	<b>SAFETY DATA SHEET</b>	<b>Chopped Fiber</b>	
		MSDS Nr	<b>CCF</b>
		Issue Date	<b>29.06.2015</b>

Safety Data Sheet in according to EC-Regulation 1907/2006 (REACH) Registration, Evaluation, Authorisation and Restriction of Chemicals, Commission Regulation (EU) No 453/2010

## 1- CHEMICAL PRODUCT & COMPANY IDENTIFICATION

**Product Name** : AKSACA® Carbon Fiber

**Product Code** : AKSACA® Chopped Fiber –AC 0101  
 AKSACA® Chopped Fiber –AC 1101  
 AKSACA® Chopped Fiber –AC 2101  
 AKSACA® Chopped Fiber –AC 3101  
 AKSACA® Chopped Fiber –AC 4101  
 AKSACA® Chopped Fiber –AC 4102  
 AKSACA® Chopped Fiber –AC 4103

**Company Identification** : **DowAksa Ileri Kompozit Malzemeler Sanayi Ltd Sti**  
**Head:** Miralay Şefik Bey Sok. Ak Han No: 15  
 34437 Gümüşsuyu - Istanbul / TURKEY  
**Plant:** Denizçalı Köyü Yalova - İzmit Yolu Cad. No:34  
 77600 Yalova / TURKEY

**Emergency Telephone** : 00 -90 226- 353 25 45

## 2- HAZARDS IDENTIFICATION

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

: Not classified

**Physio-chemical hazards** : See chapter 10

In the supplied form the product is not explosive at all; however, the build-up of fine dust can lead to a risk of dust explosions.

**Human health dangers** : See chapter 11 and below.


**Eye** : Dust may cause temporary irritation.

**Skin** : Dust may cause mild irritation. In some cases, the dust may cause allergic skin reactions.

**Inhalation:** Carbon fibers commonly in use are also greater than six micrometers in diameter, making them unlikely to be respirable. An ongoing survey of workers in a carbon-fiber production plant shows no pulmonary function abnormalities and no evidence of dust-related disease.

(Ref. : OSHA Technical Manual (OTM) Section III: Chapter 1 / VI.HEALTHY HAZARDS/ C.Reinforcement Fibers /1. Carbon/graphite fibers)

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**Permissible Exposure:** 15 MCCPF OSHA TWA, 10 mg/m<sup>3</sup> ACGIH TWA(Total Dust)

**Environmental hazards :** See chapter 12

**Other hazards :** This product and its dusts are electrically conductive.

<b>Least: 0; Slight: 1; Moderate: 2; High: 3; Extreme: 4</b>	<b>Health</b>	<b>Fire</b>	<b>Reactivity</b>
Carbon fiber	1	0	0
Sizing	1	1	0

### 3- COMPOSITION / INFORMATION ON INGREDIENTS

**Chemical Type** : Carbon (Carbon Fiber) (\*)  
**CAS No** : 7440-44-0

Ingredient	Composition, % by weight	Chemical Formula	Hazards Identification	CAS No.	TSCA
Carbon Fiber	≥ 96%	Carbon Fiber	-	7440-44-0	Registered
Sizing Agent (Hydrocarbon based)	≤ 4%	Trade Secret	-	Registered	Registered

(\*) The specific chemical identity is being withheld due to the trade secret information of DOWAKSA

### 4- FIRST AID MEASURES

**Eye contact:** Flush eyes with water for 15 minutes.

**Skin contact:** Wash affected areas thoroughly with soap and water.

**Inhalation:** Remove from the area of the dust to fresh air. Seek medical attention if you feel unwell.

**Ingestion:** In the event of deliberate ingestion, do not induce vomiting unless directed to do so by consulting with a doctor.

### 5- FIRE FIGHTING MEASURES

**Flash Point:** N/A

**LEL:** N/A


**UEL:** N/A

**Suitable extinguishing media:** Dry powder

**Extinguishing media that must not be used:** Full water jet

**Special exposure hazards arising from the substance or preparation itself or combustion products:** Carbon monoxide (CO); Nitrogen oxides (NOx).

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**Special protective equipment for firefighters:** Do not inhale combustion gases. Use self-contained breathing apparatus.

**Additional information:** Fire residues and contaminated firefighting water must be disposed of in accordance with local regulations.

## 6- ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Not applicable

**Environmental precautions:** Dust deposits should not be allowed to accumulate on surfaces as they may form an explosive mixture if they are released into the atmosphere in sufficient concentrations during processing. Avoid dust generation during processing, i.e. cleaning of surfaces with compressed air. The dust is electrically conductive and may become airborne, clean up with a vacuum. If an electrical appliance is used, take the steps necessary to avoid the risk of electrical shock.

**Methods for cleaning up:** Take up mechanically. Dispose of absorbed material in accordance within the regulations.

## 7- HANDLING and STORAGE

**Precautions for safe handling:** No special measures necessary if used properly.

**Conditions for safe storage:** Airborne particles and filaments should be controlled so as to minimize skin irritation and electrical shorts in switch gears, etc. due to conductivity of fiber.

**Other precautions:** Protect all electrical equipment, in or near areas in which fiber is handled or used, from contact with airborne particles and filaments to avoid possible damage caused by electrical shorts.

## 8- EXPOSURE CONTROL / PERSONNEL PROTECTION

**Additional advice on system design:** Ensure adequate ventilation on workstation. If dust handling systems are used they should be designed in a manner to prevent the escape of dust into the work area.


**Respiratory protection:** Breathing apparatus in the event of high concentrations. short term: filter apparatus, filter N95. Dust may produce mechanical irritation to the mucus membranes of the nose, throat and upper respiratory tract.

**Hand protection:** Butyl rubber, > 120 min (EN 374)

**Eye protection:** Safety glasses

**Skin protection:** Mechanical irritation accompanied by itching or dermal effects may occur from exposure to material. Cleanroom type clothing that is a light weight fabric and is well ventilated and prevents the transfer of dust. Consider taping at the wrist and ankle areas to control contact with exposed areas. PPE hazard analysis based on user process should be completed.

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**General protective measures:** Avoid contact with eyes. Do not inhale dust.

**Hygiene measures:** Wash hands before breaks and after work. Use barrier skin cream.

**Delimitation and monitoring of the environmental exposition:** Not determined

## 9- PHYSICAL and CHEMICAL PROPERTIES

<b>Physical State/Apperance</b>	: Black Chopped Fiber
<b>Odor</b>	: None
<b>Specific Gravity</b>	: 1.7 – 2.0 gr/cm <sup>3</sup>
<b>Vapor Pressure/Density</b>	: Not Applicable
<b>Viscosity</b>	: Not Applicable
<b>Boiling point</b>	: Not Applicable
<b>Melting point</b>	: Not Applicable
<b>Volatility</b>	: Not Applicable
<b>Solubility</b>	: Insoluble
	in water : Not Applicable
	in others: Not Applicable
Electrically Conductivity	: Yes

## 10-STABILITY and REACTIVITY


**Hazardous Reactions:** Reactions with strong oxidizing agents. Accumulation of fine dust may entail the risk of a dust explotion in the presence of air. The fine dust form a carbon fiber compound or composite that is cut or formed can create additional dust explosion risk depending on resin or compounding agent. A process hazard analysis is recommended to determine what, if any, risks are present.

**Hazardous decomposition products:** No hazardous decomposition products will be formed during normal usage of carbon fiber.

## 11-TOXICOLOGICAL INFORMATION

<b>Carcinogenity</b>	: not determined
<b>Epidomology</b>	: Contact with fly or dust can cause skin irritation.
<b>Teratogenicity/Toxic for reproduction</b>	: not determined
<b>Mutagenicity/Neurotoxicity</b>	: not determined
<b>Acute toxicity</b>	: not determined
<b>Chronic toxicity</b>	: not determined

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**Sub-chronic toxicity** : not determined

## 12- ECOLOGICAL INFORMATION

**Aquatic toxicity** : not determined  
**Biological degradability** : not determined  
**Bioaccumulative potential** : not determined  
**Mobility in soil** : not determined  
**General information** : Ecological data is not available.

## 13- DISPOSAL CONSIDERATIONS

**Product:**  
For recycling, consult manufacturer or recycling, consult waste disposal centers.

**EU Waste Number:**  
160306, 061399

**Contaminated packaging:**  
Packaging that cannot be cleaned should be disposed of as for product. Uncontaminated packaging may be taken for recycling.


**EU Waste Number:**  
150101, 150102

## 14- TRANSPORT INFORMATION

**UN Number** : None  
**Labeling** : None  
**Classification Code** : None

This product is not regulated as dangerous or hazardous goods under ADR, RID, DOT, IMO, ICAO, IATA, IMDG or UN shipping.

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### 15-REGULATORY INFORMATION

Regulatory/Classification	Reg.Info	Substance Name	Allowed Concentration	
TSCA (USA)	N/A	7440-44-0 Carbon Fiber	N/A	N/A
EINECS (European Union)	N/A	N/A	N/A	N/A
DSL (Canada)	N/A	N/A	N/A	N/A
California Proposition 65	N/A	N/A	N/A	N/A
CAS	N/A	7440-44-0	N/A	N/A
FDA	N/A	N/A	N/A	N/A
UL	N/A	N/A	N/A	N/A
OSHA	N/A	N/A	N/A	N/A
REACH	Article	Carbon Fiber	N/A	N/A

\*N/A : Not Applicable

### SARA Hazard Notification :

Hazard Categories Under Title III Rules (40 CFR 370) : Not Applicable

Section 302 Extremely Hazardous Substances : Not Applicable


Section 313 Toxic Chemicals : Not Applicable

### 16- OTHER INFORMATION

#### DISCLAIMER :

The information and recommendations set forth above are taken from sources believed to be accurate as of the date hereof, however DowAksa İleri Kompozit Malzemeler Sanayi Ltd Sti. make no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assume no liability to any user thereof. The information is supplied upon the condition that the persons receiving it will make their own determination as to its suitability for their purposes prior to use. The information contained in this sheet does not constitute a hazard assessment and should not be used in place of the user's own assessment of work place risks as required by other health and safety legislation.

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**ACRONYMS :**

- ACGIH : American Conference of Governmental Industrial Hygienists  
CAS : Chemical Abstracts Service  
DSL : Domestic Substance List  
DOT : Department of Transportation  
EINECS : European Inventory of Existing Commercial chemical Substance  
FDA : Food and Drug Administration  
HEPA : High-Efficiency Particle Air  
IARC : International Agency for Research on Cancer  
IATA : International Air Transport Association  
ICAO : International Civil Aviation Organization  
IMO : International Maritime Organization  
MSHA : Mine Safety and Health Administration  
N/A : Not Applicable  
NTP : National Toxicology Program  
NIOSH : National Institute for Occupational Safety and Health  
OSHA : Occupational Safety and Health Administration  
RCRA : Resorce Conservation and Recovery Act  
REACH : Registration, Evaluation and Authorization/Restriction of Chemicals  
SARA : Superfund Amendments and Reauthorization Act  
TSCA : Toxic Substances Control Act  
TWA : Time Weighted Average  
UN : United Nations Number

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