SAFETY DATA SHEET according to Regulation (EG) Nr. 1907/2006 (REACH) NOVOCOLOR® -Liquid Colors							
	BC51034	Version	2.0 / REG_EU	\diamond			
Revision date	29.11.2016	Print date Page	09.04.2019 1 / 7	NOVOSYSTEMS [®] LIQUIDCOLORS			
1. Identification of t	he substance/mixture	e and of the compa	ny/undertaking				
<u>1.1. Product identif</u> Novocolor[®] -L							
	ified uses of the substa I color for coloring of p		uses advised against:				
1.3. Details of the s	supplier of the safety d	ata sheet:					
Company							
Telephone : +49 (0)4105 1458 0 Telefax : +49 (0)4105 1458 22 Email address : info@novosystems.de							
1.3.1. <u>Name of respo</u> Email:	3.1. Name of responsible persons: Rainer Hoop Email: hoop@novosystems.de						
1.4. Emergency tel	ephone number:	+49 (0)4105 14	58 0				

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classified under the CLP Regulation (Regulation (EC) no. 1272/2008, as amended). **Not a hazardous substance or mixture.**

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]: Labeling is not required. Components of danger: none

Hazard (H) statements: none.

Precautionary statements (Safety P-phrases): none.

2.3 Other hazards

The product shows no other known specific threat to humans or the environment.

3. Composition/information on ingredients

3.1 Substances

Not applicable.

3.2. mixtures:

Dispersion (Liquid Colour) based upon a fatty acid ester, aliphatic carbon-di-ester and/ or vegetable oil carrier system, indexed color pigments, amorphous silica

The product does not contain dangerous substances or the concentration of hazardous substances do not reach the limits specified in the relevant regulations, so this need not be indicated on the safety data sheet.

4. First aid measures

4.1 Description of first aid measures

- general notes General advice:

When symptoms persist or in all cases of doubt seek medical advice.

- following inhalation

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Provide fres	h air, seek medical a	dvice if necessary.					
<u>- following sk</u> Wash off wit	<u>kin contact</u> h soap and water.						
- following ey	<u>ye contact</u>						
Rinse with pl	lenty of water immedi	ately, seek medical ad	vice if necessary.				
- following in	- following ingestion						
Do not induce vomiting.							
Drink plenty of water.							
- self-protect	ion of the first aider						
No personal respiratory protective equipment normally required.							

- 4.2 Most important symptoms and effects, both acute and delayed No data available
- 4.2 Indication of any immediate medical attention and special treatment needed No data available

5. Firefighting measures

- 5.1 Extinguishing media
- 5.1.1. Suitable extinguishing media: foam, carbon dioxide (CO2), dry powder, water spray
- 5.1.2. Unsuitable extinguishing media: It is not known.
- 5.2 Special hazards arising from the substance or mixture Burning will produce toxic fumes.
- 5.3 Advice for firefighters Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves.

6. Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
- 6.1.1 For non-emergency personnel:

Do not allow unprotected personnel access to the accident site. Allow only trained professionals who wear suitable protective clothing that is present in the disaster area.

6.1.2. For emergency responders:

Use appropriate personal protective equipment. See the section 8th

6.2 Environmental precautions

Should not be released into the environment. Do not contaminate water. Although the carrier of the liquids is biologically degradable, the liquid which includes carrier and pigments should not washed into the environment even there will be no danger for the environment.

6.3 Methods and material for containment and cleaning up

Wash with warm water and mild cleaning agent. The liquids should be wiped up and disposed instead of washing them into the sewerage system. But if this happens the carrier is not dangerous and will be degraded after a while.

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6.4 Reference to other sections:

If you want more, or more detailed information, see chapter 8 and 13

7. Handling and storage

7.1 Precautions for safe handling

Observe normal hygiene precautions. Observe the rules usually refer to the use of chemicals. Precautions against fire and explosion: General measures for preventive fire protection. Special measures are not necessary.

7.2 Conditions for safe storage, including any incompatibilities

Keep away from direct sunlight and keep dry. Storage temperature: > 10 $^{\circ}$ C (recommended) If the product is stored at temperatures lower than 10 $^{\circ}$ C, before use it is recommended to

- warm up the product for 24 hours at room temperature and

- homogenize by using a rotational mixer

The product is stable for 1 year minimum.

Incompatible materials: None known.

Packaging: There is no specific requirement.

7.3 Specific end uses:

Specific instructions not available.

8. Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

Components of the mixture are not regulated by limiting an exposure value.

DNELs

	Workers			Consumers				
Route of	Acute effect	Acute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
exposure	local	effects	effects local	effects	effects local	effects	effects local	effects
		systemic		systemic		systemic		systemic
Oral							no	no
	Not required				exposure	exposure	exposure	
						expected	expected	expected
Inhalation	no	no	no	no	no	no	no	no
	exposure	exposure	exposure	exposure	exposure	exposure	exposure	exposure
	expected expected expected expected				expected	expected	expected	expected
Dermal	no data	no data	no data	no data	no data	no data	no data	no data
	available	available	available	available	available	available	available	available

PNECs

	PNEC
Soil	no data available
Water	no data available
Air	no data available

8.2 Exposure controls

8.2.1. Appropriate engineering controls

When using take precautions avoiding spills on clothes and floors, avoid contact with eyes and skin.

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8.2.2. Individual protection measures, such as personal protective equipment

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and feed.

- 1. Eye / face protection: Use suitable protective goggles (EN 166).
- 2. Skin protection:

a. Hand protection: Wear suitable protective gloves (EN 374).

- b. Other: No special protective equipment.
- 3. Respiratory protection: No personal respiratory protective equipment normally required.
- 4. Thermal hazard: None known.

8.2.3. Environmental exposure controls

There is no specific answer.

The requirements listed under point 8 assume skilled work under normal conditions and use of the product for the intended purpose. See the section 6th

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Appearance	viscous liquid
(b) Odour	mild fatty
(c) Odour threshold	no data available
(d) pH	6-8
(e) Melting point/freezing point	about 2-5°C
(f) Initial boiling point and boiling range	> 350°C
(g) Flash point	> 200 °C
(h) Evaporation rate	no data available
(i) Flammability (solid, gas)	no data available
(j) Upper/lower flammability or explosive limits	no data available
(k) Vapour pressure	< 0,01 Pa at 20°C
(I) Vapour density	no data available
(m) Density	1,5 g/mL
(n) Solubility(ies)	dispersable in water
(o) Partition coefficient: n-octanol/water	no data available
(p) Auto-ignition temperature	no data available
(q) Decomposition temperature	no data available
(r) Viscosity	1 - 6 Pas
(s) Explosive properties	no data available
(t) Oxidising properties	no data available

9.2 Other information

No data available

10. Stability and Reactivity

10.1. Reactivity

May react with oxidizing agents and reducing agents

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10.2. Chemical stability

The substance is stable at ambient temperature and general working conditions.

10.3. Possibility of hazardous reactions Thermal decomposition :> 350 ° C

10.4. Conditions to avoid

Avoid open fire

10.5. Incompatible materials

It is not known.

10.6. Hazardous decomposition products

No known hazardous decomposition products. In case of burning: carbon monoxide, carbon dioxide, toxic fumes

11. Toxicological information

11.1 Information on toxicological effects

There are no data available on the preparation itself. The preparation has been assessed following the conventional method of the Dangerous Preparation Directive 1999/45/ EC and not classified.

Acute toxicity	not classified, LD50 oral rat >2000
Skin corrosion/irritation	not classified, no data available
Serious eye damage/irritation	not classified, no data available
Respiratory or skin sensitization	not classified, no data available
germ cell mutagenicity	not classified, no data available
carcinogenicity	not classified, no data available
reproductive toxicity; not classified	no data available
Summary of evaluation of the CMR properties	not classified, no data available
STOT-single exposure	not classified, no data available
STOT-repeated exposure	not classified, no data available
aspiration hazard	not classified, no data available

12. Ecological information

12.1 Toxicity

Data are not available.

- <u>12.2. Persistence and degradability</u> Carrier system is biodegradable.
- <u>12.3. Bio accumulative potential</u> Data are not available.
- <u>12.4. Mobility in soil:</u> Data are not available.
- <u>12.5.</u> Results of PBT and vPvB Data are not available.
- <u>12.6. Other adverse effects</u> Data are not available.

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12.6. Additional information

The hazards of the product to the environment have been assessed according to the conventional method of the EU Dangerous Preparations Directive 1999/45/ EC giving no indication for a harmful for the environment classification.

13. Disposal considerations

13.1 Waste treatment methods:

Disposal in accordance with local regulations.

13.1.1. Information regarding disposal of the product:

There is no specific recommendation from the manufacturer. European waste code: liquid color: 080112

13.1.2. Information regarding the disposal of packaging:

Empty containers need to take it to a local recycling center to be disposed of there. European waste code:

- The cardboard box: 150101 - For PE-Bag: 150110

14. Transport Information

Not classified as dangerous in the meaning of transport regulations!

14.1. UN number:

None.

- 14.2 UN proper shipping name: None.
- <u>14.3. Transport hazard class</u> None.
- 14.4. packing group None.
- 14.5. Environmental hazards Relevant information is not available.
- <u>14.6. Special precautions for user</u> Relevant information is not available.
- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

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15. Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency and amending Directive 1999/45 / EC and repealing Council Regulation (EEC) No . 793/93 and Commission Regulation (EC) No. 1488/94 and Council Directive 76/769 / EEC and Commission Directives 91/155 / EEC, 93/67 / EEC, 93/105 / EC and 2000/21 / EC. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548 / EEC and 1999/45 / EC, and amending Regulation (EC) No. 1907/2006 COMMISSION REGULATION (EU) No. 2015/830 of 28 May 2015 amending Regulation (EC) No. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC. EINECS Status European Inventory of Existing Commercial Chemical Substances (EINECS). This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS) or complies with the European Union chemical inventory requirements.

TSCA (Toxic Substance Control Act), EPA TSCA INVENTORY: All of the components are listed on the TSCA inventory.

15.2. Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information

Details of the supplier of the safety data sheet: none.

The terms of all abbreviations in the safety data sheet:

DNEL: Derived no effect level. PNEC: Predicted no effect concentration. CMR effects: carcinogenic, mutagenic and reproductive toxicity: PBT: Persistent, toxic, which may be biologically accumulate. vPvB: very persistent and very bioaccumulative. n. d .: not defined. n.r.: Not applicable.

Data Sources: safety sheet (from the day 20. 05. 2015 .; Version: 2.0 / EN), issued by the manufacturer. A full list of H-phrases for the ingredients referred to in point 2 and 3: none.

Instructions for training: Information not available.

This safety data sheet was prepared on the basis of data obtained from the manufacturer / supplier, and in accordance with the relevant regulations.

Information, data and recommendations in this document are given in good faith from reliable sources and are believed to be true and accurate on the date of issue. However, no further presentation to facilitate the comprehensibility of the information. VL is used only as a guide for handling the product; during handling and use of the product may affect other obligations.

Users are reminded that it is necessary to determine the relevance and validity of the above information with respect to their particular circumstances and assume all risks associated with the use of this product. When using this product borne by the user with regard to full compliance with local, national and international regulations your own risk.