperse Scarlet DRI 2398:

Partition coefficient: n-octanol/water : log Pow: 6.1
pH: 7
Method: OECD Test Guideline 117

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Partition coefficient: n-octanol/water : log Pow: 3.71 (20 °C)
Method: OECD Test Guideline 117

Mobility in soil

Mobility : No data available

Components:

Disperse Scarlet DRI 2398:

Distribution among environmental compartments : Koc: 6.42
Method: OECD Test Guideline 121

Stability in soil : No data available

Other adverse effects

Environmental fate and pathways : No data available

Results of PBT and vPvB assessment : No data available

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Endocrine disrupting potential : No data available

Components:

Lignin, alkali, reaction products with disodium sulfite and formaldehyde:

Adsorbed organic bound halogens (AOX) : 0 %

1,5-dihydroxy-4-nitro-8-(phenylamino)anthraquinone:

Adsorbed organic bound halogens (AOX) : 0 %

1,8-dihydroxy-4-nitro-5-(phenylamino)anthraquinone:

Adsorbed organic bound halogens (AOX) : 0 %

N-(4-amino-9,10-dihydro-3-methoxy-9,10-dioxo-1-anthryl)benzenesulphonamide:

Adsorbed organic bound halogens (AOX) : 0 %

Hazardous to the ozone layer

Ozone-Depletion Potential : Not applicable

Additional ecological information : No data available

Global warming potential (GWP) : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
Dispose of as hazardous waste in compliance with local and national regulations.
Dispose of contents/ container to an approved waste disposal plant.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**International Regulations****TDG**

Not regulated as dangerous goods

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IATA

Not regulated as dangerous goods

IMDG

Not regulated as dangerous goods

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

Not applicable for product as supplied.

National Regulations**TDG**

Not regulated as dangerous goods

SECTION 15. REGULATORY INFORMATION**The components of this product are reported in the following inventories:**

CH INV	: The formulation contains substances listed on the Swiss Inventory
DSL	: This product contains one or several components listed in the Canadian NDSL.
AICS	: On the inventory, or in compliance with the inventory
NZIoC	: Not in compliance with the inventory
ENCS	: Notified. Allowed to be imported / manufactured only by the notifiers. Please contact your Huntsman sales representative for more information.
KECI	: On the inventory, or in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: Notified. Allowed to be imported / manufactured only by the notifiers. Please contact your Huntsman sales representative for more information.
TCSI	: On the inventory, or in compliance with the inventory
TSCA	: On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

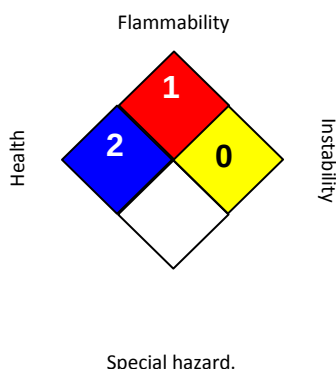
Canada. CEPA 1999 Significant New Activity (SNAc) List

The following substance(s) is/are subject to a Significant New Activity Notification:

Alanine, N,N-bis(carboxymethyl)-, trisodium salt 164462-16-2

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SECTION 16. OTHER INFORMATION**Further information****NFPA 704:****HMIS® IV:**

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard

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