

SAFETY DATA SHEET

SOLOPHENYL® BROWN RL 130%

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

Product name : SOLOPHENYL® BROWN RL 130%

Use of the substance/mixture : Textile dye

Supplier/Manufacturer : Huntsman International (India) Pvt. Ltd.
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Light Hall, 'B' Wing Saki Vihar Road,
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e-mail address of person responsible for this SDS : pehs_te@huntsman.com

Section 2. Hazards identification

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : No Code(s) - Avoid ingestion, inhalation, skin and eye contact. Handle in accordance with good industrial hygiene practice and any legal requirements.

Response : Not applicable.

Storage : Store in accordance with all local, regional, national and international regulations.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Sodium [5-[[2,5-dimethyl-4-[(4-sulfophenyl)azo]phenyl]azoxy]-2-[2-[4-[3-hydroxy-4-[(2-hydroxy-5-sulfophenyl)azo]phenyl]azoxy]-2-sulfophenyl]ethenyl]benzenesulfonato]cuprate	60 - 100	70304-36-8

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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

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Section 4. First-aid measures

Description of necessary first aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- 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. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Eye contact** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Inhalation** : No specific data.
- Ingestion** : No specific data.
- Skin** : No specific data.
- Eyes** : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

- Specific treatments** : Not available.
- Notes to physician** : No specific treatment. Treat symptomatically. Call medical doctor or poison control centre immediately if large quantities have been ingested.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Specific hazards arising from the chemical** : No specific fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
metal oxide/oxides
- Special precautions for fire-fighters** : 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.
- 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.

Section 5. Fire-fighting measures

Remark : Not available.

Section 6. Accidental release measures

- Personal precautions, protective equipment and emergency procedures** : 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. Put on appropriate personal protective equipment.
- 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 and material for containment and cleaning up** : Move containers from spill area. 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. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

- Precautions for safe handling** : 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. See also Section 8 for additional information on hygiene measures.
- Put on appropriate personal protective equipment (see Section 8).
- Conditions for safe storage, including any incompatibilities** : 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.

Section 8. Exposure controls/personal protection

Control parameters

Ingredient name	Exposure limits
None.	

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
- Appropriate engineering controls** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- 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.

Individual protection measures

Section 8. Exposure controls/personal protection

- 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. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Respiratory protection** : Use a properly fitted, particulate filter 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 P1
- 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.
Use gloves approved to relevant standards e.g. EN 374 (Europe), F739 (US). Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers. Additional information can be found for instance at www.gisbau.de.
- 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, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- 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.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Solid. [powder]
- Colour** : Brown.
- Odour** : Odourless.
- Odour threshold** : Not available.
- pH** : 8.2 to 8.8 [Conc. (% w/w): 2%]
- Melting point** : >220°C (>428°F)
- Boiling point** : Not available.
- Flash point** : Closed cup: Not applicable.
- Evaporation rate (butyl acetate = 1)** : Not applicable.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapour pressure** : Not available.
- Vapour density** : Not available.
- Relative density** : Not available.
- Solubility** : 80 g/l @ 30 deg C
80 g/l
30 deg C
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Viscosity** : Not available.

Section 9. Physical and chemical properties

Explosive properties : Not available.

Oxidising properties : None.

Other information

Density : 0.8 to 0.9 g/cm³ [20°C (68°F)]

No additional information.

Section 10. Stability and reactivity

Chemical stability : The product is stable.

Possibility of hazardous reactions : Hazardous reactions or instability may occur under certain conditions of storage or use.

None

Conditions to avoid : No specific data.

None.

Incompatible materials : None under normal storage conditions.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Decomposition products may include the following materials:None under normal storage conditions.

Section 11. Toxicological information

Information on the likely routes of exposure

Inhalation : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Eye contact : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : No specific data.

Ingestion : No specific data.

Skin contact : No specific data.

Eye contact : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Acute toxicity

Product/ingredient name	Endpoint	Species	Result	Exposure
Sodium [5-[[2,5-dimethyl-4-[(4-sulfophenyl)azo]phenyl]azoxy]-2-[2-[4-[[3-hydroxy-4-[(2-hydroxy-5-sulfophenyl)azo]phenyl]azoxy]-2-sulfophenyl]ethenyl]benzenesulfonato]cuprate	LD50 Oral	Rat	>3100 mg/kg	-
SOLOPHENYL BROWN RL 130%	LD50 Oral	Rat	>3100 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Test	Species	Result
SOLOPHENYL BROWN RL 130%	-	Rabbit	Eyes - Non-irritant.
	-	Rabbit	Skin - Non-irritant.

Conclusion/Summary

Section 11. Toxicological information

Skin : Non-irritating to the skin. OECD 404

Eyes : Non-irritating to the eyes. OECD 405

Sensitisation

Product/ingredient name	Test	Route of exposure	Species	Result
Sodium [5-[[2,5-dimethyl-4-(4-sulfophenyl)azo]phenyl]azoxy]-2-[2-[4-[[3-hydroxy-4-(2-hydroxy-5-sulfophenyl)azo]phenyl]azoxy]-2-sulfophenyl]ethenyl] benzenesulfonato]cuprate	OECD 406 Skin Sensitization	skin	Guinea pig	Not sensitizing
SOLOPHENYL BROWN RL 130%	OECD 406 Skin Sensitization	skin	Guinea pig	Not sensitizing

Potential chronic health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Eye contact : 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.

Mutagenicity

Conclusion/Summary : **SODIUM SULPHATE**: No mutagenic effect.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Aspiration hazard

Not available.

Section 12. Ecological information

Environmental effects : Not readily biodegradable.

Aquatic and terrestrial toxicity

Product/ingredient name	Test	Endpoint	Exposure	Species	Result
Sodium [5-[[2,5-dimethyl-4-(4-sulfophenyl)azo]phenyl]azoxy]-2-[2-[4-[[3-hydroxy-4-(2-hydroxy-5-sulfophenyl)azo]phenyl]azoxy]-2-sulfophenyl]ethenyl] benzenesulfonato]cuprate	OECD 209 Activated Sludge, Respiration Inhibition Test	IC50	3 hours	Bacteria	>300 mg/l
	OECD 203 Fish, Acute Toxicity Test	LC0	48 hours	Fish	20 mg/l

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Section 12. Ecological information

SOLOPHENYL BROWN RL 130%	OECD 203 Fish, Acute Toxicity Test	LC100	48 hours	Fish	>1000	mg/l
	OECD 203 Fish, Acute Toxicity Test	LC50	48 hours	Fish	>100	mg/l
	-	IC50	3 hours	Bacteria	>300	mg/l
	OECD 203 Fish, Acute Toxicity Test	LC50	48 hours	Fish	>100	mg/l

Biodegradability

Product/ingredient name	Test	Period	Result
SOLOPHENYL BROWN RL 130%	OECD 303A Simulation Test - Aerobic Sewage Treatment - Activated Sludge Units	28 days	<10 %

Conclusion/Summary : Poorly eliminated by adsorption on effluent treatment sludge.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
SOLOPHENYL BROWN RL 130%	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Sodium [5-[[2,5-dimethyl-4-[(4-sulfofenyl)azo]phenyl]azoxy]-2-[2-[4-[[3-hydroxy-4-[(2-hydroxy-5-sulfofenyl)azo]phenyl]azoxy]-2-sulfofenyl]ethenyl]benzenesulfonato]cuprate	<3	-	low

Mobility : Not available.

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

BOD5 : 0 mgO₂/g

COD : 690 mgO₂/g

TOC : 23.5 %

Organohalogen content : 0 %

Phosphorus Content : 0 %

Metal Content : 2.4 % Copper as organo-metal complex

Soil/water partition coefficient (K_{oc}) : Not available.

Results of PBT and vPvB assessment

Not applicable.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

International transport regulations

14.1 UN number 14.2 UN proper shipping name

ADR/RID Not regulated. -

IMDG Not regulated. -

IATA Not regulated. -

	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards	14.6 Special precautions for user	Additional information
ADR/RID	-	-	No.	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	-
IMDG	-	-	No.	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	-
IATA	-	-	No.	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	-

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.

Section 15. Regulatory information

Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
Prevention	: Avoid ingestion, inhalation, skin and eye contact. Handle in accordance with good industrial hygiene practice and any legal requirements.
Response	: Not applicable.
Storage	: Store in accordance with all local, regional, national and international regulations.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Additional information: 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.

Risk phrases : This product is not classified according to EU legislation.

Section 16. Other information

History

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Key to abbreviations	: ASTM = American Society for Testing Materials DNEL = Derived No Effect Level ETAD = The Ecological and Toxicological Association of Dyes and Organic Pigments Manufacturers GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods OECD = Organisation for Economic Co-operation and Development PNEC = Predicted No Effect Concentration

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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.

Section 16. Other information

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