

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

HUNTSMAN

Enriching lives through innovation

LANASET® BROWN G-01

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	13.02.2018	400001005556	Date of first issue: 13.02.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : LANASET® BROWN G-01

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

Use of the Substance/Mixture : Textile dyes, finishing and impregnating products; including bleaches and other processing aids

1.3 Details of the supplier of the safety data sheet

Company : Huntsman Textile Effects
Address : Klybeckstrasse 200
CH-4057 Basel
Switzerland
Telephone : +41 61 299 11 11
Company : Huntsman Textile Effects c/o Huntsman Textile Effects
(Germany) GmbH
Address : Rehlinger Straße 1
D-86462 Langweid
Germany
Telephone : +49 8230 410
Telefax : +49 8230 41 370
E-mail address of person responsible for the SDS : pehs_te@huntsman.com

1.4 Emergency telephone number

Emergency telephone number : Europe: +32 35751234
Americas: +1 703 527 3887
Africa: +32 35751234
Asia & Pacific: +65 6336 6011
China: +86 20 39377888
+86 532 83889090
India: + 91 22 42 87 5333
USA & Canada: 800 424 9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Acute aquatic toxicity, Category 1	H400: Very toxic to aquatic life.
Chronic aquatic toxicity, Category 1	H410: Very toxic to aquatic life with long lasting effects.

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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P273 Avoid release to the environment.
P280 Wear protective gloves.
Response:
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

Hazardous components which must be listed on the label:

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-)

Sodium bis[2-(3-chlorophenyl)-2,4-dihydro-4-[[2-hydroxy-5-mesylphenyl]azo]-5-methyl-3H-pyrazol-3-onato(2-)]chromate(1-)

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Chromate(2-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-yl]chromate(2-)	56819-40-0 260-394-7 01-2120105624-66	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 30 - < 50

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onato(2-)][3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl), azo]-2-hydroxy-5-nitrobenzenesulfonato(3-)]-, disodium			
Disodium, [2-hydroxy-3-[(2-hydroxy-1-naphthyl)azo]-5-nitrobenzene-1-sulphonato(3-)], [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-)	84145-95-9 282-316-0 01-2120137879-39	Aquatic Chronic 2; H411	>= 2.5 - < 10
Disodium, [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)], [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-)	68541-71-9 271-351-7 01-2120119768-46	Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411	>= 2.5 - < 10
Disodium, [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]-N-methylnaphthalene-2-sulpho, midato(2-)][6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-2-sulpho, nato(3-)]cobaltate(2-)	75314-27-1 278-189-6 01-2120104459-58	Aquatic Chronic 3; H412	>= 1 - < 2.5
Sodium bis[2-(3-chlorophenyl)-2,4-dihydro-4-[[2-hydroxy-5-mesylphenyl]azo]-5-methyl-3H-pyrazol-3-onato(2-)]chromate(1-)	51147-75-2 257-014-7	Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 1 - < 2.5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of 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 : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
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.

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4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : No hazardous combustion products are known

No data is available on the product itself.

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Specific 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Avoid dust formation.
Avoid breathing dust.

6.2 Environmental precautions

Environmental precautions : No data is available on the product itself.

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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.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

For disposal considerations see section 13., See Section 1 for emergency contact information.,
For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

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.

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

Hygiene measures : Wash hands before breaks and at the end of workday.

Dust explosion class : St1

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : 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.

Further information on storage stability : Stable under normal conditions.

7.3 Specific end use(s)

Specific use(s) : No data available

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Disodium [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]-N-methylnaphthalene-2-sulphonamidato(2-)][6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-2-sulphonato(3-)]cobaltate(2-)	75314-27-1	TWA	0.1 mg/m3 (Cobalt)	GB EH40
Further information	<p>Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway hyper-responsiveness via an immunological, irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even to tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance those who are likely to become hyper-responsive. 54 Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing airway hyper-responsiveness, but which do not include the disease themselves. The latter substances are not classified asthmagens or respiratory sensitisers., Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible, the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that exposure be reduced as low as is reasonably practicable. Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance., Capable of causing occupational asthma. The identified substances are those which: - are assigned the risk phrase 'R42: May cause sensitisation by inhalation'; or 'R42/43: May cause sensitisation by inhalation and skin contact' or - are listed in section C of HSE publication 'Asthmagen? Critical assessments of the evidence for agents implicated in occupational asthma' as updated from time to time, or any other substance which the risk assessment has shown to be a potential cause of occupational asthma., Capable of causing cancer and/or heritable genetic damage. The identified substances include those which: - are assigned the risk phrases 'R45: May cause cancer'; 'R46: may cause heritable genetic damage'; 'R49: May cause</p>			

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cancer by inhalation' or - a substance or process listed in Schedule 1 of COSHH., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used, Carcinogenic applies for cobalt dichloride and sulphate., The 'Sen' notation in the list of WELs has been assigned only to those substances which may cause occupational asthma.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Sodium sulphate	Workers	Inhalation	Long-term systemic effects	20 mg/m3
	Workers	Inhalation	Systemic effects	20 mg/m3
	Workers	Inhalation	Long-term local effects	20 mg/m3
	Workers	Inhalation	Local effects	20 mg/m3
Consumers	Consumers	Inhalation	Long-term systemic effects	12 mg/m3
	Consumers	Inhalation	Systemic effects	12 mg/m3
	Consumers	Inhalation	Long-term local effects	12 mg/m3
	Consumers	Inhalation	Local effects	12 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Sodium sulphate	Fresh water	11.09 mg/l
Remarks:	Assessment Factors	
	Marine water	1.109 mg/l
Assessment Factors	Freshwater - intermittent	17.66 mg/l
	Assessment Factors	
Equilibrium method	Fresh water sediment	40.2 mg/kg
	Marine sediment	4.02 mg/kg
Equilibrium method	Soil	1.54 mg/kg
	Equilibrium method	
Assessment Factors	Sewage treatment plant	800 mg/l
Assessment Factors		

8.2 Exposure controls

Personal protective equipment

Eye protection : Eye wash bottle with pure water

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Tightly fitting safety goggles

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

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.

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 (P)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : granules

Colour : brown

Odour : odourless

Odour Threshold : No data is available on the product itself.

pH : 6 - 7
Concentration: 1 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., Will not burn

Burning rate : Product resists ignition and does not promote flame spread.

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 : No data is available on the product itself.

Density : ca. 0.85 g/cm³
Bulk density

Solubility(ies)
Water solubility : 50 g/l (30 °C)

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 : > 250 °C

Viscosity : No data is available on the product itself.

Explosive properties : No data is available on the product itself.

Oxidizing properties : None.

9.2 Other information

Impact sensitivity : Not impact sensitive.

Dust explosion class : St1

Self-ignition : 550 °C
Method: BAM

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : None known.

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10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Components:

Chromate(2-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)] [3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-2-hydroxy-5-nitrobenzenesulfonato(3-)]-, disodium:

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

Disodium [2-hydroxy-3-[(2-hydroxy-1-naphthyl)azo]-5-nitrobenzene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

Acute oral toxicity : (Rat): > 5,000 mg/kg

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 420
Assessment: The substance or mixture has no acute oral toxicity

Sodium bis[2-(3-chlorophenyl)-2,4-dihydro-4-[[2-hydroxy-5-methylphenyl]azo]-5-methyl-3H-pyrazol-3-onato(2-)]chromate(1-):

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Method: No information available.
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : No data available

Acute dermal toxicity : No data available

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

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Skin corrosion/irritation

Components:

Chromate(2-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)] [3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-2-hydroxy-5-nitrobenzenesulfonato(3-)]-, disodium:
Method: OECD Test Guideline 439
Result: No skin irritation

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):
Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation

Components:

Chromate(2-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)] [3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-2-hydroxy-5-nitrobenzenesulfonato(3-)]-, disodium:
Method: OECD Test Guideline 437
Result: No eye irritation

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):
Species: Rabbit
Method: OECD Test Guideline 405
Result: No eye irritation

Respiratory or skin sensitisation

Components:

Chromate(2-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)] [3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-2-hydroxy-5-nitrobenzenesulfonato(3-)]-, disodium:
Method: OECD Test Guideline 406
Result: Did not cause sensitisation on laboratory animals.

Disodium [2-hydroxy-3-[(2-hydroxy-1-naphthyl)azo]-5-nitrobenzene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):
Exposure routes: Skin
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):
Exposure routes: Skin
Species: Guinea pig
Assessment: May cause sensitisation by skin contact.
Method: OECD Test Guideline 406

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Disodium [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]-N-methylnaphthalene-2-sulphonamido(2-)] [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-2-sulphonato(3-)]cobaltate(2-):

Exposure routes: Skin

Species: Guinea pig

Method: OECD Test Guideline 406

Result: Does not cause skin sensitisation.

Sodium bis[2-(3-chlorophenyl)-2,4-dihydro-4-[[2-hydroxy-5-mesylphenyl]azo]-5-methyl-3H-pyrazol-3-onato(2-)]chromate(1-):

Exposure routes: Skin

Species: Guinea pig

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 406

Result: Causes sensitisation.

Assessment: No data available

Germ cell mutagenicity

Components:

Chromate(2-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)] [3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-2-hydroxy-5-nitrobenzenesulfonato(3-)]-, disodium:

Genotoxicity in vitro : Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

: Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: positive

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

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: gene mutation test
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

: Test Type: gene mutation test
Test system: Chinese hamster fibroblasts
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473

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Result: negative

Disodium [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]-N-methylnaphthalene-2-sulphonamidato(2-)] [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-2-sulphonato(3-)]cobaltate(2-):

Genotoxicity in vitro : Method: OECD Test Guideline 473
Result: negative

Genotoxicity in vivo : No data available

Carcinogenicity

No data available

Carcinogenicity - Assessment : No data available

Reproductive toxicity

Components:

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

Effects on fertility : Species: Rat, male and female
Application Route: Oral
Dose: 100, 330 or 1000 milligram per kilogram
General Toxicity - Parent: No observed adverse effect level:
1,000 mg/kg body weight
General Toxicity F1: No observed adverse effect level: 1,000
mg/kg body weight
Method: OECD Test Guideline 422

Components:

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

Effects on foetal development : Species: Rat, male and female
Application Route: Oral
Dose: 100, 330 or 1000 milligram per kilogram
General Toxicity Maternal: No observed adverse effect level:
1,000 mg/kg body weight
Developmental Toxicity: No observed adverse effect level:
1,000 mg/kg body weight
Method: OECD Test Guideline 422
Result: Animal testing did not show any effects on fertility.

Reproductive toxicity - Assessment : No data available

STOT - single exposure

No data available

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STOT - repeated exposure

No data available

Repeated dose toxicity

Components:

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

Species: Rat, male and female

NOAEL: 1,000 mg/kg

Application Route: Oral

Dose: 100, 330 or 1000 mg/kg/day

Method: OECD Test Guideline 422

Repeated dose toxicity - Assessment : No data available

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

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SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to microorganisms : IC50 : > 300 mg/l
Exposure time: 3 h

Components:

Chromate(2-), [2,4-dihydro-4-[(2-hydroxy-5-nitrophenyl)azo]-5-methyl-2-phenyl-3H-pyrazol-3-onato(2-)] [3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-2-hydroxy-5-nitrobenzenesulfonato(3-)]-, disodium:

Toxicity to fish : LC50 : > 0.1 - 1 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 : 31 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae : EC50 : 8.03 mg/l
Exposure time: 7 Days
Method: OECD Test Guideline 221

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : IC50 : > 300 mg/l
Method: Other guidelines

Ecotoxicology Assessment
Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Disodium [2-hydroxy-3-[(2-hydroxy-1-naphthyl)azo]-5-nitrobenzene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

Toxicity to fish : LC50 : 7 mg/l
Exposure time: 48 h

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

Toxicity to algae : EC50 (Lemna gibba (gibbous duckweed)): 69 mg/l
Exposure time: 7 d
Method: OECD Test Guideline 221

Toxicity to microorganisms : IC50 : > 300 mg/l
Exposure time: 3 h

Ecotoxicology Assessment

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Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 146 mg/l
Exposure time: 48 h
Test Type: semi-static test
Method: OECD Test Guideline 202

Toxicity to algae : ErC50 (Lemna minor (duckweed)): 82 mg/l
Exposure time: 7 d
Method: OECD Test Guideline 221

Toxicity to microorganisms : IC50 : > 320 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Ecotoxicology Assessment
Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

Disodium [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]-N-methylnaphthalene-2-sulphonamidato(2-)] [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-2-sulphonato(3-)]cobaltate(2-):

Toxicity to fish : LC50 : 58 mg/l
Exposure time: 48 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 131 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to microorganisms : IC50 : > 320 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Ecotoxicology Assessment
Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Sodium bis[2-(3-chlorophenyl)-2,4-dihydro-4-[[2-hydroxy-5-mesylphenyl]azo]-5-methyl-3H-pyrazol-3-onato(2-)]chromate(1-):

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

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.6 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : IC50 : > 300 mg/l
Exposure time: 3 h

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Method: No information available.

12.2 Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 70 - 80 %
Exposure time: 28 d
Method: OECD Test Guideline 302B

Biochemical Oxygen Demand (BOD) : 50 mgO₂/g

Chemical Oxygen Demand (COD) : 555 mgO₂/g

Components:

Disodium [2-hydroxy-3-[(2-hydroxy-1-naphthyl)azo]-5-nitrobenzene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

Biodegradability : Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 302 C

Biochemical Oxygen Demand (BOD) : 0 mgO₂/g
Incubation time: 5 d
Method: OECD Test Guideline 302 C

Chemical Oxygen Demand (COD) : 824 mgO₂/g

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

Biodegradability : Result: Not biodegradable
Biodegradation: 22.9 %
Exposure time: 28 d
Method: OECD Test Guideline 302B

Biochemical Oxygen Demand (BOD) : 4 mgO₂/g
Incubation time: 5 d
Method: Directive 67/548/EEC, Annex V, C.5

Chemical Oxygen Demand (COD) : 496 mgO₂/g

Disodium [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]-N-methylnaphthalene-2-sulphonamidato(2-)] [6-amino-5-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-2-sulphonato(3-)]cobaltate(2-):

Biodegradability : Result: Not biodegradable
Biodegradation: 0 %
Exposure time: 21 d
Method: OECD Test Guideline 302 C

Biochemical Oxygen Demand (BOD) : 0 mgO₂/g

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Demand (BOD) : Incubation time: 5 d
Method: Directive 67/548/EEC, Annex V, C.5

Chemical Oxygen Demand (COD) : 493 mgO₂/g

Sodium bis[2-(3-chlorophenyl)-2,4-dihydro-4-[[2-hydroxy-5-mesylphenyl]azo]-5-methyl-3H-pyrazol-3-onato(2-)]chromate(1-):

Biochemical Oxygen Demand (BOD) : 0 mgO₂/g
Incubation time: 5 d
Method: OECD Test Guideline 302 C

Chemical Oxygen Demand (COD) : 1118 mgO₂/g

12.3 Bioaccumulative potential

Components:

Disodium [2-hydroxy-3-[(2-hydroxy-1-naphthyl)azo]-5-nitrobenzene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

Partition coefficient: n-octanol/water : log Pow: < 3

Disodium [4-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]naphthalene-1-sulphonato(3-)] [1-[(2-hydroxy-4-nitrophenyl)azo]-2-naphtholato(2-)]chromate(2-):

Partition coefficient: n-octanol/water : log Pow: < 3

Sodium bis[2-(3-chlorophenyl)-2,4-dihydro-4-[[2-hydroxy-5-mesylphenyl]azo]-5-methyl-3H-pyrazol-3-onato(2-)]chromate(1-):

Partition coefficient: n-octanol/water : log Pow: < 3 (20 °C)
Method: No information available.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Adsorbed organic bound halogens (AOX) : 0 %

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

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

SECTION 14: Transport information

IATA

- 14.1 UN number** : UN 3077
14.2 UN proper shipping name : Environmentally hazardous substance, solid, n.o.s.
(AZO DYESTUFF)
14.3 Transport hazard class(es) : 9
14.4 Packing group : III
Labels : Miscellaneous
Packing instruction (cargo aircraft) : 956
Packing instruction (passenger aircraft) : 956

IMDG

- 14.1 UN number** : UN 3077
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(AZO DYESTUFF)
14.3 Transport hazard class(es) : 9
14.4 Packing group : III
Labels : 9
EmS Code : F-A, S-F
14.5 Environmental hazards
Marine pollutant : yes

ADR

- 14.1 UN number** : UN 3077
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(AZO DYESTUFF)

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14.3 Transport hazard class(es) : 9
14.4 Packing group : III
Labels : 9
14.5 Environmental hazards
Environmentally hazardous : yes

RID

14.1 UN number : UN 3077
14.2 UN proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (AZO DYESTUFF)
14.3 Transport hazard class(es) : 9
14.4 Packing group : III
Labels : 9
14.5 Environmental hazards
Environmentally hazardous : no

Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

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

DSL : This product contains one or several components listed in the Canadian NDSL.
AICS : Low volume exemption
NZIoC : On the inventory, or in compliance with the inventory
ENCS : On the inventory, or in compliance with the inventory

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KECI : On the inventory, or in compliance with the inventory

PICCS : Not 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 : On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), ENCS (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (United States of America (USA))

15.2 Chemical safety assessment

SECTION 16: Other information

Full text of H-Statements

H317 : May cause an allergic skin reaction.
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.
H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Acute : Acute aquatic toxicity
Aquatic Chronic : Chronic aquatic toxicity
Skin Sens. : Skin sensitisation
GB EH40 : UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

Further information

Classification of the mixture:

Skin Sens. 1 H317
Aquatic Acute 1 H400
Aquatic Chronic 1 H410

Classification procedure:

Calculation method
Calculation method
Calculation method

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