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

1.1. Product identifier

Product / Trade name:	Charu Reactive Inkjet Black Ink
Synonyms:	None
Proper shipping name:	None
Other means of identification:	None

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

1.2.1. Relevant identified uses

For priniting on textile.
For Professional/Industrial use only

1.2.2. Uses advised against

Advice against other uses

1.3. Details of the supplier of the safety data sheet

Supplier name: Kothari Infotech Ltd.
Address: D202, Indoworld Commercial Complex, Behind Kadiwala,High school, Ring Road,Surat,Gujarat,

Pincode; 395002

Telephone: +91- 261-2365946
Fax: +91-261-2460827
E-mail: ankitm@kothariinfotech.com

Importer name: Address:
Telephone:
E-mail:

1.4. Emergency telephone number

Country	Advisory body	Address	Emergency number
India		Kothari Infotech Ltd	0091-261-2365945 (10am-6pm, Mon-Sat)
European countries	European Emergency Number Association	-----	112 (24/7 available)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 1999/45/EC

Risk codes	Risk phrases
R43	May cause sensitization by skin contact

Contains reactive dyes. May produce an allergic reaction.

Classification according to Regulation (EC) No 1272/2008 (CLP)

Classification	Category	Exposure route
Skin Sens.	1	-

Other adverse physico-chemical, human health and environmental effects

None

2.2. Label elements

Labelling according to Directive 1999/45/EC

Symbol:

Indication(s) of danger: **Skin sensitizer**

Safety advice:

S01: Keep locked up.

S24: Avoid contact with skin

S02: Keep out of the reach of children

S28: In case of contact with skin, rinse immediately with plenty of water and seek medical advice

S36: Wear suitable protective clothing

S46: If swallowed, seek medical advice immediately and show this container or label

S61: Avoid release to the environment. Refer to special instructions/Safety data sheet

S53: Avoid exposure - obtain special instructions before use.

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Hazard pictogram:

Signal word:	Warning
Hazard statements:	H317: May cause an allergic skin reaction
	EU208: Contains reactive dyes. May produce an allergic reaction.

Precautionary statements:

Prevention:	P261: Avoid breathing mist/vapors/spray P272: Contaminated work clothing should not be allowed out of the workplace P280: Wear protective gloves/ protective clothing/ protective eye and face protection P264: Wash hands/ area of contact thoroughly after handling. P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P281: Use personal protective equipment as required. P273: Avoid release to the environment.
Response:	P 302+ P352 : Wash with plenty of soap and water
	P333+P313: If skin irritation or rash occurs: Get medical advice /attention
	P363: Wash contaminated clothing before reuse
	P310: Immediately call a Poison center or doctor/ physician.
	P391:Collect spillage
Storage:	P405: Store locked up.
Disposal:	P501: Dispose of contents/container in accordance with local/regional/national/international regulation.

2.3. Other hazards

No reliable data available.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	CAS No.	EC No.	Index No.	REACH No.	% wt/wt	Classification according to (EC) No1272/2008 (CLP)	Classification according to Directive 67/548/EEC
Ethylene Glycol	107-21-1	203-473-3	603-027-21-1		<20	Acute Tox4; H302	Xn R 22
CI Reactive Black 39	68259-02-9	269-505-3	No data available	----	<15	Skin Sens. 1; H317	R 43
CI Reactive Yellow 95	84045-63-6	281-865-3	No data available	----	<4	Skin Sens. 1; H317	R 43

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Move victim to fresh air. If not breathing, give artificial respiration. Get medical attention.

Skin contact: Immediately wash with plenty of soap and water. Get medical attention if irritation occurs.

Eye contact: Immediately flush eyes with running water for at least 20 minutes holding eyelids open. Immediately call a poison center or doctor/physician..

Ingestion: Do not induce vomiting. Give 1-2 glasses of water to a conscious victim. Never give anything by mouth to an unconscious victim. Get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Inhaled:

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models).Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

Ingestion:

Although ingestion is not thought to produce harmful effects (as classified under EC Directives), the material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health).

Skin Contact:

Since material may cause sensitization to skin, good hygiene practice requires that exposure be kept to a minim um and that suitable gloves be used in an occupational setting.

Eye:

Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

Chronic:

Occupational exposure to reactive dyes may result in respiratory or skin sensitization. Several cases of allergy are attributed to the sensitising effect of certain reactive dyes inhaled in the form of dust or exposed to skin.

Most organic azo dyes are potential skin sensitizers, the most important of which are para-phenylenediamine and its analogs. Water soluble azo dyes are more likely to cause clinical sensitisation than insoluble dyes

4.3. Indication of any immediate medical attention and special treatment needed

No reliable data available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Alert Fire Brigade and tell them location and nature of hazard.

Wear breathing apparatus plus protective gloves.

Prevent, by any means available, spillage from entering drains or water courses.

Use water delivered as a fine spray to control fire and cool adjacent area.

DO NOT approach containers suspected to be hot.

Cool fire exposed containers with water spray from a protected location.

If safe to do so, remove containers from path of fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Wear Chemical goggles and chemical resistance gloves. Protective clothing essential while handling.

6.1.2. For emergency responders

Wear breathing apparatus plus protective gloves and protective clothing. Remove ignition sources and provision of sufficient ventilation, evacuate the danger area and consult experts.

6.2. Environmental precautions

Take precautions to prevent entry into waterways, sewers, or surface drainage systems. Dispose according to local or international regulations.

6.3. Methods and material for containment and cleaning up

Use appropriate tools to put the spilled material in suitable container for recovery or disposal, avoid raising dust.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the MSDS

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Note: For the best performance of the inks for application it is advisable to store and transport between 10 deg C to 35 deg C

Suitable container: PP/ HDPE/LDPE plastic can or drums. Check all containers are clearly labelled and free from leaks. Keep container tightly closed in the ventilated place. Store in dry place. Keep away from heat and direct sunlight.

Storage incompatibility: Avoid reaction with incompatible substances. Avoid reaction with oxidizing agents.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available.

8.2. Exposure controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. W ell-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the w ay a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

General Personal Protection: Safety goggles or face shield, chemical resistant gloves, protective clothing and apparatus.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Black
Odour:	Mild
Odour threshold	No data available
pH:	Not established
Melting point / Freezing point:	Not applicable
Boiling point:	>100°C
Flash point:	>100°C
Evapotation rate:	Not established
Flammability (solid, gas):	Non flammable
Upper/lower flammability:	No data available
Explosive limits:	No data available
Vapour pressure:	No data available
Vapour density	No data available
Density g/cm3:	1.15
Water Solubility(ies):	Soluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	Not applicable
Viscosity:	3-12cPs
Explosive properties:	Not explosive
Oxidising properties:	Not oxidising

9.2. Other information

No additional data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal storage conditions. May react with strong oxidizing agents and incompatible materials.

10.2. Chemical stability

Product is considered stable during storage and transportation under normal condition.

10.3. Possibility of hazardous reactions

Stable under normal conditions. Hazardous reactions may occur if contact with incompatible material.

10.4. Conditions to avoid

Heat and direct sunlight, high temperature, ignition sources (sparks, flames, static), incompatible materials.

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

Thermal decomposition products: may emit toxic fumes. Oxides of carbon, sulphur, nitrogen, zinc and phosphorus.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Data available for the mixture.

(a) Acute Oral Toxicity

LD 50>2000 mg/kg , mice, Test method: OECD 203, Aeration.

Conclusion: No toxic symtoms were observed & none of the tested mice died during 96Hrs after the dose.

(b) Mutagenicity
No data available

(c) STOT- Repeated exposures
No data available

(d) Reproductive Toxicity
No data available

(e) Aspiration hazard: not tested

Sensitization: No data available for mixture. Classified as sensitizing to skin based on component hazards.

Other information: None

SECTION 12: Ecological information

12.1. Aquatic Toxicity

Data available for the mixture.

Fish toxicity : Group of 8 fish were exposed to the concentration of 11mg/lit, OECD 203

Conclusion: sample did not cause any death of 8 fishes exposed for 96Hrs.

12.2. Persistence and degradability

Abiotic Degradation: No data available
Physical- and photo-chemical elimination: No data available
Biodegradation: After the 28 day test, extent of biodegradation was 89% based on COD measurement. Test method: OECD 302B

Hence, not classified.

12.3. Bioaccumulative potential

Bioconcentration factor (BCF): No data available

12.4. Mobility in soil

Distribution to environmental compartments: No data available

Adsorption/ Desorption: No data available

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal: refer to specific national regulation. Do not discharge into sewer or waterways.

Contaminated packaging: contaminated, empty containers must be disposed of as chemical waste.

SECTION 14: Transport information

Note: For the best performance of the inks for application it is advisable to store and transport between 10 deg C to 35 deg C.

Land transport (ADR / RID / GGVSE)

14.1 UN number	Not applicable	14.4 Packing group	Not applicable	
14.2 UN proper shipping name	Not dangerous goods	14.5 Environmental hazard	No relevant data	
14.3 Transport hazard class(es)	Not applicable	14.6 Special precautions for user	Hazard identification (Kemler)	Not applicable

Air transport (ICAO-IATA / DGR)

14.1 UN number	Not applicable	14.4 Packing group	Not applicable
14.2 UN proper shipping name	Not applicable	14.5 Environmental hazard	No relevant data
14.3 Transport hazard class(es)	Not applicable	14.6 Special precautions for user	No data available

Inland waterways transport (ADNR / River Rhine)

14.1 UN number	None	
14.2 UN proper shipping nam e	None	
14.3 Transport hazard class(es)	None	
14.4 Packing group	None	
14.5 Environment al hazards	None	
14.6 Special precautions for user	Classification code	None None
	Equipment	None
	Fire cones	None

Sea Transport (IMDG code-GGVSee)

14.1 UN number	None	14.4 Packing group	None	
14.2 UN proper shipping name	None	14.5 Environmental hazard	None	
14.3 Transport hazard class(es)	None	14.6 Special precautions for user	EMS Number	None

14.7. Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

This safety data sheet is in compliance with the following EU legislation and its adaptations – as far as applicable - 67/548/EEC, 1999/45/EC, Regulation (EC) No 1272/2008, Regulation (EC) No. 453/2010; Regulation (EC) No 1907/2006, 98/24/EC, 92/85/EEC, 94/33/EC, 91/689/EEC and 1999/13/EC.

15.1.2. International/National regulations

No data available

15.1.3. Regulation for ingredients

None

15.2. Chemical safety assessment

No chemical safety assessment report was provided for this safety data sheet compilation.

SECTION 16: Other information

16.1 Key literature references and sources for data

- ESIS (European chemical Substances Information System), *http://esis.jrc.ec.europa.eu/*
- REACH registered chemicals, *http://echa.europa.eu/chem_data_en.asp*
- IFA GESTIS - International limit values for chemical agents - occupational exposure limits (OELs), *http://www.dguv.de/ifa/en/gestis/limit_values/index.jsp*

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

16.2 List of relevant hazard statements and risk phrases

H - Phrase	H317: May cause an allergic skin reaction
R - Phrase	R43 : May cause sensitization by skin contact

16.3 Other

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following EUCEN Standards:

EN 16 Personal eye – protection

EN 340 Protective clothing

EN 374 Protective gloves against chemicals and micro – organisms

EN 13832 Footwear protecting against chemicals

EN 133 Respiratory protective devices.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.