

TERASIL® BROWN 2RFL 200%

Version 3.4 Revision Date: 07/19/2023 SDS Number: 400001011265 Date of last issue: 12/23/2022
Date of first issue: 01/24/2017

Print Date 11/29/2023

SECTION 1. IDENTIFICATION

Product name : TERASIL® BROWN 2RFL 200%

Manufacturer or supplier's details

Company name of supplier : Archroma U.S., Inc
Address : 5435 77 Center Dr #10
Charlotte,
NC 28217
United States of America (USA)
Telephone : +1 704-353-4100
E-mail address : SDS.hte@archroma.com

Initial Supplier Identifier
Données relatives au fournisseur
Univar Solutions Canada Ltd.
64 Arrow Road
North York, ON M9M 2L9
Telephone: 1-866-686-4827

Emergency telephone number : Europe: +44 1235239670, Middle East/Africa: +44
1235239671, Americas: +1 215 207 0061/+1 866 928 0789
(Toll free), Asia and Pacific: +65 3158 1074.

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

Long-term (chronic) aquatic hazard : Category 3

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.
Response:
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.

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

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)
2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate	5261-31-4	60 - 80
Lignin, alkali, reaction products with disodium sulfite and formaldehyde	105859-97-0	30 - 60

The specific chemical identity and/or exact percentage (concentration) of composition may be withheld as a trade secret.

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.

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.

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If symptoms persist, call a physician.

Most important symptoms
and effects, both acute and
delayed

: None known.

Protection of first-aiders

: First Aid responders should pay attention to self-protection
and use the recommended protective clothing
If potential for exposure exists refer to Section 8 for specific
personal protective equipment.
Avoid inhalation, ingestion and contact with skin and eyes.
No action shall be taken involving any personal risk or without
suitable training.
It may be dangerous to the person providing aid to give
mouth-to-mouth resuscitation.

Notes to physician

: Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media

: Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemicalUnsuitable extinguishing
media: Exercise caution when using a high volume water jet as it may
scatter and spread fireSpecific hazards during
firefighting: Do not allow run-off from fire fighting to enter drains or water
courses.Hazardous combustion
products: Carbon oxides
Sulphur oxides
FormaldehydeSpecific extinguishing
methods

: No data is available on the product itself.

Further information

: Collect contaminated fire extinguishing water separately. This
must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must
be disposed of in accordance with local regulations.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.

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- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.
- Advice on safe handling : Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitisation of susceptible persons.
Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
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.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
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.
Stable under normal conditions.

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

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Hand protection

Remarks : 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.
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.

Skin and body protection : 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	: brown
Odour	: odourless
Odour Threshold	: No data is available on the product itself.
pH	: 6 - 8 (20 °C) Concentration: 20 g/l
Melting point/freezing 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.

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Vapour pressure	: No data is available on the product itself.
Relative vapour density	: No data is available on the product itself.
Relative density	: 1.401 (19.5 °C) Method: OECD Test Guideline 109
Density	: No data is available on the product itself.
Bulk density	: 600 - 700 kg/m3
Solubility(ies)	
Water solubility	: dispersible
Solubility in other solvents	: No data is available on the product itself.
Partition coefficient: n-octanol/water	: No data is available on the product itself.
Auto-ignition temperature	: No data is available on the product itself.
Decomposition temperature	: 165 °C
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

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SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Components:****2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate:**

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
Assessment: The substance or mixture has no acute oral toxicity

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

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

Skin corrosion/irritation**Components:****2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate:**

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

Serious eye damage/eye irritation**Components:****2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate:**

Species : Rabbit
Result : No eye irritation
Assessment : No eye irritation
Method : OECD Test Guideline 405
GLP : yes

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

Result : Eye irritation

Respiratory or skin sensitisation**Components:****2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate:**

Exposure routes : Skin
Species : Mouse
Assessment : Did not cause sensitisation on laboratory animals.
Method : OECD Test Guideline 429
Result : Did not cause sensitisation on laboratory animals.

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

Species : Guinea pig

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Result : Does not cause skin sensitisation.

Germ cell mutagenicity**Components:****2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate:**

Genotoxicity in vitro : Test Type: reverse mutation assay
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: positive
GLP: yes

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
GLP: yes

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Rat (male and female)
Cell type: Bone marrow
Application Route: Oral
Dose: 62.5/250/500 mg/kg bw/day
Result: negative
GLP: yes

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

Carcinogenicity

No data available

Reproductive toxicity**Components:****2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate:**

Effects on fertility : Test Type: Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test
Species: Rat, male and female
Application Route: Oral
Dose: 0/62.5/250/500/1000 mg/kg bw/
Frequency of Treatment: 7 days/week
General Toxicity - Parent: NOAEL: 250 mg/kg body weight
General Toxicity F1: NOAEL: 250 mg/kg body weight
Method: OECD Test Guideline 422
GLP: yes

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STOT - single exposure

No data available

STOT - repeated exposure

No data available

Repeated dose toxicity**Components:****2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate:**

Species	: Rat, male and female
NOAEL	: 250 mg/kg
Application Route	: Oral
Number of exposures	: 7 days/Week
Dose	: 0/62.5/250/500/1000 mg/kg bw
Method	: OECD Test Guideline 422
GLP	: yes
Target Organs	: Liver

Aspiration toxicity

No data available

Experience with human exposure

No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

No data available

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

Toxicity to fish	: LC50 : > 100 mg/l
	Exposure time: 96 h
	Method: OECD Test Guideline 203

Toxicity to microorganisms	: IC50: > 100 mg/l
	Exposure time: 3 h
	Method: OECD Test Guideline 209

Components:**2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate:**

Toxicity to fish	: LC50 (Danio rerio (zebra fish)): 55 mg/l
	Exposure time: 96 h
	Test Type: static test
	Analytical monitoring: yes
	Method: OECD Test Guideline 203

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GLP: no

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 18.6 mg/l
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Test substance: Fresh water
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Test substance: Fresh water
Method: OECD Test Guideline 201
GLP: yes

EL10 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Test substance: Fresh water
Method: OECD Test Guideline 201
GLP: yes

Toxicity to microorganisms : IC50 (activated sludge): > 1,000 mg/l
Exposure time: 3 h
Test Type: static test
Analytical monitoring: yes
Test substance: Fresh water
Method: OECD Test Guideline 209
GLP: yes

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

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

Persistence and degradability**Product:**

Biodegradability : Biodegradation: 30 - 40 %
Exposure time: 28 d
Method: OECD Test Guideline 302B

Biochemical Oxygen Demand (BOD) : 0 mgO₂/g

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Chemical Oxygen Demand : ca. 900 mgO₂/g
(COD)

Components:**2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate:**

Biodegradability : Concentration: 6 mg/l
Result: Not readily biodegradable.
Biodegradation: 5 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

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

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

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

Chemical Oxygen Demand : 1415 mgO₂/g
(COD)

Bioaccumulative potential**Components:****2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate:**

Partition coefficient: n- : log Pow: 4.1 (25 °C)
octanol/water pH: 6.1
Method: OECD Test Guideline 117

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

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

Mobility in soil

No data available

Other adverse effects**Product:**

Adsorbed organic bound : ca 9 %
halogens (AOX) Test substance: Chlorine

Additional ecological : An environmental hazard cannot be excluded in the event of
information unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

Components:**2-[N-(2-cyanoethyl)-4-[(2,6-dichloro-4-nitrophenyl)azo]anilino]ethyl acetate:**

Adsorbed organic bound : 4.8 %

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halogens (AOX)

Test substance: Chlorine

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

Adsorbed organic bound : 0 %

halogens (AOX)

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with 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****UNRTDG**

Not regulated as dangerous goods

IATA-DGR

Not regulated as dangerous goods

IMDG-Code

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

Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

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

DSL : All components of this product are on the Canadian DSL

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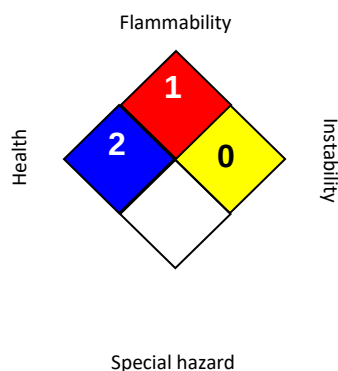
AIIC : On the inventory, or in compliance with the inventory
 NZIoC : On the inventory, or in compliance with the inventory
 ENCS : On the inventory, or in compliance with the inventory
 KECI : On the inventory, or in compliance with the inventory
 PICCS : On the inventory, or in compliance with the inventory
 IECSC : On the inventory, or in compliance with the inventory
 TCSI : On the inventory, or in compliance with the inventory
 TSCA : All substances listed as active on the TSCA inventory

Inventories

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

Canada. CEPA 1999 Significant New Activity (SNAc) List

No substances are subject to a Significant New Activity Notification.

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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THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

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