

## 39-10 LM Process Black HC

Version 1.5

Revision Date 14.04.2016

Print Date 16.03.2018

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

#### 1.1 Product identifier

Product name : 39-10 LM Process Black HC

Material : 80-900423-7.2730

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

Use of the Substance/Mixture : Printing inks, varnishes and printing ink related material for professional users.

#### 1.3 Details of the supplier of the safety data sheet

Company : Siegwerk Druckfarben AG & Co. KGaA  
Alfred-Keller-Straße 55  
53721 Siegburg

Telephone : +4922413040

Telefax : +492241304777

E-mail address of person responsible for the SDS : msds\_info@siegwerk.com

#### 1.4 Emergency telephone number

+44 1235 239670 National Chemical Emergency Centre (NCEC)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2 H315: Causes skin irritation.

Eye irritation, Category 2 H319: Causes serious eye irritation.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Chronic aquatic toxicity, Category 2 H411: Toxic to aquatic life with long lasting effects.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H315 Causes skin irritation.

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H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H411 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/ eye protection/ face protection.

**Response:**  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 + P364 Take off contaminated clothing and wash it before reuse.

### 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

Chemical nature : Radiation curable printing ink

#### Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration [%]
Pentaerythritol, ethoxylated, esters with acrylic acid	51728-26-8 500-111-9 01-2119969962-19	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	>= 25 - < 30
Ethoxylated trimethylolpropane triacrylate (TMPeoTA)	28961-43-5 500-066-5 01-2119489900-30	Eye Irrit. 2; H319 Skin Sens. 1; H317	>= 20 - < 30
2-[[2,2-Bis[[[1-oxoallyl]oxy]methyl]butoxy]methyl]-2-ethyl-1,3-propanediyl diacrylate	94108-97-1 302-434-9 01-2119977121-41	Eye Irrit. 2; H319 Aquatic Chronic 2; H411	>= 3 - < 10
2-Benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone	119313-12-1 404-360-3	Repr. 2; H361d Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 2,5 - < 3
Phenylbis(2,4,6-trimethylbenzoyl)phosphine oxide	162881-26-7 423-340-5	Skin Sens. 1; H317 Aquatic Chronic 4; H413	>= 0,25 - < 1

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Trimethylolpropane triacrylate	15625-89-5 239-701-3 01-2119489896-11	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317	$\geq 0,1 - < 1$
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For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- General advice : Victim to lie down in the recovery position, cover and keep him warm.  
Never give anything by mouth to an unconscious person.  
When symptoms persist or in all cases of doubt seek medical advice.  
Show this safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.  
Keep patient warm and at rest.  
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Take off all contaminated clothing immediately.  
Wash skin thoroughly with soap and water or use recognized skin cleanser.  
Do NOT use solvents or thinners.
- In case of eye contact : Remove contact lenses.  
Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.  
Seek medical advice.
- If swallowed : If accidentally swallowed obtain immediate medical attention.  
Keep at rest.  
Rinse mouth with water.  
Do NOT induce vomiting.

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

- Symptoms : No information available.
- Risks : No information available.

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

- Treatment : No information available.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet

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### 5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : No hazardous combustion products are known

### 5.3 Advice for firefighters

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

Further information : Use water spray to cool unopened containers. 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.

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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment. Ventilate the area. Evacuate personnel to safe areas.

### 6.2 Environmental precautions

Environmental precautions : Do not let product enter 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 : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Clean with detergents. Avoid solvents.

### 6.4 Reference to other sections

For personal protection see section 8.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling : Avoid exceeding the given occupational exposure limits (see section 8). For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapour or mist.

Advice on protection against : Normal measures for preventive fire protection. Take

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| fire and explosion | measures to prevent the build up of electrostatic charge.  |
| Hygiene measures   | : Store personal protection equipment in a clean location away from the work area. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of workday. Keep away from food and drink. |

### 7.2 Conditions for safe storage, including any incompatibilities

- |   |  |
|---|--|
| Requirements for storage areas and containers | : Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep containers tightly closed in a dry, cool and well-ventilated place. Observe label precautions. No smoking. Prevent unauthorized access. |
| Further information on storage conditions     | : Storage must be in accordance with the BetrSichV (Germany).  |
| Advice on common storage                      | : Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.   |

### 7.3 Specific end use(s)

- |                 |   |
|-----------------|---|
| Specific use(s) | : Consult the technical guidelines for the use of this substance/mixture. |
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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Engineering measures

Maintain air concentrations below occupational exposure standards.

#### Personal protective equipment

Eye protection : Chemical resistant goggles must be worn.

Hand protection

Material : Protective gloves complying with EN 374.

Remarks

: Wear suitable gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use. Skin should be washed after contact. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred.

Skin and body protection : Working clothes must not consist of textiles, which show a dangerous melting behaviour in case of fire.

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Skin should be washed after contact.

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Protective measures : Wear suitable protective equipment.

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### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: coloured
Odour	: characteristic
Odour Threshold	: not determined
pH	: not determined
Melting point/range	: Not applicable
Boiling point	: > 38 °C
Flash point	: does not flash
Evaporation rate	: not determined
Upper explosion limit	: not determined
Lower explosion limit	: not determined
Vapour pressure	: < 1.100 hPa (50 °C)
Relative vapour density	: not determined
Density	: ca. 1,19 g/cm <sup>3</sup> (20 °C)
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: not determined
Decomposition temperature	: The substance or mixture is not classified self-reactive.
Viscosity	
Viscosity, kinematic	: > 21 mm <sup>2</sup> /s (40 °C)
Explosive properties	: Not explosive
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

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### 9.2 Other information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Stable under recommended storage conditions.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

### 10.4 Conditions to avoid

Conditions to avoid : Protect from frost, heat and sunlight.

### 10.5 Incompatible materials

Materials to avoid : Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

### 10.6 Hazardous decomposition products

Stable under recommended storage conditions.

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## SECTION 11: Toxicological information

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the Regulation (EC) No. 1272/2008 and classified for toxicological hazards accordingly. See Sections 2 and 3 for details.

### 11.1 Information on toxicological effects

#### Acute toxicity

**Product:**

Acute dermal toxicity : Remarks: This information is not available.

#### Skin corrosion/irritation

**Product:**

Remarks: This information is not available.

#### Serious eye damage/eye irritation

**Product:**

Remarks: This information is not available.

#### Respiratory or skin sensitisation

**Product:**

Remarks: This information is not available.

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### Further information

#### Product:

Remarks: Health injuries are not known or expected under normal use.

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## SECTION 12: Ecological information

Unless otherwise indicated, no data is available on the mixture itself. The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and classified for ecotoxicological hazards accordingly.

### 12.1 Toxicity

#### Product:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae : Remarks: No data available

Toxicity to bacteria :  
Remarks: No data available

### 12.2 Persistence and degradability

#### Product:

Biodegradability : Remarks: No data available

### 12.3 Bioaccumulative potential

#### Product:

Bioaccumulation : Remarks: Does not bioaccumulate.

### 12.4 Mobility in soil

#### Product:

Mobility : Remarks: Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

### 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..



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### 12.6 Other adverse effects

**Product:**

Additional ecological information : We have no quantitative data concerning the ecological effects of this product.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.  
Dispose of in accordance with local regulations.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as the unused product.  
Empty containers can be landfilled after cleaning, when in compliance with local regulations.

## SECTION 14: Transport information

### 14.1 UN number

ADN : UN 3082  
ADR : UN 3082  
IMDG : UN 3082  
IATA : UN 3082

### 14.2 UN proper shipping name

ADN : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(2-Benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone (ketone based photoinitiator), Pentaerythritol, ethoxylated (acrylic acid ester))

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(2-Benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone (ketone based photoinitiator), Pentaerythritol, ethoxylated (acrylic acid ester))

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(2-Benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone (ketone based photoinitiator), Pentaerythritol, ethoxylated (acrylic acid ester))

IATA : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., Environmentally hazardous substance, liquid, n.o.s.  
(2-Benzyl-2-(dimethylamino)-4'-morpholinobutyrophenone (ketone based photoinitiator), Pentaerythritol, ethoxylated (acrylic acid ester))

### 14.3 Transport hazard class(es)

ADN : 9

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**ADR** : 9  
**IMDG** : 9  
**IATA** : 9

### 14.4 Packing group

**ADN**  
Packing group : III  
Classification Code : M6  
Hazard Identification Number : 90  
Labels : 9

**ADR**  
Packing group : III  
Classification Code : M6  
Hazard Identification Number : 90  
Labels : 9  
Tunnel restriction code : (E)

**IMDG**  
Packing group : III  
Labels : 9  
EmS Code : F-A, S-F

**IATA**  
Packing instruction (cargo aircraft) : 964  
Packing instruction (passenger aircraft) : 964  
Packing instruction (LQ) : Y964  
Packing group : III  
Labels : Miscellaneous Dangerous Goods

### 14.5 Environmental hazards

**ADN**  
Environmentally hazardous : yes

**ADR**  
Environmentally hazardous : yes

**IMDG**  
Marine pollutant : yes

### 14.6 Special precautions for user

Remarks : Packages less than or equal to 5 L / 5 kg: Not classified as dangerous in the meaning of transport regulations (SP375 ADR, 2.10.2.7 IMDG Code, A197 IATA DGR).

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

Not applicable for product as supplied.

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## SECTION 15: Regulatory information

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

- Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable
- 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).
- Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable
- Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

		Quantity 1	Quantity 2
9b	Dangerous for the environment	200 t	500 t

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E2	ENVIRONMENTAL HAZARDS	200 t	500 t
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- Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)  
Volatile organic compounds (VOC) content: 0,01 %, 0,14 g/l  
Remarks: VOC content excluding water
- Other regulations : Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Young people under the age of 18 are not allowed to use or be exposed to the product professionally. Young people who will be turning 16 during the calendar year are, however, except from this rule if the product is a necessary part of their education.

### 15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

## SECTION 16: Other information

### Full text of H-Statements

- H315 : Causes skin irritation.  
H317 : May cause an allergic skin reaction.  
H319 : Causes serious eye irritation.  
H361d : Suspected of damaging the unborn child.  
H400 : Very toxic to aquatic life.

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- H410 : Very toxic to aquatic life with long lasting effects.  
H411 : Toxic to aquatic life with long lasting effects.  
H413 : May cause long lasting harmful effects to aquatic life.

### **Full text of other abbreviations**

- Aquatic Acute : Acute aquatic toxicity  
Aquatic Chronic : Chronic aquatic toxicity  
Eye Irrit. : Eye irritation  
Repr. : Reproductive toxicity  
Skin Irrit. : Skin irritation  
Skin Sens. : Skin sensitisation

### **Further information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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