



# MATERIAL SAFETY DATA SHEET

## Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Trade name: SENTOS V-LR3

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Uses of the Substance/ Mixture: At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.

Uses advised against: At this moment we have not identified any uses advised against.

### 1.3 Details of the supplier of the safety data sheet

Company: Carbide Related Technologies, Inc.  
355 Sackett Point Road Unit 5  
North Haven, CT 06473

Telephone: +1 203-281-1266

Email address: [mlee@carbiderelatedtech.com](mailto:mlee@carbiderelatedtech.com)

Responsible/Issuing Person: Environment/Quality management

### 1.4 Emergency telephone number

Emergency telephone Number: (203)281-1266

## Hazards identification

### 2.1 Classification of the substance or mixture

Directive 67/548/EEC or 199 45/EC	
Hazard symbol/ Category of danger	Risk phrases
Harmful (Xn)	R65
	R66

## 2.2 Label elements

Labelling according to EC Directives 67/548/ECG

Hazard symbols:



Harmful

R-phrase(s):	R65	Harmful: may cause lung damage if swallowed
	R66	Repeated exposure can cause skin dryness and cracking
S-phrase(s):	S23	Do not breathe gas/fumes/vapor/spray.
	S24	Avoid contact with skin.
	S62	If swallowed, do not induce vomiting: seek medical Immediately and show this container or label.

### Hazardous components which must be listed on the label:

- Hydrocarbons, C10-C13, isoalkanes, cyclics, <2% aromatics

### Hazardous components which must be listed on the label:

- Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics <% aromatics

## 2.2 Other hazards

For results of PBT and vPvB assessment see section 12.5.

## Composition/information on ingredients

### 3.1 Mixtures

Chemical nature: Preparation of substances listed below with no hazardous additions.

Hazardous Components	Amount%	Classification (Regulations (EC) No. 1272/2008) Hazard Class. Category	Classification (67/548/EWG) Hazard Statements
Hydrocarbons, C10-C13, isoalkanes, cyclics, <2% aromatics EC-Nr: 918-317-6 Registration: 01-2119474196-32-xxxx >=50		Asp. Tox. 1 H304	Xn: R65; R66
Hydrocarbons, C10- C13 n-alkanes, isoalkanes, cyclics, <2% aromatics EC-Nr: 918-481-9		Asp. Tox. 1 H304	Xn; R65, R66



Remarks: Benzene <0.1%  
For full text on the R-phrases mentioned in this section, see section 16  
For full text on the H-statements mentioned in this section, see section 16.

## First aid measures

### 4.1 Description of first aid measures

General advice:	Move out of dangerous area. Take off contaminated clothing immediately.
If inhaled:	Move to fresh air. Oxygen, if needed. Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.
In case of skin contact:	Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
In case of eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If eye irritation persists, consult a physician.
If swallowed:	Rinse mouth with water. DO NOT induce vomiting. Risk of aspiration! Call a physician immediately. If a person vomits when laying them on their back, place them into the recover position.

### 4.2 Most important symptoms and effects, both acuter and delayed

Symptoms:	Symptoms of overexposure may be headaches, dizziness, tiredness, nausea and vomiting. Inhalation can cause CNS-depression and narcosis. Dries out the skin.
Effects:	Aspiration hazard if swallowed- can enter lungs and cause damage. Aspiration may cause pulmonary edema and pneumonitis.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment:	Treat symptomatically
------------	-----------------------

## Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing



Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: High volume water jet

## 5.2 Special Hazards arising from the substance mixture

Specific hazards during firefighting: Combustible liquid. Vapors may form explosive mixtures with air. The product is insoluble and floats on water. Incomplete combustion may form toxic pyrolysis products. Fire may cause evolution of: Carbon oxides.

## 5.3 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)

Further information: Cool closed containers exposed to fire with water spray. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

## Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Provide adequate ventilation. Keep away from heat and sources of ignition. Avoid contact with skin and eyes. Do not breathe gas/fumes/vapor/spray.

### 6.2 Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

### 6.3 Methods and materials for containment and cleaning up

Methods and materials for Containment and cleaning up: Ensure adequate ventilation. Absorb with liquid binding Material (sand, diatomite, acid binders, and universal binders). Treat recovered material as described in the section, "Disposal Considerations."



## Handling and storage

### 7.1 Precautions for safe handling

Advice on safe handling:	Keep container tightly closed. Avoid inhalation of vapor or mist. Provide sufficient air exchange and/or exhaust in work rooms.
Hygiene measures:	Take off all contaminated clothing immediately. Do not breathe gas/fumes/vapors/spray. Avoid contact with the skin and the eyes. Keep away from food, drink, animal feeding stuffs. Smoking eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage Areas and containers:	Keep in an area equipped with solvent resistant flooring. Store in cool place. Keep container tightly closed in a dry and well ventilated place.
Advice on protection against Fire and explosion:	Combustible liquid. Possible formation of ignitable mixtures in Air if heated above flash point and/or if sprayed (atomized). Handle only at temperatures at least 15°C below the flash point. Keep away from sources of ignition- No smoking. Take measures to prevent the buildup of electrostatic charge.

#### Further information on storage:

Conditions:	Keep away from heat. Keep away from direct sunlight.
Advice on common storage:	Incompatible with oxidizing agents.
German storage class:	10 combustible liquids.
Specific use(s):	No information available.



## Exposure controls/personal protection

### 8.1 Control parameters

Component:	C9-C15 Aliphatics
Occupational Exposure Limit Values	

TRGS 900, AGW:

600 mg/m<sup>3</sup>, (2(11))

Hydrocarbon mixtures, application as solvent (hydrocarbon solvent), additive-free

### 8.2 Exposure controls

#### Engineering measures

Refer to protective measures listed in sections 7 and 8

#### Personal protective equipment

##### Respiratory protection

Advice: Required, if exposure limit is exceeded (e.g. OEL). In case of intensive or longer exposure use self-contained breathing apparatus. Recommended Filter type: combination filters: A-P2.

##### Hand protection

Advice: Protective gloves Solvent-resistant gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact.) Protective gloves should be replaced at, first signs of wear. The following materials are suitable:

Material:	Nitrile rubber
Break through time:	>=480 min
Glove thickness:	0.45mm

##### Eye protection

Advice: Tightly fitting safety goggles

##### Skin and body protection

Advice: Protective work clothing

### Environmental exposure controls

General advice: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform



respective authorities. If material reaches soil inform respective authorities responsible for such cases.

## Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Form:</b>	liquid
<b>Color:</b>	colorless
<b>Odor:</b>	like petrol
<b>Odor threshold:</b>	no data available
<b>pH:</b>	not applicable
<b>Freezing point:</b>	not applicable
<b>Boiling point/range:</b>	>180° C No data available
<b>Flash point:</b>	>65° C
<b>Evaporation Rate:</b>	No data available
<b>Flammability (solid, gas):</b>	Not applicable
<b>Upper explosion limit:</b>	7% (V)
<b>Lower explosion limit:</b>	0.6% (V)
<b>Vapor pressure:</b>	0.5 hPa (20° C) 6.0 hPa (7° C)
<b>Relative vapor Density:</b>	not data available
<b>Density:</b>	0.797g/cm <sup>3</sup> (20° C)
<b>Water solubility:</b>	not respectively poorly mixable
<b>Partition coefficient n-octanol/water:</b>	no data available
<b>Ignition temperature:</b>	no data available



**Thermal Decomposition:** no data available

**Viscosity, dynamic:** No data available

**Explosively:** Formation of explosive air/vapor mixture is possible.

**Oxidizing properties:** None known

## 9.2 Other information

No further information available.

## Stability and Reactivity

### 10.1 Reactivity

Advice: No decomposition if stored and applied as directed.

### 10.2 Chemical Stability

Advice: Stable under recommended storage conditions

### 10.3 Possibility of hazardous reactions

Hazardous reactions: Formation of explosive/vapor mixtures is possible.

### 10.4 Conditions to avoid

Conditions to avoid: Heat, flames and sparks.  
Keep away from direct sunlight

### 10.5 Incompatible materials

Materials to avoid: Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition Products: Fire may cause evolution of: Carbon oxides. Under certain fire conditions, traces of other toxic products cannot be excluded.





## Toxicological information

### 11.1 Information on toxicological effect

<b>Irritation</b>	
<b>Skin</b>	
Result:	Prolonged skin contact may defat the skin and produce dermatitis
<b>Eyes</b>	
Result:	Causes discomfort in the eyes but does not harm eye-tissue
<b>Sanitation</b>	
Result:	No Sensitizing effect known
<b>Further information</b>	
Experience with human exposure:	Even smallest amounts of product may cause pulmonary edema or pneumonia when absorbed into the lungs by swallowing or subsequent vomiting.
<b>Component: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</b>	
<b>Acute Toxicity</b>	
<b>Oral</b>	
LD50	>500mg/kg (rat) Data based on test results or data from comparable product.
<b>Inhalation</b>	
LC50	>4951 mg/l (rat; vapour) Data based on test results or data from a comparable product.
<b>Dermal</b>	
LD50	>5000 mg/kg (rabbit) Data based on test results or data from a comparable product.
<b>Component: Hydrocarbons, C10-C13, isoalkanes, cyclics, &lt;2% aromatics</b>	
<b>Acute toxicity</b>	
<b>Oral</b>	
LD50	>5000mg/kg (rat) (OECD Test Guideline 401) Aspiration may cause pulmonary edema and pneumonitis
<b>Inhalation</b>	
LC50	>5 mg/l (rat) (OECD Test Guideline 403) Inhalation may cause central nervous system effects
<b>Dermal</b>	
LD50	>5000 mg/kg (rat) (OECD Test Guideline 402)



## Ecological Information

### 12.1 Toxicity

<b>Component: Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</b>	
<b>Acute toxicity</b>	
<b>Fish</b>	
LL0	1000 mg/l (Oncorhynchus mykiss (rainbow trout); 96h) (Toxicity to fish)
<b>Toxicity to daphnia and other aquatic invertebrates.</b>	
ELO	1000 mg/l (Daphnia magna (Water flea); 48 h) (Toxicity to daphnia)
<b>Algae</b>	
ELO	1000mg/l (Pseudokirchneriella subcapitata (green algae); 72h) (toxicity to algae)
<b>Component: Hydrocarbons, C-10-C13, isoalkanes, cyclics, &lt;2% aromatics</b>	
<b>Acute toxicity</b>	
<b>Fish</b>	
LL50	>1000 mg/1 (Freshwater fish; 96h) (Toxicity to fish; OECD Test Guideline 203)
<b>Toxicity to daphnia and other aquatic invertebrates.</b>	
EL50	>1000 mg/l (Daphnia magna; 48 h) (Toxicity to daphnia; OECD Test Guideline 202)
<b>Algae</b>	
EL50	>1000mh/l ( pseudokirchneriella subcapitata (green algae); 72 h) (toxicity to algae; OECD test Guideline 201)

### 12.2 Persistence and degradability

Persistence and degradability	
<b>Persistence</b>	
Result:	The product is insoluble and floats on water. The product evaporates slowly.
<b>Biodegradability</b>	
Result:	Inherently biodegradable.

### 12.3 Bio accumulative potential

<b>Bioaccumulation</b>	
Result:	no data available

### 12.4 Mobility in soil

<b>Mobilität</b>	
Result:	The product is insoluble and floats on water



### 12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
Results:	This mixture contains no substance considered to be persistent, bio accumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bio accumulating (vPvB.)

### 12.6 Other adverse effects

Additional ecological information	
Result:	Do not flush into surgance water on sanitary sewer system. Do not allow material to contaminate ground water system.

### Disposal considerations

#### 13.1 waste treatment methods

Product: Disposal together with normal waste is not allowed. Do not let product enter drains. Can be incinerated, when in compliance with local regulations.

Contaminated Packaging: Empty remaining contents. Do not burn or use a cutting torch on, the Empty drum. Risk of explosion. Empty containers should be delivered To local recyclers for disposal or to the provider for their reutilization In case of being subject to a return and deposit system.

European Waste Catalogue Number: No waste code according to the European Waste Catalogue. Can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

### Transport information

Not dangerous goods for ADR, RID and IMDG.

#### 14.1 UN number

Not applicable.

#### 14.2 UN proper shipping name

Not applicable.

#### 14.3 Transport hazard class(es)

Not applicable.

#### 14.4 Packaging group

Not applicable.

#### 14.5 Environmental hazards

Not applicable.

**14.6 Special precautions for user**

Not applicable.

**14.7 Transport in bulk according to Annex II or MARPOL 73/78 and the IBC code**

IMDG: Not applicable.

**Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

WKG (DE): WGK:1; slightly water endangering; WGK (DE); Major Accident Hazard  
13 Falls under the German Störfall

Legislation:

Other regulations: Occupational restriction: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the Protection of young people at work.

**15.2 Chemical Safety Assessment**

Currently we do not have any information from our supplier about this.

**Other Information**

Full text of R-phrases referred to under section 2 and 3

R65 Harmful may cause lung damage if swallowed

R66 Repeated exposure may cause skin dryness or cracking

Full text of H-statements referred to under sections 2 and 3

H304 May be fatal if swallowed and enters airways

**Further information**

Other information: The information provided in this Safety Data Sheet is correct to our knowledge at the date of revision (14.10.2011). The information given only describes the Products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.