

according to GB/T 16483 and GB/T 17519

KETJENBLACK EC-300J

Version Revision Date: 3.0 2022/08/04

CN / EN Date of last issue: 2019/07/30

Date of first issue: 2015/01/15

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : KETJENBLACK EC-300J

Manufacturer or supplier's details

Company : Nouryon Functional Chemicals B.V.

Address : Zutphenseweg 10

NL 7418 AJ Deventer

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: pelletsColour: blackOdour: 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.



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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



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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.

for firefighters

Special protective equipment : 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.



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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	Control	Basis	
		(Form of	parameters /		
		exposure)	Permissible		
			concentration		
Carbon black	1333-86-4	PC-TWA	4 mg/m3	CN OEL	
		(Total dust)			
	Further information: G2B - Possibly carcinogenic to humans				
		TWA	3 mg/m3	ACGIH	
		(Inhalable			
		particulate			
		matter)			

Further occupational exposure limits

Description	Value type	Control parameters	Basis		
	(Form of				
	exposure)				
KETJENBLACK EC-300J	TWA (Total	4 mg/m3	CN OEL		
	dust)		ļ		

Engineering measures : Provide appropriate exhaust ventilation at places where dust



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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 : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : May form combustible dust concentrations in air.

Self-ignition : not determined: expected to be

> 400 °C



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Method: Auto-ignition of a 5mm dust layer according to EN

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 : 125 - 145 kg/m3 (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 : not determined: expected to be > 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) : 148 m.b_/s



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Dust explosion class : St1

Minimum ignition energy : not determined: expected to be > 1,000 mJ

(L = 0 mH)

Particle Size Distribution : $D10 = 4 \mu m \pm 1 \mu m$

 $D50 = 11 \ \mu m \pm 1 \ \mu m$ $D90 = 22 \ \mu m \pm 3 \ \mu m$ $D99 = 42 \ \mu m \pm 8 \ \mu m$

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:



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

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.



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Components:

Carbon black:

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

carcinogenity 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).



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Not carcinogenic.

Reproductive toxicity

Not classified based on available information.

Components:

Carbon black:

Reproductive toxicity -

: No toxicity to reproduction

Assessment

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.



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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:



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Bioaccumulation : Remarks: No data available

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



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Packing instruction (cargo

aircraft)

Packing instruction (passenger aircraft)

IMDG-Code

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

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

Not applicable

Not applicable

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

Not applicable

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

AIIC : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL



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ENCS : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

KECI: On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : 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; IATA - International Air Transport Association; IBC - International Code for the Construction and



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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; TECI - 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.

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