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, as amended, do not apply to it.

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

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:

CARBON BLACK

IDENTIFIER	IDENTIFICATION NAME	IDENTIFICATION NUMBER
Registration	Carbon Black	REACH registration No.: 01-2119384822-32-0043
Harmonized classification	not on the list	no index number
International chemical name	Carbon Black	CAS No.:1333-86-4 EC No.: 215-609-9
Trade names	Carbon Black Chezacarb **A**dvanced **C**onductive (AC-10, AC-20, AC-30, AC-50, AC-60, AC-70, AC-80, AC-90, AC-95)	

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

1.2.1. Determined application

Industrial and professional applications.

Use the product in the ways specified in subsection 7.3.

1.2.2. Not recommended application

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

1.3. Details of the supplier of the safety data sheet

- manufacturer: ORLEN Unipetrol RPA s.r.o., Záluží 1, 436 70 Litvínov, Czech Republic
  ID NO :27597075
  ☎: +420 476 161 111
  email: info@orlenunipetrol.cz
  www.orlenunipetrolrpa.cz
  - Director of the Monomers and Chemicals Unit ☎: ++48 242 566 615; Dorota.Smolarek@orlen.pl
  - Chezacarb Sales Manager: ☎: +420 476 166 781; Lenka.Blazkova@orlenunipetrol.cz
  - Customer Service Department Manager: ☎: +420 476 162 006; Lucie.Markova@orlenunipetrol.cz
  - Person professionally qualified to compile a SDS: e-mail: reach.unirpa@orlenunipetrol.cz

1.4. Emergency telephone number

- ORLEN Unipetrol RPA, s.r.o. ☎:+420 476 163 111 (NON STOP)
- Toxicological Information Center (TIS) ☎:+420 224 919 293 (NON STOP)
  Na bojišti 1, 120 00 Prague 2, Czech Republic ☎:+420 224 915 402 (NON STOP)
  e-mail: tis@vfn.cz

- Transport Information & Accident System (TRINS) ☎:+420 476 163 111 (NON STOP)

Note: Emergency telephone numbers for EU countries are listed in section 16.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The product is not classified as hazardous according to Regulation (EC) No. 1272/2008 CLP.

2.2. Label 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.
Settled carbon black dust is hardly ignitable, but spreads fire very readily. Turbid dust is not ignitable even to 640°C and it is not ignitable through electrostatic spark up to 40 J of energy at standard conditions. Dust is inexplosive at initiatory energy up to 9 kJ and has a low rate of pressure rise.
The product is prone to self-ignition when stored in larger layers at elevated ambient temperatures (from 292˚C critical temperature for a 5 cm layer; from 247˚C critical temperature for a 10 cm layer). When stored at normal operating temperatures, the risk of spontaneous combustion is unlikely.
Carbon black dust or powder may cause drying of the skin with repeated and prolonged contact. As superficial foreign bodies, carbon black particles may be slightly irritating mechanically and may cause discoloration of lids and conjunctivae in humans.
The substance is not included in the candidate list pursuant to Article 59 (Paragraph 1) of the REACH Directive (SVHC substances).
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 (vPvB).
Based on the known facts, the product does not meet the criteria for PMT substances (P-persistent, M-mobile, T-toxic) or for vPvM substances (vP-very persistent, vM-very mobile).

SECTION 3: COMPOSITION/INFORMATION ABOUT INDIVIDUAL ELEMENTS

3.1. Substances

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

Name of the substance:	Carbon Black
Origin:	inorganic
Purity [% hm.] :	97,2 - 99,1
Index number (index):	-
CAS number:	1333-86-4
EC number:	215-609-9

IMPURITIES	*NAME:*	*IDENTIFIER :*
The product does not contain any impurities, stabilizing additives or other components, which would have an impact on its classification.		

Note: The substance is not or not contain a nanoform.

Note: Harmonized classification: Specific concentration limits (SCL), M-factor (M-) and Acute toxicity estimate (ATE) were not determined for this substance.

Registration documentation: Acute toxicity estimate (ATE) =LD50 stated in the section 11.1.; M-factor (M-) – NOEC a LC50 stated in the section 12.1.;

The product does not meet the definition of nanoforms according to Regulation (EU) No 2018/1881. Assessment has been done based on knowledge which we know in this time.

3.2. Mixtures

Not applicable, the product is a substance.

SECTION 4: FIRST AID INSTRUCTIONS

4.1. Description of first aid measures

4.1.1. General instructions

When providing first aid pay attention to self-protection.

Call emergency medical services (☎120 EU) and follow their instructions until their arrival. Provision of first aid must always focus on checking for consciousness, breathing, and blood circulation. In case of loss of consciousness and breathing, check if the airway is clear (pull out the lower jaw slightly). If the airway is clear, immediately start CPR (chest compressions) and artificial respiration in a 30:2 ratio. It is also possible to perform only chest COMPRESSIONS without artificial respiration if you are not trained or if for reasons of personal safety you are unwilling to perform artificial respiration.

If the subject is unconscious and breathing NORMALLY (REGULARLY), place them in the recovery position. When in doubt, if you are not sure if the person is breathing (for example, there is a long pause between breaths), act as if the person were not breathing.

If the person is unconscious or has spasms, do not administer anything by mouth, just place the person in the recovery position.

A patient's condition can improve very quickly, so never take your eyes off the patient and keep checking on consciousness and breathing.

4.1.2. Inhalation

symptoms: mechanical irritation

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. Skin contact

symptoms: mechanical irritation

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. Eye contact

symptoms: mechanical irritation

Immediately flush eyes wide open with running lukewarm water for at least 15 minutes. Protect unharmed eye. If patient has contact lenses, they must be removed before flushing. Consult a doctor.

4.1.5. Swallowing

symptoms: possible irritation

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.

If patient is conscious, flush out mouth with water, do not try to induce vomiting. If vomiting occurs spontaneously, put patient into a stabilised position to prevent aspiration of vomits. Consult a doctor.

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

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.

NOTE TO PHYSICIANS: Treat symptomatically.

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

None.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable fire extinguishing substances: foam, carbon dioxide (CO_2), dry chemical, nitrogen (N_2), or water fog. A fog spray is recommended if water is used.
Unsuitable fire extinguishing substances: direct water flow, as this may spread burning powder (burning powder will float and may spread fire).

5.2. Special hazards arising from the substance or mixture

Development of pungent irritant smoke and possible formation of carbon monoxide and carbon dioxide.

It may not be obvious that carbon black is burning unless the material is stirred and sparks are apparent. Carbon black that has been on fire should be observed closely for at least 48 hours to ensure no smouldering material is present.

5.3. Advice for firefighters

Firemen protective aids: complete protective suit and insulation breathing apparatus.
Wet carbon black produces very slippery walking surfaces.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with the substance. Use all recommended personal protective equipment when working on accidental disposal. Wet carbon black produces very slippery walking surfaces.

6.2. Environmental precautions

Carbon black poses no significant environmental hazards. As a matter of good practice, minimize contamination of sewage water, soil, groundwater, drainage systems, or bodies of water.

Do not flush scattered material to the sewerage system.

6.3. Methods and material for containment and cleaning up

Vacuum the scattered material (a vacuum equipped with HEPA filtration is recommended), possibly sweep, and place it in a suitable dry container for further processing or later liquidation. If necessary, light water spray will reduce dust for dry sweeping, but over-wetting may produce very slippery walking surfaces. Liquidate it in compliance with the valid legal regulation related to waste.

6.4. Reference to other

For recommended personal protection aids, see Subsection 8.2. (“Exposure controls”).
For recommended waste liquidation manner, see Section 13 (“Disposal considerations”).

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

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.
Avoid dust exposures above the occupational exposure limit. Use local exhaust ventilation or other appropriate engineering controls to maintain exposures below occupational exposure limit. Avoid contact with skin and eyes.
An exposure of employees to the product during individual work procedures should be minimized by observing personal hygiene measures and corresponding industrial hygienic practices:

- If exposed, wash affected body parts to avoid mechanical irritation and soiling.
- 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 measures to prevent the build-up of electrostatic chargé (for example grounding/ earthing).

Dust may cause electrical shorts if capable of penetrating electrical equipment. Ensure equipment is tightly sealed.
If hot work (welding, torch cutting, etc.) is required the immediate work area must be cleared of carbon black product and dust.
Follow standard safe practices when entering confined spaces (for example test for adequate oxygen, flammable gases or potential toxic air contaminants (e.g., CO).
Use the recommended personal protection aids.
Ensure that the product does not leak into the environment.

7.2. Conditions for safe storage, including any incompatibilities

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. Do avoid contact with water, oils or oxidising agents. It is recommended to process this material preferably, to prevent initiation of a self-ignition process, if large amounts are stored.
The product is prone to self-ignition when stored in larger layers at elevated ambient temperatures (from 292˚C critical temperature for a 5 cm layer; from 247˚C critical temperature for a 10 cm layer). When stored at normal operating temperatures, the risk of spontaneous combustion is unlikely.
Based on the results of the tests performed, according the RID/ADR regulations the substance is not classified in class 4.2. self-igniting substances.

7.3. Specific end use(s)

Industrial use of carbon black in general:

- Formulation into mixtures and to solid matrices (for use in coatings, inks, paints, dyes, lubricants, adhesives and sealants, rubber and plastic manufacturing)
- Additive to rubber/tyres & plastics
- Chemical reagent
- Use as a pigment
- Manufacture of computer, electronic and optical products, electrical equipment (portable energy)

Professional use of carbon black in general:

- Application of coatings, paints, inks, adhesives and sealants containing carbon black
- Professional end-use of carbon black containing polishes and wax blends

Chezacarb AC is intended for the adjustment of:

- – electrical conductivity of plastics, paints and rubbers
- – electromagnetic properties of plastics, paints and rubbers
- – thermal conductivity of plastics, paints and rubbers
- – pigmentation of paints and varnishes, dyeing of plastics and rubbers

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational exposure limit values

The following Permissible Exposure Limits (PELs) and Maximum Allowable Concentrations (NPK-P) of Chemicals in the Atmosphere of Workplaces within the Czech Republic are set by the Government Regulation No. 361/2007 Coll., determining conditions of occupational health protection, as amended:

Carbon black dust	PEL_r [$mg.m^{-3}$]	PEL_c [$mg.m^{-3}$]
Czech Republic (Government Regulation No. 361/2007 Coll.)	-	2

Carbon black dust	PEL_r [$mg.m^{-3}$]	PEL_c [$mg.m^{-3}$]
European Union (Regulation 2000/39/ES)	Limiting values are not specified	

Decomposition products:	*NAME / CAS NUMBER:*	*PEL [$mg.m^{-3}$]*	*NPK-P [$mg.m^{-3}$]*
	Carbon monoxide / 630-08-0	*23*	*117*
	Carbon dioxide / 124-38-9	*9 000*	*45 000*

Note: An explanation of the meaning of the PEL and NPK-P abbreviations is in section 16.
PEL_r : Acceptable exposure limit for the dust respirable fraction
PEL_C: Acceptable exposure limit for the total dust concentration

Note: Occupational exposure limit values for EU countries are listed in section 16.

8.1.2. DNEL/DMEL values
Because no acute toxicity hazard (leading to classification and labelling) has been identified, a DNEL for acute exposure is not derived.
No hazard identified.

8.1.3. PNEC values
PNECs were not established because no risk was identified for any of the environmental compartments.

8.2. Exposure control

8.2.1. 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. Recommended a process enclosures.

8.2.2. 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, insulation breathing apparatus should be used
- *Protection of eyes / face:* protective googles with a side protection (EN166)
- *Protection of skin - hands* protective gloves (EN374);
  use of a barrier cream may help to prevent skin drying
- *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 on basic physical and chemical properties

The information is taken from the registration dossier of substance (CSR) unless otherwise stated.

CHARACTERISTIC	UNIT	VALUE	SOURCE	NOTE
Physical state		solid product		at 20°C; 101,3 kPa
Colour		black		

CHARACTERISTIC	UNIT	VALUE	SOURCE	NOTE
Odour		Without odour		
Odour threshold	[mg.m^{-3}]	Not relevant		
Melting point/freezing point	[°C]	3 652- 3 697	CSR	sublimation
Boiling point or Initial boiling point / boiling range	[°C]	Not relevant	CSR	
Flammability (solid, gas, liquid)		non flammable capable of burning/igniting	CSR	
Upper flammability / explosive limits	[% obj]	Not relevant		
Lower flammability / explosive limits	[% obj]	Not relevant		
Flash point	[°C]	to 750 no inflammation	own tests	granules; at 101,3 kPa
Auto-ignition temperature	[°C]	to 750 no inflammation (granules) to 400 no ignition (settled dust) min. 640 (turbid dust)	own tests	at 101,3 kPa
Decomposition temperature	[°C]	Not relevant		
pH value		6,5 – 9,5	own tests	10% suspension
Kinematic viscosity	[mm^2/s]	Not relevant	CSR	
Solubility in water	[mg.l^{-1}]	Insoluble (<1 mg/l)	CSR	at 20°C
Partition coefficient: n-octanol/water	[log Kow]	Not relevant – anorganic substance	CSR	
Vapour pressure	[Pa]	Not relevant	CSR	
Relative density		1,70-1,9	CSR	at 20°C
Vapour density	Air=1	Not relevant	CSR	
Particle characteristics		0.5 – 2.5 mm sized pellet form. It consists of primary particles that are tightly bound into aggregates. The measured size of the aggregates is in a range approximately 60 - 500 nm. D50: 144 nm/ 194 nm / 229 nm Crystallinity structures: amorphous	own tests	The product does not meet the definition of nanoforms according to Regulation (EU) No 2018/1881.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

CHARACTERISTIC	UNIT	VALUE	NOTE
Explosive characteristics: Constant Kst according to ČSN EN 14034-2 + A1 Explosion class (dust)	[m.bar.s^{-1}]	non explosive 72 St1	own tests
Oxidation characteristics		None – anorganic substance	CSR
Minimum initial energy of ignition	[J]	Over 40	own tests
Glowing temperature	[°C]	360	own tests
Speed of flame propagation	[cm.s^{-1}]	4,17	own tests
Maximal explosive pressure	[bar]	6,70	own tests

9.2.2. Other safety characteristics

CHARACTERISTIC	UNIT	VALUE	NOTE
Dynamic viscosity	[mPa.s]	Not relevant	CSR
Bulk density	[$g.l^{-1}$]	min. 105	own tests
Heat value	[$MJ.kg^{-1}$]	33-34,4	own tests
Solubility in organic solvents		insoluble	CSR

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.
Can be use as a reducing agent.

10.2. Chemical stability

Stable under normal ambient conditions. Carbon black is inert, inorganic and not soluble in water.
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 avoid

Ignition sources. Prevent exposure to high temperatures and open flames.

10.5. Incompatible materials

Oils, strong oxidizing agents (chlorates, bromates, and nitrates).

10.6. Hazardous decomposition products

Thermal decomposition under high temperatures, for example, during fire, can cause formation of carbon monoxide and carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1. Toxicological effects of the substance / mixture

HAZARD CLASS	IMPACT ON HEALTH	JUSTIFICATION
Acute toxicity	No adverse effect observed. Acute Toxicity Estimate Mixture Calculation: Ingestion LD50 >10 000 mg/kg bw (rat)	Does not meet the classification criteria as acutely toxic
Causticity / skin irritability	Based on the available information, the product does not have to be classified as caustic or a skin irritant	Does not meet the classification criteria
Serious eye damage / eye irritation	Based on the available information, the product does not have to be classified as eye damaging or eye irritant	Does not meet the classification criteria
Sensibilization of the air passages / skin sensibilization	Based on the available information, the product does not have to be classified as causing sensibilization	Does not meet the classification criteria
Mutagenicity in embryonic cells	Based on the available information, the product does not have to be classified as mutagenic	Does not meet the classification criteria
Carcinogenicity	Based on the available information, the product does not have to be classified as carcinogenic	Does not meet the classification criteria

HAZARD CLASS	IMPACT ON HEALTH	JUSTIFICATION
Toxicity for reproduction	Based on the available information, the product does not have to be classified for unfavourable impacts on fertility or embryo development	Does not meet the classification criteria
Toxicity for specific target organs – one- time exposure	Based on the available information, the product does not have to be classified for its ability to damage human organs upon one-time exposure	Does not meet the classification criteria
Toxicity for specific target organs – repeated exposure	Based on the available information, the product does not have to be classified for its ability to damage human organs upon repeated exposure Oral / Dermal: NOAEL: >1000 mg/kg bw/day (rat) Inhalation: NOAEC = 1 mg/m³ (rat)	Does not meet the classification criteria
Hazardous when inhaled	Based on the available information, the product does not have to be classified as hazardous when inhaled	Does not meet the classification criteria

11.2. Information on other hazards

The substance is not included in the candidate list pursuant to Article 59 (Paragraph 1) of the REACH Directive due to the characteristics that can compromise endocrine activities or due to any other reason according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Currently, there is no information available that would demonstrate that the product is harmful for aquatic or terrestrial environment.

Carbon black is highly insoluble in water and unlikely to cross biological membranes. Aquatic toxicity is unlikely to occur.

Based on available acute toxicity studies to microorganisms, algae, invertebrates and fish and chronic toxicity to algae, the potential for acute and chronic toxicity of carbon black to aquatic organisms is low.

Short-term toxicity: LC50 > 1000 mg/l (fish)

Long-term toxicity: NOEC > 1000 mg/l (fish)

Short-term toxicity: NOEC = 3200 mg/l (aquatic invertebrates)

Long-term toxicity: EC50 > 56000 mg/l (aquatic invertebrates)

12.2. Persistence and degradability

The degradation half-life: no relevant

Carbon black has no functional groups that could bring about solubility in water and organic solvents. Its vapour pressure is negligible. It cannot be further degraded by hydrolysis, light or by photodegradation in air or in surface water. These physico-chemical properties are reason why important parameters like water solubility, octanol/water partition coefficient, dissociation constant or adsorption/desorption which are relevant for environmental fate and distribution cannot be analytically measured.

As an inorganic substance with the chemical structure “C”, carbon black cannot be used as a carbon source and will not be biodegraded by microorganisms.

12.3. Bioaccumulation potential

Currently, there is no information available that would demonstrate that the product has bioaccumulation potential. The physical and chemical properties of non-nanoforms of carbon black do not indicate a potential to diffuse through membranes of aquatic or terrestrial organisms, because of its inertness, and insolubility in both water and organic solvents.

12.4. Mobility in soil

Data are not available.

In accordance with section 2 of REACH Annex XI, the adsorption/desorption screening study does not need to be conducted as the substance is highly insoluble in water and in organic solvents and cannot be measured analytically, the determination of a distribution coefficient is technically not feasible.

Based on the physicochemical properties (insolubility, no vapor pressure), it is expected that the substance - carbon will not occur in air or water in relevant quantities. The possibility of their distribution through water or air, respectively, can also be excluded. Deposition in soil or sediments is therefore the most significant factor in the occurrence of carbon in the environment. Carbon is widely distributed in nature and is an essential element in the components of all living organisms.

12.5. Results of PBT and vPvB assessment

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 (vPvB) - the criteria cannot be applied to inorganic substances.

12.6. Endocrine disrupting properties

The substance is not included in the candidate list pursuant to Article 59 (Paragraph 1) of the REACH Directive due to the characteristics that can compromise endocrine activities or due to any other reason according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

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

WGK: nwg (not dangerous for water)

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste management methods

If the remainder of the product is to be disposed (eg unused or leaked product), the valid European Union and national legislature as well as locally valid regulations have to be complied with. Deliver the waste for disposal to a professionally qualified person /to facility with the appropriate authorization to manage waste.

Recommended waste classification pursuant to COMMISSION DECISION of 18 December 2014, amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council:

13.1.1. Catalogue number

06 13 03 Carbon black manufactured.
06 13 02 Spent activated carbon.

13.1.2. Recommended waste removal method

Hand the waste over for liquidation to an appropriately qualified entity with the corresponding authorization.
Material or energy utilization.

13.1.3. Recommended methods of contaminated containers disposal

Material or energy utilization.
15 01 02 Plastic packaging

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 (“Accidental release measures”) and Subsection 8.2 (“Limiting exposure”) and observe all valid legal regulations related to the protection of people, air and water.

WARNING: *The stated information is of a recommendation character. It is related to the delivered, still unused material. Pursuant to the Waste Act, all responsibilities for managing the waste, including its assignment based on its type and category, are responsibilities of the waste originator.*

SECTION 14: TRANSPORT INFORMATION

The product does not represent a hazardous item according to transport regulations.

Based on the results of the tests performed, according the RID/ADR regulations the substance is not classified in class 4.2. self-igniting substances.

14.1. UN number or ID number Not relevant
14.2. UN proper shipping name Not relevant
14.3. Transport hazard class(es) Not relevant
14.4. Packing group Not relevant
14.5. Environmental hazards Not relevant
14.6. Special precautions for user Not relevant
14.7. Maritime transport in bulk according to IMO instruments: Not relevant
14.8. Other information None.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the 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 therefore there is no obligation to apply for authorization of its production and use.

RESTRICTIONS (HEAD VIII, REACH REGULATION)

The product is not subject to any restrictions on manufacture, placing on the market or use stated in Annex XVII of the Regulation (EC) No 1907/2006 of the European Parliament and of the Council (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.

Commission Decision of 18 December 2014, amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council

Implemented into Act No. 541/2020 Coll.,on Waste.

15.1.2. Czech Republic

Act No. 350/2011 Coll. on Chemical Substances and Chemical Mixtures, as amended
the product is not subject to the obligation of notification to the information system PCN (Poison centres notification)
Act No. 258/2000 Coll. on the Protection of Public Health, as amended
Act No. 254/2001 Coll., on Water, as amended
Act No. 201/2012 Coll., on Air Protection, as amended
Act No. 541/2020 Coll., on Waste, as amended
Decree of Ministry of Environment no. 8/2021 Coll. laying down Waste Catalogue, as amended
Governmental decree no. 361/2007 Coll., laying down occupational health and safety conditions
product has exposure limits;
Act no. 224/2015 Coll., on prevention of serious accidents caused by selected dangerous chemical substances or mixtures

15.2. Chemical safety assessment

The appropriate chemical safety assessment (CSR) was conducted when substance was registered. The substance does not meet the criteria for being classified as a hazardous substance pursuant to Directive (EC) No. 1272/2008 CLP.

SECTION 16: OTHER INFORMATION

Changes adopted as a part of the revision process

02.01.2021: Revision (1.1) The change of company's business name; updating the new regulations in Article 13 and Article 15;

11/11/2022: Revision (2): – Overall modification of the document in relation to the update of Appendix II of Directive (EC) No. 1907/2006 REACH, by Directive of the Council (EC) No. 2020/878;

16/05/2023: Revision (2.1): – Update of fire technical characteristics in section 9th;

15/11/2023: Revision (2.2): – Update of substance`s purity in section 3.2.;

15/05/2025: Revision (3): – Overall modification of the document in relation to the update of registration dossier of substance;

06/06/2026: Revision (3.1): – Updates to chapters 11.1.; 12.1. and 12.4. in connection with the update of the Chemical Safety Report (CSR);

Acronyms and abbreviations used in the text

ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
CAS	Registration number assigned to the substance by the Chemical Abstracts Service of the American Chemical Society
CLP	EU Directive No. 1272/2008 on Classification, Labeling and Packaging of chemical substances and mixtures, which is implemented into the European legislature by the means of GHS (United Nations´ Globally harmonized System) for classifying and labeling chemical substances
CMR	Carcinogenic, mutagenic or toxic for reproduction
ČSN EN (ISO)	European standard incorporated into the Czech technical standards
CSR	Chemical Safety Report
DMEL	Derived minimal effect level - an exposure level that corresponds to a low and possibly theoretical risk, which should be considered as an acceptable risk (for threshholdless effects, i.e. there is no exposure level without effect))
DNEL	Derived no-effect level - level of exposure derived from toxicological data that does not produce any adverse effects on human health
DW	Data waiving
EC_{50}	Effective concentration EC_{50} is the concentration of substance that causes immobilization of 50% of individuals
ErC_{50}	Effective concentration EC_{50} is the concentration of substance that causes 50 % decrease of Algea growth
ECHA	European Chemicals Agency
ES	Official number of the chemical substance in the European Union: EINECS from the European Inventory of Existing Commercial Substances, or ELINCS from the European List of Notified Chemical Substances, or NLP from the No Longer Polymer list
HSDB	Hazardous Substances Data Bank
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
IC_{50}	Inhibition concentration IC_{50} that causes inhibition of 50% of individuals
ICAO	International Civil Aviation Organization
ICE	"Intervention in Chemical Transport Emergencies" system providing both professional and practical assistance in dealing with emergency situations related to the transport and storage of hazardous chemicals
IMDG	International Maritime Dangerous Goods

IMO	International Maritime Organisation
ISO	International Organization for Standardization
LC_{50}/LD_{50}	Lethal concentration/level is the concentration/level of substance that causes mortality of 50 % individuals
LOEC/LOEL	Lowest Observed Effect Concentration/Level
log Kow	Logarithm of distribution coefficient n-octanol/water
nf	Not feasible
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
NPK-P	The highest permitted concentration of the chemical substance in the air (the concentration of the substance that a worker may be exposed to for a maximum of 15 minutes but which must never be exceeded)
OECD	Organization for Economic Co-operation and Development
OOP	Recommended personal protective aids
OSN	United Nations
(Q)SAR	Quantitative Structure-Activity Relationship
PBT, vPvB	Persistent, bioaccumulative and toxic; high persistent and high bioaccumulative
PCN	Poison Centres Notification – international system for the notification of dangerous mixtures
PEL	Permitted exposure limit of the chemical substance in the air (the exposure value that an employee may be exposed to during the entire working shift (8 hours), without endangering his health during lifetime occupational exposure)
PMT, vPvM	Persistent, mobile and toxic, very persistent and very mobile
PNEC	Predicted No Effect Concentration
REACH	EU Directive No. 1907/2006 on Registration, Evaluation and Authorization of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
STP	Sewage treatment plant
su	Scientifically Unjustified
TRINS	Transport Information and Accident System of the Czech Republic, providing professional and practical assistance in dealing with emergency situations related to transport and storage of hazardous chemical substances, included in ICE
UACRON	Chemical database (The University of Akron).
UFI code	Unique identifier of the composition of the product containing the dangerous mixture (s).
UN	The four-digit identification number of the substance or object identifying hazardous material in international transport
UVCB	Substances of Unknown or Variable composition, Complex reaction products or Biological materials

Data sources used for preparing the material safety sheet

Annexes I, IV, VI and VII to Regulation (EC) No. 1272/2008 CLP, as amended.
Principles for providing first aid upon being exposed to chemical substances.
Research data sources (PubChem; CLP notification, ECHA, Gestis sanitary limits).
Substance registration documentation pursuant to Regulation (EC) No. 1907/2006 REACH;
Decision of ECHA on registration in accordance with EC Regulation No 1907/2006 REACH;
Protocols – own tests;

Full text of H-/ EUH-sentences and abbreviations of hazard classes stated in Section 2 and/or 3

There are no H-sentences or EUH-sentences included in the text.

Occupational exposure limit values for countries (see point 8.1.)

data for Carbon Black (number CAS 1333-86-4)

	8-hour limit [$mg.m^{-3}$]	Short-term limit [$mg.m^{-3}$]
European Union (Regulation No. 2000/39/ES as amended)	-	-
Italy	-	-

	8-hour limit [mg.m^{-3}]	Short-term limit [mg.m^{-3}]
Germany	-	-
Poland	4 (3)	-
Austria	-	-
Spain	3,5	-
France	3,5	-
Sweden	3	
Japan (JSOH)	1 (1) / 4 (2)	-
United Kingdom	3,5	7
China	4 (3)	

8-hour limit: *Measured or calculated in relation to the 8-hour reference period as a timely weighted average*
Short-term limit: *Exposure limit value, which shall not be exceeded and which corresponds to a 15-minute period*

(1) Respirable dust
(2) Total dust: Total dust comprises particles with a flow speed of 50 to 80 cm/sec at the entry of a particle sampler.
(3) Inhalable fraction

Emergency telephone number for EU countries (see subsection 1.4.)

National Centers		TELEFONE	LANGUAGE	Institution / website / email
Great Britain		☎ 8448920111	English	☎+44/123 5836002; 5753363
Belgium		☎+32/70245245	French	http://www.centreantipoisons.be
		☎+32/70245245	Dutch	http://www.antigifcentrum.be
		☎+32/70245245	German	http://www.poisoncentre.be
Bulgaria		☎+359/29154411	Bulgarian	https://pirogov.eu/bg
Croatia		☎+385/12348342	Croatian	https://www.imi.hr/en/jedinica/poison-control-centre
Czech Republic		☎+420/224-919293; 915402	Czech	http://www.tis-cz.cz
Denmark		☎+45/82121212	Danish	https://www.bispebjerghospital.dk/giftlinien
Estonia		☎+372/7943794	Estonian	https://www.16662.ee
Finland		☎+358/9471977	Finnish	http://www.hus.fi/sairaanhoito/sairaanhoitopalvelut/myrkytystietokeskus/Sivut/default.aspx
France - Angers		☎+33/241482121	French	http://www.centres-antipoison.net/angers/index.html
France - Bordeaux		☎+33/556964080	French	http://www.centres-antipoison.net/bordeaux/index.html
France - Lille		☎+33/0800595959	French	http://www.centres-antipoison.net/lille/index.html
France - Lyon		☎+33/472116911	French	http://www.centres-antipoison.net/lyon/index.html
France - Marseille		☎+33/491752525	French	http://www.centres-antipoison.net/marseille/index.html
France - Nancy		☎+33/383225050	French	http://www.centres-antipoison.net/nancy/index.html
France - Paris		☎+33/140054848	French	http://www.centres-antipoison.net/paris/index.html
France - Strasbourg		☎+33/388373737	French	http://www.centres-antipoison.net/strasbourg/index.html
France - Toulouse		☎+33/561777447	French	http://www.centres-antipoison.net/toulouse/index.html
Ireland		☎+353/18092166	English	http://www.poisons.ie/Public
Italy - Bergamo		☎+39/800883300	Italian	http://www.asst-pg23.it/section/259/Tossicologia_-_Centro_antiveleni
Italy - Firenze		☎+39/557947819	Italian	http://www.antiveleni.altervista.org
Italy - Milano		☎+39/266101029	Italian	http://www.centroantiveleni.org
Italy - Pavia		☎+39/38224444	Italian	http://www-3.unipv.it/reumatologia-tossicologia/cav
Italy - Napoli		☎+39/817472870	Italian	
Italy - Foggia		☎+39/881732326	Italian	
Italy - Roma		☎+39/668593726, 39/649978000, 39/63054343	Italian	http://www.corso-primo-soccorso-roma.it/centriantiveleno-lazio.html
Cyprus		☎+357/22405611	Greek	http://www.mlsi.gov.cy/
Lithuania		☎+370/52362052	Lithuanian	http://www.apsinuodijau.lt
Latvia		☎+371/67000610	Latvian	https://www.aslimnica.lv/lv

National Centers		TELEFONE	LANGUAGE	Institution / website / email
Luxembourg		☎+49/80025500	German	http://www.poisoncentre.be
		☎+352/80025500	French	http://www.centreantipoisons.be
Hungary		☎+36/680201199, 36/0614766464	Hungarian	http://www.okbi.hu/page.php?trid=1&dz=103
Malta		☎+356/23952000	English	https://mccaa.org.mt/
Germany - Berlin		☎+49/3019240	German	https://giftnotruf.charite.de
Germany - Bonn		☎+49/22819240	German	http://www.gizbonn.de/index.php?id=272
Germany - Erfurt		☎+49/361730730	German	https://www.ggiz-erfurt.de/home.html
Germany - Freiburg		☎+49/76119240	German	https://www.uniklinik-freiburg.de/giftberatung.html
Germany - Göttingen		☎+49/55119240	German	https://www.giz-nord.de/cms/index.php
Germany – Homburg/Saar		☎+49/684119240	German	http://www.uniklinikum-saarland.de/de/einrichtungen/kliniken_institute/kinder_und_jugendmedizin/informations_und_behandlungszentrum_fuer_vergiftungen_des_saarlandes
Germany – Mainz		☎+49/613119240	German	http://www.giftinfo.uni-mainz.de/index.php?id=24807
Germany - München		☎+49/8919240	German	http://www.toxinfo.med.tum.de
Netherlands		☎+31/31887558561	Dutch	http://www.productnotification.nl/
Poland		☎ +48 12 411 99 99	Polish	Pracownia Informacji Toksykologicznej i Analiz Laboratoryjnych Uniwersytetu Jagiellońskiego ul. Jakubowskiego 2 30-688 Krakov Poland https://oit.cm.uj.edu.pl/dzialalnosc-uslugowa
Portugal		☎+351/808250143	Portuguese	http://www.inem.pt
Austria		☎+43/14064343	German	http://www.goeg.at/de/VIZ
Greece		☎+30/2132009000	Greek	http://www.aglaiakyriakou.gr/; http://0317.syzefxis.gov.gr
Romania		☎+40/213183606, 215992300, 265212111	Romanian	spital@urgentafloreasca.ro secretariat@spitjudms.ro infotox@insp.gov.ro
Slovakia		☎+421/254774166	Slovak	http://www.ntic.sk
Slovenia		☎ 112 ☎ +386 1 522 1293	Slovenian	Centre for Clinical Pharmacology and Toxicology Division of Internal Medicine University Medical Centre Ljubljana Zaloška cesta 7 1525 Ljubljana Slovenia www.kclj.si e-mail: gp.ukc@kclj.si
Spain		☎ +34 91 562 04 20	Spanish	Servicio de Información Toxicológica (SIT) Instituto Nacional de Toxicología y Ciencias Forenses (INTCF) C/José Echegaray nº4 28232 Las Rozas de Madrid Madrid e-mail: sit@mju.es; intcf@justicia.es
Sweden		☎+46/104566700	Swedish	https://giftinformation.se

Important note

This document has been prepared based on the 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.*