

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : KETJENBLACK EC-600JD

Manufacturer or supplier's details

Company : Nouryon Functional Chemicals B.V.

Address : Haaksbergweg 88
NL 1101 BZ Amsterdam
Netherlands

Telephone : +31889840367

Emergency telephone number : 24 hours:+31 57 06 79211, US-CHEMTREC:1-800-424-9300,
CA-CANUTEC:1-613-996-6666, JP: +81 (836) 74 8810, CN: 化
学事故应急咨询电话 : +86 532 8388 9090

E-mail address : polymer.emeia@nouryon.com

Recommended use of the chemical and restrictions on use

Recommended use : Conductive additive

Restrictions on use : Use as pigment in tattoo colors for humans

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	: pellets
Colour	: black
Odour	: odourless

Not a hazardous substance or mixture.

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Physical and chemical hazards

Not classified based on available information.

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

Health hazards

Not classified based on available information.

Environmental hazards

Not classified based on available information.

Other hazards which do not result in classification

Dust can form an explosive mixture in air.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	Substance
Substance name	:	Carbon black
CAS-No.	:	1333-86-4
Synonyms	:	Carbon black

Components

Chemical name	CAS-No.	Concentration (% w/w)
Carbon black	1333-86-4	<= 100

4. FIRST AID MEASURES

General advice	:	No hazards which require special first aid measures.
If inhaled	:	Remove to fresh air. Keep patient warm and at rest. Rinse nose and mouth with water.
In case of skin contact	:	Remove contaminated clothing and shoes. Rinse with water.
In case of eye contact	:	Rinse with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing.
If swallowed	:	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.
Most important symptoms	:	The symptoms and effects are as expected from the hazards

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

and effects, both acute and delayed : as shown in section 2. No specific product related symptoms are known.

Notes to physician : Treat symptomatically.

5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
 - Specific hazards during firefighting : Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.
 - Hazardous combustion products : Fire will produce smoke containing hazardous combustion products (see section 10).
 - Specific extinguishing methods : Standard procedure for chemical fires.
 - Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
-

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Avoid dust formation.
 - Environmental precautions : No special environmental precautions required.
 - Methods and materials for containment and cleaning up : Sweep up and shovel.
Keep in suitable, closed containers for disposal.
 - Prevention of secondary hazards : Follow safe handling advice and personal protective equipment recommendations.
-

7. HANDLING AND STORAGE

Handling

- Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

No sparking tools should be used.

Advice on safe handling : For personal protection see section 8.
 Avoid creating dust.
 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
 No special handling advice required.

Avoidance of contact : None known.

Storage

Conditions for safe storage : Keep in a dry place.
 Store at room temperature in the original container.
 Keep container tightly closed.

Materials to avoid : No special restrictions on storage with other products.

Further information on storage stability : No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Carbon black	1333-86-4	PC-TWA (Total dust)	4 mg/m ³	CN OEL
Further information: G2B - Possibly carcinogenic to humans				
		TWA (Inhalable particulate matter)	3 mg/m ³	ACGIH

Further occupational exposure limits

Description	Value type (Form of exposure)	Control parameters	Basis
KETJENBLACK EC-600JD	TWA (Total dust)	4 mg/m ³	CN OEL

Engineering measures : Provide appropriate exhaust ventilation at places where dust

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

is formed.

Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
In the case of dust, vapour or aerosol formation use a respirator with an approved filter.
Half mask with a particle filter P2 (EN 143)
- Eye/face protection : Safety glasses
- Hand protection
Material : For prolonged or repeated contact use protective gloves.
- Hygiene measures : General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : pellets
- Colour : black
- Odour : odourless
- Odour Threshold : No data available
- pH : alkaline
- Melting point : No data available
- Boiling point/boiling range : No data available
- Flash point : No data available
- Evaporation rate : Not applicable
- Flammability (solid, gas) : May form combustible dust concentrations in air.
- Self-ignition : > 400 °C
Method: Auto-ignition of a 5mm dust layer according to EN

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

50281-2-1

Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	Not applicable
Relative vapour density	:	Not applicable
Relative density	:	No data available
Bulk density	:	100 - 120 kg/m ³ (20 °C)
Solubility(ies)		
Water solubility	:	insoluble (20 °C)
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	> 600 °C Method: Auto-ignition of a dust cloud according to EN 50281-2-1 G-G oven
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable
Explosive properties	:	Not explosive
Oxidizing properties	:	Not classified as oxidising.
Self-heating substances	:	The substance or mixture is not classified as self heating.
Dust deflagration index (Kst)	:	102 m.b_/s
Dust explosion class	:	St1

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

Minimum ignition energy	:	> 1,000 mJ (L = 0 mH)
Particle Size Distribution	:	D10 = 7 µm ± 1 µm D50 = 15 µm ± 1 µm D90 = 28 µm ± 2 µm D99 = 45 µm ± 5 µm Type of distribution: volume distribution Measurement method: ISO 13320 Measurement technique: Laser light diffraction Physical state: aggregates (These data are typical for the product and not a specification), Dust explosion data are applicable to the aggregate particle size distribution.

10. STABILITY AND REACTIVITY

Reactivity	:	Stable under normal conditions.
Chemical stability	:	Stable under recommended storage conditions.
Possibility of hazardous reactions	:	Dust may form explosive mixture in air.
Conditions to avoid	:	None known.
Incompatible materials	:	None known.
Hazardous decomposition products	:	No decomposition if stored and applied as directed.
Hazardous decomposition products	:	Carbon oxides
Thermal decomposition	:	No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Components:

Carbon black:

Acute oral toxicity	:	LD50 (Rat, male and female): > 10,000 mg/kg
---------------------	---	---

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

Method: OECD Test Guideline 401

Skin corrosion/irritation

Not classified based on available information.

Components:

Carbon black:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Carbon black:

Species	:	Rabbit
Result	:	No eye irritation
Method	:	OECD Test Guideline 405

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Carbon black:

Test Type	:	Buehler Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Not sensitizing.
GLP	:	yes

Germ cell mutagenicity

Not classified based on available information.

Components:

Carbon black:

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

Genotoxicity in vitro : Test Type: Ames test
 Test system: Salmonella typhimurium
 Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 471
 Result: negative
 GLP: yes

Genotoxicity in vivo : Species: Rat (female)
 Application Route: Inhalation
 Result: negative

Germ cell mutagenicity - Assessment : Not mutagenic.

Carcinogenicity

Not classified based on available information.

Product:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

Components:

Carbon black:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

There is still an ongoing scientific discussion on the relevance of tumorigenic response in rats to inorganic insoluble particles like carbon black. According to many inhalation toxicologists the tumour response observed in the rat studies is species specific. It does not correlate to human exposure. However, the IARC evaluation in Monograph 65 concluded that there is "sufficient evidence in experimental animals for the carcinogenicity of carbon black". In humans there is inadequate evidence for carcinogenicity of carbon black according to IARC. Based on IARC's system of evaluation its overall evaluation for carbon black is that it is "possibly carcinogenic to humans" (group 2B). The PAH (polycyclic aromatic hydrocarbon) content of Ketjenblack carbon blacks is below 0.1% (see specification of the different carbon black types).

Not carcinogenic.

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

Reproductive toxicity

Not classified based on available information.

Components:

Carbon black:

Reproductive toxicity - Assessment : No toxicity to reproduction

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Components:

Carbon black:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

Carbon black:

Species : Rat, female
 NOAEC : 0.001 mg/l
 Application Route : Inhalation

Aspiration toxicity

Not classified based on available information.

Components:

Carbon black:

No aspiration toxicity classification

Further information

Product:

Remarks : No further data available.

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

Components:

Carbon black:

Remarks : No further data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Carbon black:

Toxicity to fish	:	LC0 (Danio rerio (zebra fish)): > 1,000 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 5,600 mg/l Exposure time: 24 h Test Type: static test Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 10,000 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 GLP: yes

Persistence and degradability

Components:

Carbon black:

Biodegradability : Remarks: No data available

Bioaccumulative potential

Components:

Carbon black:

Bioaccumulation : Remarks: No data available

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : None known.

Components:

Carbon black:

Additional ecological information : None known.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Contaminated packaging : Empty remaining contents.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable

IATA-DGR

UN/ID No. : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
Packing instruction (cargo) : Not applicable

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

aircraft)
Packing instruction : Not applicable
(passenger aircraft)

IMDG-Code

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
EmS Code : Not applicable
Marine pollutant : Not applicable

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

Not applicable for product as supplied.

National Regulations

GB 6944/12268

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable

Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

National regulatory information

Law on the Prevention and Control of Occupational Diseases

The components of this product are reported in the following inventories:

TCSI : On the inventory, or in compliance with the inventory
TSCA : All substances listed as active on the TSCA inventory
AIIIC : On the inventory, or in compliance with the inventory
DSL : All components of this product are on the Canadian DSL

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version 3.0	Revision Date: 2022/08/04	CN / EN	Date of last issue: 2019/07/30 Date of first issue: 2015/04/28
----------------	------------------------------	---------	---

KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
ENCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
ISHL	:	On the inventory, or in compliance with the inventory
NZIoC	:	On the inventory, or in compliance with the inventory
TECI	:	On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

Further information

Other information : This data sheet contains changes from the previous version in section(s):
Physical and chemical properties

Date format : yyyy/mm/dd

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
CN OEL : Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

ACGIH / TWA : 8-hour, time-weighted average
CN OEL / TWA : Time weighted average
CN OEL / PC-TWA : Permissible concentration - time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer;

SAFETY DATA SHEET

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-600JD

Version	Revision Date:	CN / EN	Date of last issue: 2019/07/30
3.0	2022/08/04		Date of first issue: 2015/04/28

IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECl - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Disclaimer

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

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.

CN / EN