

SAFETY DATA SHEET

NOVACRON BRILLIANT BLUE FN-G

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Identification of the substance or mixture

Product name : NOVACRON BRILLIANT BLUE FN-G
Product type : Solid.
Product description : Oxazine dye preparation

Use of the substance/mixture

Uses : Textile dye
Supplier : Huntsman Textile Effects, Klybeckstrasse 200, CH
 4057 Basel, Telephone: +41 61 299 11 11

EU-Distributor : Huntsman Textile Effects
 c/o Huntsman Textile Effects (Germany) GmbH
 Rehlinger Straße 1
 D-86462 Langweid
 Deutschland
 Tel: +49 8230 410
 Fax: +49 8230 41 370

Information contact : pehs_te@huntsman.com
Emergency telephone number : Europe: +32 35751234
 Americas: +1 703 527 3887
 Africa: +32 35751234
 Asia & Pacific: +65 6336 6011
 China: +86 20 39377888
 India: + 91 22 40 506 333
 USA & Canada: 800 424 9300

2. HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xi; R41
Human health hazards : Risk of serious damage to eyes.

See Section 11 for more detailed information on health effects and symptoms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation : Mixture

Ingredient name	CAS number	%	EC number	Classification
6,13-dichloro-3,10-bis{2-[4-fluoro-6-(2-sulfophenylamino)-1,3,5-triazin-2-ylamino]propylamino}benzo[5,6][1,4]oxazino[2,3-b.]phenoxazine-4,11-disulphonic acid, lithium-, sodium salt See section 16 for the full text of the R-phrases declared above	163062-28-0	60 - 100	418-000-8	Xi; R41 [1]

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

Date of issue/Date of revision : 21 December 2010

3. COMPOSITION/INFORMATION ON INGREDIENTS

Occupational exposure limits, if available, are listed in Section 8.

4. FIRST AID MEASURES

First-aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Loosen tight clothing such as a collar, tie, belt or waistband. Consult a physician immediately if symptoms such as shortness of breath or asthma are observed.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes.
- Protection of first-aiders** : 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** : Symptomatic treatment

See Section 11 for more detailed information on health effects and symptoms.

5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : No specific fire or explosion hazard.
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
phosphorus oxides
halogenated compounds
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up**
- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

Date of issue/Date of revision : 21 December 2010

6. ACCIDENTAL RELEASE MEASURES

- Large spill** : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

7. HANDLING AND STORAGE

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

- Recommended** : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
No exposure limit value known.	

- Recommended monitoring procedures** : None assigned.

Exposure controls

- Occupational exposure controls** : Use only with adequate ventilation.

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Avoid ingestion, inhalation, skin and eye contact. Handle in accordance with good industrial hygiene practice and any legal requirements. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: Respiratory protection, filter P3

- Hand protection** : 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. <1 hours (breakthrough time): butyl or neoprene

- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: tightly fitting safety goggles

- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

- Physical state : Solid. [granules]
 Colour : Violet.
 Odour : Odourless.

Important health, safety and environmental information

- pH : 7 to 7.5 [Conc. (% w/w): 2%]
 Decomposition temperature : >200°C (>392°F)
 Oxidising properties : None
 Density : 0.4 to 0.5 g/cm³ [20°C (68°F)]
 Water solubility : 80 g/l 30 deg C
 Partition coefficient: n-octanol/water : <-10
 Auto-ignition temperature : >300°C
 Dust ignition temperature : 500 °C
 Dust min ignition energy : > 1 J

10. STABILITY AND REACTIVITY

- Chemical stability : The product is stable.
 Possibility of hazardous reactions : None
 Conditions to avoid : No specific data.
 Materials to avoid : None known.
 Hazardous decomposition products : None under normal storage conditions

11. TOXICOLOGICAL INFORMATION

Toxicokinetics

- Absorption : Not available.
 Distribution : Not available.
 Metabolism : Not available.
 Elimination : Not available.

Potential acute health effects

- Inhalation : Cases of respiratory sensitisation have been observed with reactive dyes.
 Ingestion : No known significant effects or critical hazards.
 Skin contact : No known significant effects or critical hazards.
 Eye contact : Stains the eyes

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
NOVACRON BRILLIANT BLUE FN-G	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

- Conclusion/Summary : Not available.

Potential chronic health effects

Chronic toxicity

- Conclusion/Summary : Not available.

Irritation/Corrosion

Conclusion/Summary

- Skin : Non-irritant. OECD 404
 Eyes : Stains the eyes OECD 405

Sensitiser

Date of issue/Date of revision : 21 December 2010

11. TOXICOLOGICAL INFORMATION

Product/ingredient name	Route of exposure	Species	Result
6,13-dichloro-3,10-bis{2-[4-fluoro-6-(2-sulfophenylamino)-1,3,5-triazin-2-ylamino]propylamino}benzo[5,6][1,4]oxazino[2,3-b.]phenoxazine-4,11-disulphonic acid, lithium-, sodium salt	skin	Guinea pig	Not sensitizing
Conclusion/Summary	: Cases of respiratory sensitisation have been observed with reactive dyes. Care should be taken to avoid inhalation. Should an individual become sensitized a physician should be consulted and all contact with reactive dyes must cease immediately.		
Respiratory			
Carcinogenicity	: Not available.		
Conclusion/Summary	: Not available.		
Mutagenicity	: Not available.		
Conclusion/Summary	: Not available.		
Teratogenicity	: Not available.		
Conclusion/Summary	: Not available.		
Reproductive toxicity	: Not available.		
Conclusion/Summary	: Not available.		
Chronic effects	: No known significant effects or critical hazards.		
Carcinogenicity	: No known significant effects or critical hazards.		
Mutagenicity	: No known significant effects or critical hazards.		
Teratogenicity	: No known significant effects or critical hazards.		
Developmental effects	: No known significant effects or critical hazards.		
Fertility effects	: No known significant effects or critical hazards.		
Over-exposure signs/symptoms			
Inhalation	: No specific data.		
Ingestion	: No specific data.		
Skin	: No specific data.		
Eyes	: Adverse symptoms may include the following: Stains the eyes		

12. ECOLOGICAL INFORMATION

Environmental effects : Not readily biodegradable. This product shows a low bioaccumulation potential.

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
NOVACRON BRILLIANT BLUE FN-G	OECD 202 <i>Daphnia</i> sp. Acute Immobilisation Test	Acute EC50 >223.1 mg/L	Daphnia	48 hours
	OECD 209 Activated Sludge, Respiration Inhibition Test	Acute IC50 >320 mg/L	Bacteria - Activated sludge	3 hours
	OECD 203 Fish, Acute Toxicity Test	Acute LC50 >228.1 mg/L	Fish - Zebra fish (Brachydanio rerio)	96 hours
	OECD 203 Fish, Acute Toxicity Test	Acute NOEC 228.1 mg/L	Fish - Zebra fish (Brachydanio rerio)	96 hours
	OECD 202 <i>Daphnia</i> sp. Acute Immobilisation Test	Acute NOEC 223.1 mg/L	Daphnia	48 hours
	OECD 201 Alga,	Acute NOEC	Algae	72 hours

Date of issue/Date of revision : 21 December 2010

12. ECOLOGICAL INFORMATION

Growth Inhibition >100 mg/L
Test

Conclusion/Summary : Not toxic or harmful to aquatic organisms

Other ecological information

Biodegradability

Product/ingredient name	Test	Result	Dose	Inoculum
NOVACRON BRILLIANT BLUE FN-G	OECD 301A Ready Biodegradability - DOC Die-Away Test	<10 % - Not readily - 28 days	-	-
	OECD 302B Inherent Biodegradability: Zahn- Wellens/EMPA Test	<10 % - 28 days	DOC	-

Conclusion/Summary : Not readily biodegradable.

BOD5 : 0 mgO₂/g

COD : 829 mgO₂/g

TOC : 34.76 %

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
6,13-dichloro-3,10-bis{2-[4-fluoro-6-(2-sulfophenylamino)-1,3,5-triazin-2-ylamino]propylamino}benzo[5,6][1,4]oxazino[2,3-.b.]phenoxazine-4,11-disulphonic acid, lithium-, sodium salt	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
6,13-dichloro-3,10-bis{2-[4-fluoro-6-(2-sulfophenylamino)-1,3,5-triazin-2-ylamino]propylamino}benzo[5,6][1,4]oxazino[2,3-.b.]phenoxazine-4,11-disulphonic acid, lithium-, sodium salt	<-10	-	low

Other adverse effects : No known significant effects or critical hazards.

Organohalogen content : 4.6 % Chloro

PBT : Not applicable.

Other information

Phosphorus Content : 0.7 % as phosphate

Nitrogen Content : 11.4 %

: Metal content under the ETAD recommended limits

13. DISPOSAL CONSIDERATIONS

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Date of issue/Date of revision : 21 December 2010

14. TRANSPORT INFORMATIONInternational transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label
ADR/RID Class	Not applicable.		-	-	
ADN/ADNR Class	Not applicable.		-	-	
IMDG Class	Not applicable.		-	-	
IATA Class	Not applicable.		-	-	

Remarks PG* : Packing group

15. REGULATORY INFORMATION

Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Hazard symbol or symbols :



Irritant

Risk phrases : R41- Risk of serious damage to eyes.

Safety phrases : S22- Do not breathe dust.
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S39- Wear eye/face protection.

Contains :

Product use : Industrial applications.

International regulations**16. OTHER INFORMATION**

Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK) : R41- Risk of serious damage to eyes.

Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK) : Xi - Irritant

GHS Classification (UN)

Classification of the substance or mixture : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

GHS label elements

Symbol

Date of issue/Date of revision : 21 December 2010

16. OTHER INFORMATION



Signal word	: Danger
Hazard statements	: Causes serious eye damage.
Precautionary statements	
Prevention	: Wear eye/face protection. Avoid breathing dust.
Response	: IF IN EYES: Rinse cautiously with water for several minutes. Immediately call a POISON CENTER or physician.
Storage	: Not applicable.
Disposal	: Not applicable.

History

MSDS no.	: 00042450
Date of printing	: 21. December 2010
Date of issue/ Date of revision	: 21. December 2010
Date of previous issue	: No previous validation
Version	: 1
Prepared by	: Huntsman Textile Effects, EH&S, Klybeckstrasse 200, CH 4057 Basel: pehs_te@huntsman.com

✔ Indicates information that has changed from previously issued version.

Notice to reader

Product name is a trademark of Huntsman Corporation or an affiliate thereof.

While the information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

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.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT PERMISSION IN WRITING FROM HUNTSMAN. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET SHOULD BE DIRECTED TO HUNTSMAN, MANAGER, PRODUCT SAFETY AT THE ABOVE ADDRESS.

Annex
