INFORMATION DATASHEET
CARBON BLACK

This document does not necessarily comply with the requirements of Regulation (EC) No. 1907/2006 (REACH), as the product, for which it was prepared, is not classified as hazardous.

Issue date: 31. 05. 2019
version: 1

According to article 31 of Regulation (EC) No. 1907/2006 (REACH), Safety Data Sheet (SDS) has to be issued for hazardous substances and mixtures. The product in question does not meet the classification criteria according to Regulation (EC) No. 1272/2008 (CLP). That is why this document does not fall under the stipulations of Article 31 of the REACH Regulation and the requirements related to the content of individual elements described in Appendix II of the REACH Regulation do not apply to it.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product identifier

The table shows identifiers (names and identification numbers) of the product that is being put on the market under the following trading name:

<table>
<thead>
<tr>
<th>IDENTIFIER</th>
<th>IDENTIFICATION NAME</th>
<th>IDENTIFICATION NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration</td>
<td>Carbon Black</td>
<td>REACH registration No.: 01-2119384822-32-0043</td>
</tr>
<tr>
<td>Harmonized classification</td>
<td>not on the list</td>
<td>no index number</td>
</tr>
<tr>
<td>International chemical name</td>
<td>Carbon Black</td>
<td>CAS No.: 1333-86-4 EC No.: 215-609-9</td>
</tr>
<tr>
<td>Trade names</td>
<td>Carbon Black Chezacarb Advanced Conductive (AC-10, AC-20, AC-30, AC-50, AC-60, AC-70, AC-80, AC-90, AC-95)</td>
<td></td>
</tr>
</tbody>
</table>

1.2 Determined application of the substance or mixture and not recommended application

2.1.1 Determined application

Industrial applications.

2.1.2 Not recommended application

Product must not be used as pigment in Tattoo colours for human.

1.3 Detailed information about the Material Safety Datasheet supplier

UNIPETROL RPA, s.r.o., Záluží 1, 436 70 Litvínov, Czech Republic

☎: +420 476 161 111  fax: +420 476 619 553
unipetrolrpa@unipetrol.cz
www.unipetrolrpa.cz

- Director of the Monomers and Chemicals Unit ☎: +48 242 566 615
  Dorota Smolarek@orlen.pl
- Chezacarb Sales Manager: ☎: +420 476 166 781
  Lenka.Semenysinova@unipetrol.cz
- Customer Service Department Manager: ☎: +420 476 162 006
  Lucie.Markova@unipetrol.cz

1.4 Emergency phone number

- UNIPETROL RPA, s.r.o. ☎: +420 476 163 111 (nonstop)
- MINISTRY OF HEALTH CENTRE
  Toxicological Information Centre (TIS) ☎: +420 224 915 402, +420 224 919 293 (nonstop)
  e-mail: tis@vfn.cz
SECTION 2: HAZARDS IDENTIFICATION

2.1 Substance or mixture classification
The product is not classified as hazardous according to Regulation (EC) No. 1272/2008 CLP.

2.2 Labelling elements
The product is not classified as hazardous and that is why the labelling obligation pursuant to Regulation (EC) No. 1272/2008 CLP does not apply.

2.3 Other hazards
The product is capable of burning. With regard to very long time (ca 14 months), high ignition temperature and low content of volatile combustibles, carbon black has very low predisposition to self-ignition as a result of oxidation by air oxygen. Settled carbon black dust is hardly ignitable, but spreads fire very readily. Turbid dust is not ignitable even at 800°C and it is not ignitable through electrostatic spark up to 40 J of energy at standard conditions. Dust is in explosive at initiatory energy up to 9 kJ and has a low rate of pressure rise.

SECTION 3: COMPOSITION/INFORMATION ABOUT INDIVIDUAL ELEMENTS
Carbon black is not hazardous according to Regulation (EC) No. 1272/2008 CLP, moreover, it does not contain any hazardous additives in concentrations that would have an impact on its classification or substances, with exposition limits specified by the European Community.

SECTION 4: FIRST AID INSTRUCTIONS

4.1 First aid description

4.1.1 General instructions
Should medical difficulties occur or should you have any doubts, notify the given physician.

4.1.2 Upon inhaling
Remove patient to fresh air, rinse eyes, mouth and nasal cavity with lukewarm water, not to let him get cold through. Consult a doctor in case of persisting troubles.

4.1.3 Upon contact with your skin
Take off all contaminated clothing and footwear. Flush effected area with water (preferably lukewarm) and soap. Consult a doctor in case of persisting troubles.

4.1.4 When the product gets into your eyes
Immediately flush eyes wide open with running lukewarm water for at least 15 minutes. If patient has contact lenses, they must be removed before flushing. Consult a doctor.

4.1.5 When consumed
This exposure is not expected for professional and industrial use of the product. Should you consume a large amount of the product anyway, ensure professional medical assistance.

4.2 The most important acute and delayed symptoms and effects
When used under standard conditions, there are no acute or chronic unfavorable impacts on human health. When used in a negligent manner, only eyes or skin can become irritated. Inhaling the dust can irritate your breathing organs.

4.3 Instructions related to immediate medical assistance and special measures
None.
SECTION 5: FIRE EXTINGUISHING MEASURES

5.1 Fire extinguishing substances
   Suitable fire extinguishing substances: foam, powder, water spray for large fires.
   Unsuitable fire extinguishing substances: direct water flow.

5.2 Special hazards based on the given substance or mixture characteristics
   Development of pungent irritant smoke and possible formation of carbon monoxide.

5.3 Firemen instructions
   Firemen protective aids: complete protective suit and insulation breathing apparatus.

SECTION 6: MEASURES IN THE CASE OF AN ACCIDENTAL LEAK

6.1 Measures for the protection of people, protective aids and emergency procedures
   Avoid contact with the substance. Use all recommended personal protective equipment when working on accidental disposal.

6.2 Measures for the protection of the environment
   Do not flush scattered material to the sewerage system.

6.3 Methods and materials used for limiting leaks and for cleaning
   Sweep the scattered material and place it in a suitable dry container for further processing or later liquidation.
   Liquidate it in compliance with the valid legal regulation related to waste.

6.4 References to other sections
   For recommended personal protection aids, see Subsection 8.2 (“Limiting exposure”).
   For recommended waste liquidation manner, see Section 13 (“Liquidation instructions”).

SECTION 7: HANDLING AND STORAGE

7.1 Safe handling measures
   The product is not classified as hazardous according to the criteria of Regulation (EC) No. 1272/2008 - CLP. No specific risk management measures are thus required. Despite of this fact, exposure of employees to the product during individual work procedures should be minimized by observing personal hygiene measures and corresponding industrial hygienic practices:
   • Do not eat, drink or smoke while working;
   • Thoroughly wash your hands and uncovered parts of your body after work and before eating with soap and water;
   • Do not wear polluted clothes, footwear and protective aids to eating areas.
   Observe fire protection measures and use the recommended personal protection aids. Ensure that the product does not leak into the environment.

7.2 Conditions for safe storage of substances and mixtures, including incompatible substances and mixtures
   For safe handling and storage all fire-fighting measures (no smoking, do not handle with naked flame and remove all possible sources of ignition) should be observed and should be taken care to avoid contact with product (use personal protective equipment). Product should be stored in dry and well-ventilated place with effective exhaust, away from heat sources. You should store in roofed areas protected from direct sunshine and not store together with oils, other flammable material or oxidizing agents. Product can be stored in undamaged containers during the whole lifetime of the packaging, if temperature does not exceed 63°C. Product can be kept in dry environs without packaging for the period of 12 months, as far as temperature does not exceed 50°C, but do avoid contact with water, oils or oxidising agents, and it is recommended to process this material preferably, to prevent initiation of a self-ignition process, if large amounts are stored.

7.3 Specific final usage(s)
   None.
SECTION 8: LIMITING EXPOSURE / PERSONAL PROTECTION AIDS

8.1 Control parameters

<table>
<thead>
<tr>
<th>Carbon black dust</th>
<th>PEL_{d} [mg.m^{-3}]</th>
<th>PEL_{c} [mg.m^{-3}]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic (Government Regulation No. 361/2007 Coll.)</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>European Union (Regulation 2000/39/EC)</td>
<td>Limiting values are not specified</td>
<td></td>
</tr>
</tbody>
</table>

PEL_{d}: Acceptable exposure limit for the dust respirable fraction
PEL_{c}: Acceptable exposure limit for the total dust concentration

8.2 Limiting exposure

Technical protective measures for limiting exposure of people and of the environment

Sufficient ventilation, making sure that the acceptable exposure limit specified for the polyethylene dust is not exceeded. Should the ventilation be insufficient, an effective local suction system has to be installed.

Individual protective measures

Should the exposure increase due to an accident or extraordinary event, the employees have to have personal protections aids (PPA) available to them for protecting their breathing organs, eyes, hands and skin. These aids have to correspond to the character of the conducted activities. Suitable protection of the breathing organs has to be also available whenever it is not possible to ensure compliance with the exposure limits specified for the work environment by technical means. All PPA have to be always maintained in a usable condition. Damaged or dirty PPA have to be immediately replaced.

RECOMMENDED PERSONAL PROTECTION AIDS (PPA):

- **Protection of air passages:** No protection of air passages is required under normal circumstances; should there be a possibility of exceeding the given exposure limit, a dust respirator should be used (type P); when rectifying consequences of extraordinary events / accidents, insulating breathing apparatus should be used

- **Protection of eyes / face:** protective goggles with a side protection (EN166)
- **Protection of skin - hands** protective gloves (EN374)
- **Protection of other body parts:** protective work clothes and footwear
- **Thermal hazard:** not relevant for the intended use

SECTION 9: PHYSICAL AND CHEMICAL CHARACTERISTICS

9.1 Information about the basic physical and chemical characteristics

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>UNIT</th>
<th>VALUE</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td></td>
<td>Solid black product</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td></td>
<td>Without odour</td>
<td></td>
</tr>
<tr>
<td>Threshold odor value</td>
<td>[ppm]</td>
<td>Not relevant</td>
<td></td>
</tr>
<tr>
<td>pH value</td>
<td></td>
<td>6.5 – 9.5</td>
<td>10% suspension</td>
</tr>
<tr>
<td>Melting point / solidification point</td>
<td>[°C]</td>
<td>Not relevant</td>
<td></td>
</tr>
<tr>
<td>Initial boiling point / boiling point range</td>
<td>[°C]</td>
<td>Not relevant</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>[°C]</td>
<td>To 600 no inflammation</td>
<td>granules</td>
</tr>
</tbody>
</table>
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### CHARACTERISTIC | UNIT | VALUE | NOTE
--- | --- | --- | ---
Evaporation speed | | Not relevant | 
Flammability | | Inflammable | 
Upper Explosive Limit | [g.cm\(^{-3}\)] | Not relevant | 
Lower Explosive Limit | [g.cm\(^{-3}\)] | Not relevant | 
Steam pressure | [hPa] | Not relevant | 
Steam density | | Air=1 | Not relevant | 
Density | [kg.m\(^{-3}\)] | 69-71 | Insoluble | 
Solubility in water | [g.l\(^{-1}\)] | | 
Distribution coefficient: n-octanol/water | [log Kow] | Not relevant | 
Ignition point | [°C] | to 600 no inflammation (granules) min. 390-490 (settled dust) to 800 no ignition (turbid dust) | 
Decomposition temperature | | Not relevant | 
Kinematic viscosity | [mm\(^2\).s\(^{-1}\)] | Not relevant | 
Dynamic viscosity | [mPa.s] | Not relevant | 
Explosive characteristics | | Inexplosive at energy of 9 kJ | 
Oxidation characteristics | | None | 
Minimum initial energy of ignition | [J] | Over 40 | 
Glowing temperature | [°C] | 435-483 | 
Speed of flame propagation | [cm.s\(^{-1}\)] | 4,17 | 
Bulk density | [g.l\(^{-1}\)] | min. 112 | 
Maximal explosive pressure | [MPa] | 0,59 | 
Heat value | [MJ.kg\(^{-1}\)] | 33-34,4 | 

9.2 Other information
Not required.

### SECTION 10: STABILITY AND REACTIVITY
10.1 Reactivity
There is no risk of reactivity, provided the handling and storage conditions in Section 7 are maintained.

10.2 Chemical stability
The product is chemically stable during storage and handling under the conditions described in Section 7.

10.3 Possibility of hazardous reactions
No hazardous reactions occur during storage and handling under the conditions described in Section 7.

10.4 Conditions to be avoided
Ignition sources.

10.5 Incompatible materials
Oils, oxidizing agents.
10.6 Hazardous decomposition products
Thermal decomposition under high temperatures, for example, during fire, can cause formation of carbon monoxide.

### SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information about toxicological effects

<table>
<thead>
<tr>
<th>HAZARD CLASS</th>
<th>IMPACT ON HEALTH</th>
<th>JUSTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Based on the available information, the product does not have to be classified as acutely toxic</td>
<td>There are currently no information available that would demonstrate that the product has the given characteristic</td>
</tr>
<tr>
<td>Causticity / skin irritability</td>
<td>Based on the available information, the product does not have to be classified as caustic or a skin irritant</td>
<td>There are currently no information available that would demonstrate that the product has the given characteristic</td>
</tr>
<tr>
<td>Serious eye damage / eye irritation</td>
<td>Based on the available information, the product does not have to be classified as eye damaging or eye irritant</td>
<td>There are currently no information available that would demonstrate that the product has the given characteristic</td>
</tr>
<tr>
<td>Sensibilization of the air passages / skin sensibilization</td>
<td>Based on the available information, the product does not have to be classified as causing sensibilization</td>
<td>There are currently no information available that would demonstrate that the product has the given characteristic</td>
</tr>
<tr>
<td>Mutagenicity in embryonic cells</td>
<td>Based on the available information, the product does not have to be classified as mutagenic</td>
<td>There are currently no information available that would demonstrate that the product has the given characteristic</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Based on the available information, the product does not have to be classified as carcinogenic</td>
<td>There are currently no information available that would demonstrate that the product has the given characteristic</td>
</tr>
<tr>
<td>Toxicity for reproduction</td>
<td>Based on the available information, the product does not have to be classified for unfavourable impacts on fertility or embryo development</td>
<td>There are currently no information available that would demonstrate that the product has the given characteristic</td>
</tr>
<tr>
<td>Toxicity for specific target organs – one-time exposure</td>
<td>Based on the available information, the product does not have to be classified for its ability to damage human organs upon one-time exposure</td>
<td>There are currently no information available that would demonstrate that the product has the given characteristic</td>
</tr>
<tr>
<td>Toxicity for specific target organs – repeated exposure</td>
<td>Based on the available information, the product does not have to be classified for its ability to damage human organs upon repeated exposure</td>
<td>There are currently no information available that would demonstrate that the product has the given characteristic</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>HAZARD CLASS</th>
<th>IMPACT ON HEALTH</th>
<th>JUSTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous when inhaled</td>
<td>Based on the available information, the product does not have to be classified as hazardous when inhaled</td>
<td>There are currently no information available that would demonstrate that the product has the given characteristic</td>
</tr>
</tbody>
</table>

11.2 Other information
None.

SECTION 12: ENVIRONMENTAL INFORMATION

12.1 Toxicity
Currently, there is no information available that would demonstrate that the product is harmful for the environment.

12.2 Persistence and degradability
No information is available.

12.3 Bioaccumulation potential
Data are not available.

12.4 Mobility in soil
Data are not available.

12.5 PBT and hPhB assessment results
The product does not fulfil the criteria for substances that are persistent, bio accumulative and toxic (PBT substances) or substances that are highly persistent and highly bio accumulative (hPhB).

12.6 Other unfavourable impacts
The product is not considered a hazardous and harmful substance according to Appendix I of the Water Act (Act No. 254/2001 Coll.).

12.7 Other information
None.

SECTION 13: LIQUIDATION INSTRUCTIONS

13.1 Waste management methods
Should the product become waste due to, for example, an accident or extraordinary event, it is necessary to comply with the valid legislature of the European Union as well as of the applicable national and local regulations. Hand the waste over for liquidation to an appropriately qualified entity with the corresponding authorization.

13.1.1 Recommended classification of the waste according to Decree No. 381/2001 Coll. (Catalogue of Waste)
06 13 03 Carbon black manufactured.
06 13 02 Spent activated carbon.

13.1.2 Recommended waste liquidation method
Hand the waste over for liquidation to an appropriately qualified entity with the corresponding authorization. Energy utilization.

13.1.3 Recommended liquidation manner for dirty packaging material
Energy utilization.
13.1.4 Measures for limiting exposure while handling the waste
Do not flush the product that has leaked during an extraordinary event or an accident into the sewerage system. Proceed in compliance with the instructions stated in Section 6 (“Measures in the case of an accidental leak”) and Subsection 8.2 (“Limiting exposure”) and observe all valid legal regulations related to the protection of people, air and water.

SECTION 14: TRANSPORT INFORMATION
The product does not represent a hazardous item according to transport regulations.

14.1 UN number: Not relevant
14.2 Official (UN) name for transport: Not relevant
14.3 Hazard class/classes for transport: Not relevant
14.4 Packaging group: Not relevant
14.5 Hazard for the environment: Not relevant
14.6 Special user safety measures: Not relevant
14.7 Bulk transport according to Appendix II of the MARPOL Convention and IBC regulation: the product is not meant to be transported in bulk according to the documents of the International Maritime Organization (IMO)

14.8 Other information
None.

SECTION 15: INFORMATION ABOUT REGULATIONS
15.1 Regulations related to safety, health and the environment / specific legal regulations related to the given substance or mixture

15.1.1 European Union
Regulation of the European Parliament and Council (EC) No. 1907/2006 (REACH), as amended
REGISTRATION (HEAD II, REACH REGULATION)
The product has been fully registered as a substance.
APPROVALS (HEAD VII, REACH REGULATION)
The product is not on the list of substances included in Annex XIV of Regulation (EC) No. 1907/2006 REACH, and that is why no mandatory approvals apply to it.
RESTRICTIONS (HEAD VIII, REACH REGULATION)
The product is not subject to the restrictions in the Annex XVII of Regulation (EC) No. 1907/2006 REACH.
Regulation of the European Parliament and Council (EC) No. 1272/2008 (CLP), as amended
Based on the stated regulation, the product is not classified as hazardous and that is why no obligations related to wrapping and package labelling apply to it.
Regulation of the European Parliament and Council (EC) No. 649/2012, on Exporting and Importing Hazardous Chemical Substances, as amended
The product is not subject to any special export and import stipulations.
Regulation of the European Parliament and Council (EC) No. 2006/12, on Waste, as amended
Implemented into Act No.185/2001 Coll., on Waste.

15.1.2 Czech Republic
Act No. 258/2000 Coll., on the Protection of Public Health, as amended
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Act No. 185/2001 Coll., on Waste, as amended
Decree No. 93/2016 Coll., the Waste Catalogue, as amended
Government Regulation No. 361/2007 Coll., which determines the occupational health and safety conditions, as amended

15.2 Assessing chemical safety
The assessment was carried out.

SECTION 16: OTHER INFORMATION
Changes made as a part of the revision
No revision has taken place.

Used abbreviations
CAS Registration number assigned to the substance by the “Chemical Abstracts Service” operated by “American Chemical Society”.
REACH European Union Regulation No. 1907/2006 on Registration, Evaluation and Authorisation of Chemicals.
CLP European Union Regulation No. 1272/2008 on Classification, Labelling and Packaging of chemical substances and mixtures, which are implemented to the European legislature by GHS (United Nations’ Globally Harmonized System)
SDS Safety Data Sheet.
OSN, přip. UN United Nations.
IBC Intermediate Bulk Container.
MARPOL 73/78 International convention on boat pollution prevention as amended by the protocol from 1978.

There are no H-sentences or EUH-sentences stated in Section 2 and/or 3

Important note
This document has been prepared based on the explicit request by the customer despite the fact that the supplied product does not meet the criteria for being classified as hazardous according to Regulation (EC) No. 1272/2008 (CLP), or any other condition specified in Article 31 of Regulation (EC) No. 1907/2006 (REACH), which would establish the obligation to provide a safety data sheet. The created document has been prepared for informative purposes only and cannot thus be perceived in any other manner.

Declaration: The document includes data that are necessary for ensuring occupational health and safety and protection of the environment. These data do not replace the quality specification and cannot be considered a guarantee of suitability and usability of this product for a particular application. The stated data correspond to the current knowledge and experience and they comply with our valid legal regulations. The consumer is responsible for compliance with the applicable, regional valid legal regulations.