

CARBON BLACK WITH DISPERSANT 807

Version 3.0 Revision Date: 04/26/2017 SDS Number: 40000002518 Date of last issue: 04/26/2017
Date of first issue: 01/09/2017

SECTION 1. IDENTIFICATION

Product name : CARBON BLACK WITH DISPERSANT 807

Manufacturer or supplier's details

Company name of supplier : Venator Materials Corporation
Address : P.O. Box 4980
The Woodlands,
TX 77387
United States of America (USA)
Telephone : TechInfo: (800) 367-8462

E-mail address of person responsible for the SDS : msds@venatorcorp.com

Emergency telephone number : Chemtrec: (800) 424-9300 or (703) 527-3887

Recommended use of the chemical and restrictions on use

Recommended use : Industrial use
Colouring agents, pigments

Restrictions on use : Do not use for cosmetics, food additives, drug additives, feed additives or permanent implant applications., Due to lack of related experience or data, the supplier cannot approve this use.

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with 29 CFR 1910.1200**

Combustible dust

GHS label elements

Signal word : Warning

Hazard statements : May form combustible dust concentrations in air.

Other hazards

Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

| Chemical name | CAS-No. | Concentration (% w/w) |
|---------------|-----------|-----------------------|
| carbon black | 1333-86-4 | 60 - 100 |

CARBON BLACK WITH DISPERSANT 807

| | | | |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04/26/2017 |
| 3.0 | 04/26/2017 | 40000002518 | Date of first issue: 01/09/2017 |

The specific chemical identity and/or exact percentage (concentration) of composition may be withheld as a trade secret.

SECTION 4. FIRST AID MEASURES

- General advice : Consult a physician.
- If inhaled : If breathed in, move person into fresh air.
Get medical attention if symptoms occur.
- In case of skin contact : Wash off with soap and water.
Call a physician if irritation develops or persists.
- In case of eye contact : Rinse with water.
If eye irritation persists, consult a specialist.
- If swallowed : Rinse mouth with water.
If material has been swallowed and the exposed person is conscious, give small quantities of water to drink.
DO NOT induce vomiting unless directed to do so by a physician or poison control center.
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Eye contact
Dust contact with the eyes can lead to mechanical irritation.
Inhalation may provoke the following symptoms:
Symptoms of Overexposure
Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough.
Skin contact may provoke the following symptoms:
The product is not irritant but as with all fine powders can absorb moisture and natural oils from the surface of the skin during prolonged exposure.
Individuals with sensitive skin may experience skin drying on prolonged or repeated exposure.
- Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.
- Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam
Dry powder
Carbon dioxide (CO₂)
- Unsuitable extinguishing : High volume water jet

CARBON BLACK WITH DISPERSANT 807

| | | | |
|---------|----------------|-------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04/26/2017 |
| 3.0 | 04/26/2017 | 40000002518 | Date of first issue: 01/09/2017 |

media

- Specific hazards during firefighting : 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. Burning produces irritant fumes. The product is insoluble and floats on water. If possible, try to contain floating material. This material creates a fire hazard because it floats on water. May ignite other combustible materials.
- Hazardous combustion products : Carbon dioxide (CO₂)
Carbon monoxide
Sulphur oxides
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Avoid dust formation.
Remove all sources of ignition.
Material can create slippery conditions.
Never return spills in original containers for re-use.
Treat recovered material as described in the section "Disposal considerations".
- Environmental precautions : No special environmental precautions required.
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Keep in suitable, closed containers for disposal.
Sweep up or vacuum up spillage and collect in suitable container for disposal.
Avoid creating dusty conditions and prevent wind dispersal.
Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.
- Advice on safe handling : Keep away from fire, sparks and heated surfaces.
Minimize dust generation and accumulation.
Avoid formation of respirable particles.

CARBON BLACK WITH DISPERSANT 807

Version Revision Date: SDS Number: Date of last issue: 04/26/2017
 3.0 04/26/2017 400000002518 Date of first issue: 01/09/2017

Avoid inhalation, ingestion and contact with skin and eyes.
 Avoid exposure - obtain special instructions before use.
 For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application area.
 Provide sufficient air exchange and/or exhaust in work rooms.
 Dispose of rinse water in accordance with local and national regulations.
 Take precautionary measures against static discharges.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
 Observe label precautions.
 Electrical installations / working materials must comply with the technological safety standards.

SECTION 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 | TWA (Inhalable fraction) | 3 mg/m ³ | ACGIH |
| | | TWA | 3.5 mg/m ³ | OSHA Z-1 |

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines

Hand protection
 Remarks : For prolonged or repeated contact use protective gloves.

Eye protection : Safety glasses
 Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Protective measures : Wear suitable protective equipment.

Hygiene measures : Wash hands before breaks and immediately after handling the product.
 Remove contaminated clothing and protective equipment before entering eating areas.
 Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred.

CARBON BLACK WITH DISPERSANT 807

Version Revision Date: SDS Number: Date of last issue: 04/26/2017
3.0 04/26/2017 400000002518 Date of first issue: 01/09/2017

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--|---|
| Appearance | : powder |
| Colour | : black |
| Odour | : odourless |
| Odour Threshold | : No data is available on the product itself. |
| pH | : Concentration: 7.50 g/l |
| Freezing point | : No data is available on the product itself. |
| Melting point | No data is available on the product itself. |
| Boiling point | No data is available on the product itself. |
| Flash point | : No data is available on the product itself. |
| Evaporation rate | : No data is available on the product itself. |
| Flammability (solid, gas) | : No data is available on the product itself. |
| Flammability (liquids) | : No data is available on the product itself. |
| Upper explosion limit | : No data is available on the product itself. |
| Lower explosion limit | : No data is available on the product itself. |
| Vapour pressure | : No data is available on the product itself. |
| Relative vapour density | : No data is available on the product itself. |
| Relative density | : 1.7 - 1.9 |
| Density | : No data is available on the product itself. |
| Solubility(ies) | |
| Water solubility | : insoluble |
| Solubility in other solvents | : No data is available on the product itself. |
| Partition coefficient: n-octanol/water | : No data is available on the product itself. |
| Auto-ignition temperature | : No data is available on the product itself. |
| Thermal decomposition | : No data is available on the product itself. |
| Self-Accelerating decomposition temperature (SADT) | : No data is available on the product itself. |
| Viscosity | : No data is available on the product itself. |

CARBON BLACK WITH DISPERSANT 807

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04/26/2017 |
| 3.0 | 04/26/2017 | 400000002518 | Date of first issue: 01/09/2017 |

Explosive properties : No data is available on the product itself.

Oxidizing properties : No data is available on the product itself.

Particle size : No data is available on the product itself.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Dust may form explosive mixture in air.
Stable under recommended storage conditions.

Conditions to avoid : No data available

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : Carbon dioxide (CO₂)
Carbon monoxide
Sulphur oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : No data is available on the product itself.

Acute toxicity**Components:**

carbon black:

Acute oral toxicityComponents : LD50 (Rat, male and female): > 8,000 mg/kg
Method: OECD Test Guideline 401
Assessment: The substance or mixture has no acute oral toxicity

Components:

carbon black:

Acute inhalation toxicity : LC50 (Rat): > 4.6 mg/m³
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : No data available

Acute toxicity (other routes of administration) : No data available

Skin corrosion/irritation**Components:**

carbon black:

CARBON BLACK WITH DISPERSANT 807

Version Revision Date: SDS Number: Date of last issue: 04/26/2017
3.0 04/26/2017 400000002518 Date of first issue: 01/09/2017

Species: Rabbit
Exposure time: 4 h
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: No skin irritation

Serious eye damage/eye irritation**Components:**

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

Respiratory or skin sensitisation**Components:**

carbon black:
Test Type: Buehler Test
Exposure routes: Skin
Species: Guinea pig
Assessment: Does not cause skin sensitisation.
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.

Exposure routes: Respiratory Tract
Species: Mouse
Assessment: Does not cause respiratory sensitisation.
Result: Does not cause skin sensitisation.

Assessment: No data available

Germ cell mutagenicity**Components:**

carbon black:
Genotoxicity in vitro : Test Type: sister chromatid exchange assay
Species: Chinese hamster ovary cells
Concentration: 0.00032-1 mg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 479
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Species: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Test Type: Ames test
Species: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

CARBON BLACK WITH DISPERSANT 807

Version Revision Date: SDS Number: Date of last issue: 04/26/2017
3.0 04/26/2017 400000002518 Date of first issue: 01/09/2017

Components:

carbon black:

Genotoxicity in vivo

: Test Type: in vivo assay
Species: Rat (females)
Cell type: Somatic
Application Route: Inhalation
Dose: 10 - 100 mg/kg
Result: positive

Test Type: in vivo assay
Species: Rat (females)
Application Route: Inhalation
Exposure time: 13 Weeks
Dose: 1 - 50 mg/m³
Result: negative

Test Type: in vivo assay
Application Route: Oral
Exposure time: 6 h
Dose: 1%
Method: OECD Test Guideline 477
Result: negative

Components:

carbon black:

Germ cell mutagenicity-
Assessment

: Contains no ingredient listed as a mutagen

Germ cell mutagenicity-
Assessment

: No data available

Carcinogenicity**Components:**

carbon black:

Species: Mouse, (female)

Application Route: Inhalation

Exposure time: 13.5 month(s)

Dose: 7.5 - 12 mg/m³

Frequency of Treatment: 5 daily

Method: OECD Test Guideline 451

Result: negative

Species: Mouse, (male and female)

Application Route: Dermal

Exposure time: 18 month(s)

Frequency of Treatment: 3 daily

Result: negative

Species: Rat, (female)

Application Route: Oral

Exposure time: 24 month(s)

Dose: 52 mg/kg

Frequency of Treatment: 7 daily

CARBON BLACK WITH DISPERSANT 807

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04/26/2017 |
| 3.0 | 04/26/2017 | 400000002518 | Date of first issue: 01/09/2017 |

Result: negative

Species: Rat, (male and female)
 Application Route: Inhalation
 Exposure time: 24 month(s)
 Dose: 7,5 - 12,2 mg/m³
 Frequency of Treatment: 5 daily
 Method: OECD Test Guideline 451
 Result: positive
 Target Organs: Lungs

Species: Mouse
 Application Route: Dermal
 Exposure time: 9 - 24 month(s)
 Dose: 6 - 60%
 Frequency of Treatment: 2 daily
 Method: OECD Test Guideline 451
 Result: negative

Species: Mouse, (male and female)
 Application Route: Oral
 Exposure time: 12 - 18 month(s)
 Dose: 10%
 Frequency of Treatment: 7 daily
 Result: negative

Species: Rat, (male and female)
 Application Route: Inhalation
 Exposure time: 24 month(s)
 Dose: 2,5 mg/m³
 Frequency of Treatment: 16 hr/day, 5 d/wk
 Method: OECD Test Guideline 451
 Result: positive
 Target Organs: Lungs

Components:

carbon black:

Carcinogenicity -
 Assessment

: Weight of evidence does not support classification as a carcinogen
 Tumours produced in rats on inhalation of very high concentrations are believed to be the result of prolonged "lung overload" and are not considered relevant to man.

IARC

Group 2B: Possibly carcinogenic to humans

carbon black

ACGIH

Confirmed animal carcinogen with unknown relevance to humans

carbon black

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

CARBON BLACK WITH DISPERSANT 807

Version 3.0 Revision Date: 04/26/2017 SDS Number: 400000002518 Date of last issue: 04/26/2017
Date of first issue: 01/09/2017

NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Effects on fertility : No data available

Effects on foetal development : No data available

Reproductive toxicity - Assessment : No data available

STOT - single exposure

No data available

STOT - repeated exposure**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: Mouse, male and female

NOEL: > 1000000 mg/kg

Application Route: oral (feed)

Exposure time: 12 - 18 months

Number of exposures: continuously

Species: Rat, females

NOEL: 52 mg/kg

Application Route: oral (feed)

Exposure time: 52 Weeks

Number of exposures: Continuously

Dose: 2.05 g/kg

Species: Mouse, females

NOEL: 137 mg/kg

Application Route: oral (feed)

Exposure time: 52 Weeks

Number of exposures: Continuously

Dose: 2.05 g/kg

Method: OECD Test Guideline 413

Species: Rat, male and female

LOEC: 2.5 mg/m³

Application Route: inhalation (dust/mist/fume)

Exposure time: 24 Months

Number of exposures: 16 h/day, 5 days/wk

Dose: 2.5 or 6.5 mg/m³

CARBON BLACK WITH DISPERSANT 807

Version Revision Date: SDS Number: Date of last issue: 04/26/2017
3.0 04/26/2017 400000002518 Date of first issue: 01/09/2017

Method: OECD Test Guideline 452
Target Organs: Lungs

Species: Mouse, male and female
Application Route: Dermal
Number of exposures: 3 times/week
Dose: 20%
Symptoms: see user defined free text

Repeated dose toxicity - : No data available
Assessment

Aspiration toxicity

No data available

Experience with human exposure

General Information: No data available

Inhalation: No data available

Skin contact: No data available

Eye contact: No data available

Ingestion: No data available

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Ingestion: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:**

carbon black:
Toxicity to fish : LC50: > 1,000 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

CARBON BLACK WITH DISPERSANT 807

Version 3.0 Revision Date: 04/26/2017 SDS Number: 400000002518 Date of last issue: 04/26/2017
Date of first issue: 01/09/2017

Components:

carbon black:

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 5,600 mg/l
Exposure time: 24 h
Method: OECD Test Guideline 202

Components:

carbon black:

Toxicity to algae : ErC50: > 10,000 mg/l
Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : No data available

Toxicity to fish (Chronic toxicity) : No data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : No data available

M-Factor (Chronic aquatic toxicity) : No data available

Components:

carbon black:

Toxicity to microorganisms : IC0: > 800 mg/l
Exposure time: 3 h
Method: No information available.

Toxicity to soil dwelling organisms : No data available

Plant toxicity : No data available

Sediment toxicity : No data available

Toxicity to terrestrial organisms : No data available

Ecotoxicology Assessment Acute aquatic toxicity : No data available

Chronic aquatic toxicity : No data available

Toxicity Data on Soil : No data available

Other organisms relevant to the environment : No data available

Persistence and degradability

Biodegradability - Product : Result: Not readily biodegradable.

CARBON BLACK WITH DISPERSANT 807

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04/26/2017 |
| 3.0 | 04/26/2017 | 400000002518 | Date of first issue: 01/09/2017 |

Biochemical Oxygen Demand (BOD) : No data available

Chemical Oxygen Demand (COD) : No data available

BOD/COD : No data available

ThOD : No data available

BOD/ThOD : No data available

Dissolved organic carbon (DOC) : No data available

Physico-chemical removability : No data available

Stability in water : No data available

Photodegradation : No data available

Impact on Sewage Treatment : No data available

Bioaccumulative potential

Bioaccumulation - Product : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : No data available

Mobility in soil

Mobility : No data available

Distribution among environmental compartments : No data available

Stability in soil : No data available

Other adverse effects

Environmental fate and pathways : No data available

Results of PBT and vPvB assessment - Product : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Endocrine disrupting potential : No data available

CARBON BLACK WITH DISPERSANT 807

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04/26/2017 |
| 3.0 | 04/26/2017 | 400000002518 | Date of first issue: 01/09/2017 |

Adsorbed organic bound halogens (AOX) : No data available

Hazardous to the ozone layer

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

Global warming potential (GWP) : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**International Regulations****IATA**

Not regulated as dangerous goods

IMDG

Not regulated as dangerous goods

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

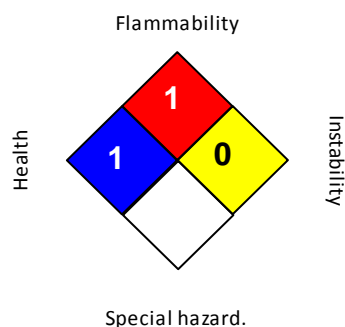
Not applicable for product as supplied.

National Regulations**DOT Classification**

Not regulated as dangerous goods

CARBON BLACK WITH DISPERSANT 807

Version 3.0 Revision Date: 04/26/2017 SDS Number: 400000002518 Date of last issue: 04/26/2017
 Date of first issue: 01/09/2017

SECTION 16. OTHER INFORMATION**Further information****NFPA:****HMIS® IV:**

| | | |
|------------------------|---|----------|
| HEALTH | * | 1 |
| FLAMMABILITY | | 1 |
| PHYSICAL HAZARD | | 0 |

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

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.

LABEL CODE : 0015

Sources of key data used to compile the Safety Data Sheet : Information taken from reference works and the literature., Information derived from practical experience.

Revision Date : 04/26/2017

The information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

CARBON BLACK WITH DISPERSANT 807

| | | | |
|---------|----------------|--------------|---------------------------------|
| Version | Revision Date: | SDS Number: | Date of last issue: 04/26/2017 |
| 3.0 | 04/26/2017 | 400000002518 | Date of first issue: 01/09/2017 |

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