

## Material Safety Data Sheet

**Product name :**  
MSDS number : 00109-17

**Ultra Carb** (whole product range)  
Version: 1

Data: 28/09/2017

### PRODUCT LABELS

LABELLING (standard or EU) : Not Concerned  
R-phrases : None  
S-phrases : None  
TRANSPORT LABELLING : Not Applicable

---

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY UNDERTAKING

Name of the product : **Ultra Carb**  
Code No : SMD/01-10  
Product application : Motor oil additive  
Manufacturer / supplier : Research & Production Company «State-of-the-art Technology of Synthesis» Ltd.  
11th line 26, letter A, office 7-H, 199178 St.-Petersburg/ Russia  
Tel : +7 (812) 309-8455  
Fax : +7 (812) 309-8455

---

### 2. COMPOSITION/INFORMATION OF INGREDIENTS

#### PREPARATION

The product is produced by introducing nanoscale carbon (fullerenes C60 modification Fullerene FCM C60) in mineral base oil.

The base is mineral oil:

An aerosol of mineral oil of hazard class 3 (moderately hazardous substance). Not classified (the classification as a carcinogen is not applied in accordance with note L of the Annex VI of EC Regulation 72/2008 12, as the content of polycyclic aromatic hydrocarbons determined in accordance with IP 346, is less than 3%).

Substances presenting health hazard:	EC №	CAS №	Content
Filler-modifier (Fullerene FCM C60)			< 0,68 %
Filler-modifier (Fullerene C60 99,5%+)		99685-96-8	< 0,80 %
Polarized Carbon		131159-39-2	< 0,99 %

Specifications on filler-modifier : 0257-005-31033476-2016

---

### 3. HAZARD IDENTIFICATION

Health effects : Under normal conditions of use, the product holds no danger of intoxication  
Environmental impact : Do not discard this product into the environment  
Physical and chemical hazards : No specific risk of fire or explosion under normal conditions of use

---

### 4. FIRST AID MEASURES

IN CASE OF SERIOUS OR PERSISTENT MANIFESTATIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE

Inhalation : Inhalation of heavy concentrations of vapour, fumes or spray, may cause mild irritation of the throat.  
Transport the person into fresh air, keep warm and allow to rest.

## Material Safety Data Sheet

**Product name :**  
MSDS number : 00109-17

**Ultra Carb** (whole product range)  
Version: 1

Data: 28/09/2017

**Skin contact :** Immediately remove all soiled or stained clothing.  
Wash the affected area immediately and repeatedly with soap and water.

**Eye contact :** Keep eyes open and rinse immediately and repeatedly with water for at least 15 minutes.

---

### 5. FIRE FIGHTING MEASURES

**Flash Point :** See heading 9

**Fire extinguishers media :**

- suitable : Foam, carbon dioxide (CO<sub>2</sub>), powder.
- not recommended : Do not use water jet (stick jets) for extinguishing fire since they could help to spread the flames.

**Specific hazards :** Incomplete combustion and thermolysis produce gases of varying toxicity such as CO, CO<sub>2</sub>, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled.  
Vapours can build explosive mixtures with air.  
Vapours are heavier than air and may spread on the ground to source of ignition.

**Protective measures for firefighter :** PInsulated breathing apparatus must be worn in confined premises with heavy concentrations of fumes and gases.

**Other :** The combustion residues and contaminated water for fire fighting have to be disposed according to the local regulations.

---

### 6. ACCIDENTAL RELEASE MEASURES

See sections 8 and 13

**Personnel protection :** Ensure good ventilation.  
Remove sources of ignition. Do not smoke.

**After spillage / leakage :**

- on the soil : Surfaces on which the product has been spilled may become slippery.  
Do not allow the product to enter sewers or rivers or contaminate the soil.  
Recover with mechanical means such as pumps and skimmers.
- on water : Floating absorbent material, then mechanical recovery.  
If the product is spilled in a river or in the sewers, notify the authorities of the possible presence of surface effluent.

**Spill cleanup methods :**

- Recovery Contain and collect the spilled product, sand the surfaces concerned if necessary.  
Contain and collect the spilled product with sand or any other inert absorbent material.  
In the event of a major spill, inform the competent authorities if the situation cannot be brought under control rapidly and efficiently.

## Material Safety Data Sheet

**Product name :**  
MSDS number : 00109-17

**Ultra Carb** (whole product range)  
Version: 1

Data: 28/09/2017

- Elimination : Dispose of waste in compliance with regulations.  
Avoid discharge of the material in a steam or a sewer or cause ground contamination.

### 7. HANDLING AND STORAGE

#### HANDLING :

- Prevention of user exposure : Ventilate extensively if the formation of vapour, fumes, mist or aerosols is a risk.  
Make all the necessary arrangement in order to reduce exposure risk, notably to products in use or to wastes.  
Keep away from combustive substances; keep away from food and beverages.
- Prevention of fire and explosion : Empty containers may contain flammable or explosive vapours.  
There is a fire hazard associated with rags, papers or any other material used to remove spills  
which become soaked with product.  
Avoid accumulation of these : they are to be disposed off safety after use.
- Precautions : Avoid static electricity build up with connection to earth.  
Set up machinery and equipment so as to avoid the risk of accidental spills or splashes onto hot  
machine parts and electrical contacts (on joints failure, for example).

#### STORAGE :

- Technical measures : Make the necessary arrangements to prevent water and soil pollution.
- Storage precautions :  
- Suitable : Store at room temperature, protected against contact with water and moisture, and away from  
any sources of ignition.  
Keep containers closed when not in use.
- To be avoided: Do not store exposed to the elements.
- Incompatible products : Dangerous reaction with strong oxidizing agents.
- Packaging materials :  
- Recommended : Use only hydrocarbon resistant containers, joints, pipes etc...  
Keep in original container if possible.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Technical measures : Use the product in a properly ventilated atmosphere.  
When working in enclosed place (tanks, reservoirs,..), make sure that atmosphere is not suffocating and/ or wear recommended equipment.
- Occupational exposure limit :  
- oil mist : 10mg/m<sup>3</sup>, for 15 minutes  
- oil mist : 5mg/m<sup>3</sup>, for 8 hours
- Hand protection : Impermeable hydrocarbon-proof gloves.  
Recommended material: nitrile, neoprene.  
The break through times of the same type of glove of different manufacturers can be very different - even if the layer thickness is similar. Therefore the break through times have to be found out from the manufacturer of the

## Material Safety Data Sheet

**Product name :**  
MSDS number : 00109-17

**Ultra Carb** (whole product range)  
Version: 1

Data: 28/09/2017

protective gloves themselves.

The demands on the gloves are determined by the conditions in practice (e.g. multiple use, mechanical load, temperature, strength and duration of exposition). Before choosing suitable gloves, it is recommended that the user tests the gloves.

Eye protection :

Goggles, in case of splashing.

Skin and body (other than the hands) protection :

As required, wear a face mask, hydrocarbon-proof clothing, and safety boots (when handling drums).  
Don't wear ring, watches or anything similar which can retain the product and may give rise to skin conditions.

Hygienic work practices :

Avoid prolonged and repeated contact with the skin, especially with used or waste product.  
Immediately remove all soiled or stained clothing.  
If the product comes into contact with the skin, wash the affected area immediately and repeatedly with soap and water.  
Use no abrasives, solvents or fuels.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :	Dark, Turbid liquid
Colour :	Brown
Odour :	Characteristics
Density/Specific Gravity :	About 853 kg/m <sup>3</sup> at 15°C
Flash point :	>210°C (ASTM D92)
Auto-ignition temperature :	>250°C (ASTM E 659)
Comments on auto-ignition temperature :	This temperature may be significantly lower under particular conditions (slow oxidation on finely divided materials).
Comments on explosivity :	Not applicable
Solubility :	
- in water :	Insoluble and immiscible.
- in organic solvents :	Soluble in many common solvents.
Viscosity :	Kinematic viscosity at 100°C : about 14.20 mm <sup>2</sup> /s

### 10. STABILITY AND REACTIVITY

Stability :	The product is stable under normal storage, handling and use temperatures.
Condition to avoid :	Heat (temperatures above flash point), sparks, ignition points, flames, static electricity

## Material Safety Data Sheet

**Product name :**  
MSDS number : 00109-17

**Ultra Carb** (whole product range)  
Version: 1

Data: 28/09/2017

Materials to avoid : Avoid contact with strong oxidizing agents

Hazardous decomposition products : Incomplete combustion and thermolysis produces potentially toxic gases such as CO, CO<sub>2</sub>, various hydrocarbons, aldehydes and soot.

---

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE TOXICITY / LOCAL EFFECTS :

- Inhalation, comments : Risk is improbable under normal conditions of use.  
Inhalation of important concentration of vapour or aerosols may cause irritation of the upper respiratory tract.
- Skin contact, comments : Risk is improbable under normal conditions of use.
- Ingestion, comments : In case of ingestion of small quantities, no important effect observed.  
In case of ingestion of larger amounts: abdominal pain, diarrhoea,...

#### CHRONIC TOXICITY OR LONG TERM TOXICITY :

- Skin contact : Characteristics skin affections (oil blisters) may develop following prolonged and repeated exposure through contact with stained clothing.
- Sensitization : Not determine
- Carcinogenicity : During use in engines, contamination of oil with low levels of combustion products occurs.  
Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure.

---

### 12. ECOLOGICAL INFORMATION

Comments about ecotoxicity : Experimental data on the finished product are not available.  
No information available for used product.  
It is considered to present a little danger for aquatic life.

#### Mobility :

- Air : There is a slow loss by evaporation.
- Soil : Given its physical and chemical characteristics, the product generally shows little mobility in the ground.
- Water : The product is insoluble; it spreads on the surface of the water.

---

### 13. DISPOSAL INFORMATION

Waste disposal : Dispose of in a safe manner, in accordance with local regulations.  
If need be, collection by an authorized waste collector and regeneration or incineration in an approved installation.

Waste class : 13-02-05 (non-chlorinated engine, gear, lubricating oils)

## Material Safety Data Sheet

**Product name :**  
MSDS number : 00109-17

**Ultra Carb** (whole product range)  
Version: 1

Data: 28/09/2017

The waste classification is dependent on the composition of the product at the time of disposal.

The waste classification mentioned here represents only a recommendation.

The waster producer is

responsible for the correct specification of the waste. The specification of the waster classification should be in arrangement with the authorized waste disposal company.

Disposal of contaminated packaging :

Proceed in compliance with the prevailing regulations.

---

### 14. TRANSPORT INFORMATION

Not concerned by the transport regulatory below

Road (ADR) / Rail (RID) :

Class : Not restricted for transport

Transport by barge (ADNR) :

Marine (IMO-IMDG) :

Air (ICAO / IATA) :

---

### 15. REGULATORY INFORMATION

Risk phrase(s) : None

Safety phrase(s) : None

EU directives : Hazardous preparations directive 1999/45/EC modified (Directive 2001/60/EC)

Social Security code : Art. L 461-6, Art. D461-1, appendix A, No. 601. Table of occupational illnesses and diseases No. 36

labor code : Art. R 241-50, decree of 07.11.1977

---

This Safety Data Sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of our knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his or her activity.

The user bears sole liability for the precautions required when using the product. The regulatory texts herein are intended to aid the user to fulfil his obligations.

This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

---