

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**DINITROL 501 FC HM SQ**

Revision date: 11/19/2020

Product code: 10704

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**1. Identification****Product identifier**

DINITROL 501 FC HM SQ

**Recommended use of the chemical and restrictions on use****Use of the substance/mixture**

Adhesives, sealants

**Uses advised against**

No further relevant information available.

**Details of the supplier of the safety data sheet****Manufacturer**

Company name:	DINOL GmbH	
Street:	Pyrmonter Strasse 76	
Place:	D-32676 Luegde	
Telephone:	+ 49 (0) 5281 982980	Telefax: + 49 (0) 5281 9829860
e-mail:	msds@dinol.com	
Contact person:	Labor	
Responsible Department:	msds@dinol.com	

**Supplier**

Company name:	DINOL U.S. Inc.	
Street:	8520 Cotter Street, Lewis Center	
Place:	USA-43035 Ohio	
Telephone:	740-548-1656	Telefax: 740-548-1657
e-mail:	info@dinolus.com	
Internet:	www.dinol.com	

**Emergency phone number:** 3E Company Emergency +1-866-404-4230**2. Hazard(s) identification****Classification of the chemical****29 CFR Part 1910.1200**

Respiratory or skin sensitization: Resp. Sens. 1

Respiratory or skin sensitization: Skin Sens. 1

Carcinogenicity: Carc. 2

**Label elements****29 CFR Part 1910.1200****Signal word:** Danger**Pictograms:****Hazard statements**

May cause an allergic skin reaction

May cause allergy or asthma symptoms or breathing difficulties if inhaled

Suspected of causing cancer

**Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid breathing dust/fume/gas/mist/vapors/spray.

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Contaminated work clothing must not be allowed out of the workplace.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 Wear respiratory protection.  
 If on skin: Wash with plenty of water.  
 Specific treatment (see on this label).  
 Wash contaminated clothing before reuse.  
 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
 If experiencing respiratory symptoms: Call a poison center/doctor.  
 If exposed or concerned: Get medical advice/attention.  
 Store locked up.

#### Hazards not otherwise classified

No information available.

### 3. Composition/information on ingredients

#### Mixtures

#### Hazardous components

CAS No	Components	Quantity
1333-86-4	Carbon Black	10 - 25 %
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	0.9 %

### 4. First-aid measures

#### Description of first aid measures

##### **General information**

In all cases of doubt, or when symptoms persist, seek medical advice.  
 Never give anything by mouth to an unconscious person or a person with cramps.  
 If unconscious place in recovery position and seek medical advice.

##### **After inhalation**

Remove casualty to fresh air and keep warm and at rest.  
 Call a doctor if you feel unwell.

##### **After contact with skin**

Change contaminated clothing.  
 Wash with plenty of water/Soap.

##### **After contact with eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing.

##### **After ingestion**

If swallowed, rinse mouth with water (only if the person is conscious).  
 Do NOT induce vomiting.  
 Call a physician immediately.  
 Put victim at rest, cover with a blanket and keep warm.

#### Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

No further relevant information available.

### 5. Fire-fighting measures

#### Extinguishing media

##### **Suitable extinguishing media**

alcohol resistant foam, Carbon dioxide (CO<sub>2</sub>), Extinguishing powder, Water fog.

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Co-ordinate fire-fighting measures to the fire surroundings.

#### **Unsuitable extinguishing media**

High power water jet.

#### **Specific hazards arising from the chemical**

No further relevant information available.

#### **Special protective equipment and precautions for fire-fighters**

No further relevant information available.

#### **Additional information**

Use water spray/stream to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## 6. Accidental release measures

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

#### **General measures**

Avoid contact with skin, eyes and clothes. Use personal protection equipment.

#### **Environmental precautions**

Do not allow to enter into surface water or drains.

### **Methods and material for containment and cleaning up**

#### **For containment**

Prevent spread over a wide area (e.g. by containment or oil barriers).

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

#### **For cleaning up**

Prevent spread over a wide area (e.g. by containment or oil barriers).

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

#### **Other information**

No information available.

### **Reference to other sections**

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Disposal: see section 13

## 7. Handling and storage

### **Precautions for safe handling**

#### **Advice on safe handling**

No special measures are necessary.

#### **Advice on protection against fire and explosion**

No special measures are necessary.

#### **Further information on handling**

No further relevant information available.

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

#### **Requirements for storage rooms and vessels**

No further relevant information available.

#### **Hints on joint storage**

Not required.

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**Further information on storage conditions**

maximum storage temperature : < 35°C  
 minimum storage temperature : > 0°C  
 storage temperature: : 0 - 35 °C

**8. Exposure controls/personal protection**
**Control parameters**
**Exposure limits**

CAS No.	Substance	ppm	mg/m <sup>3</sup>	f/cc	Category	Origin
1333-86-4	Carbon black (in presence of polycyclic aromatic hydrocarbons (PAHs)) (as PAHs)	-	0.1		TWA (8 h)	REL
1333-86-4	Carbon black	-	3.5		TWA (8 h)	PEL
101-68-8	Methylene bisphenyl isocyanate (MDI)	C 0.02	C 0.2		Ceiling	PEL
101-68-8	Methylene bisphenyl isocyanate	0.005	0.05		TWA (8 h)	REL
		C 0.02	C 0.2		Ceiling	REL

**Exposure controls**

**Appropriate engineering controls**

Provide adequate ventilation.  
 If handled uncovered, arrangements with local exhaust ventilation should be used if possible.  
 If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

**Protective and hygiene measures**

The usual precautionary measures are to be adhered to when handling chemicals.  
 Keep away from food, drink and animal feedingstuffs.  
 Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.  
 Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

**Eye/face protection**

Eye glasses with side protection (DIN EN 166)

**Hand protection**

Tested protective gloves must be worn (EN ISO 374):  
 FKM (fluoro rubber), Breakthrough time (maximum wearing time): 480 min.  
 NBR (Nitrile rubber), Breakthrough time (maximum wearing time): 480 min.  
 For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.  
 Protective gloves have to be replaced at the first sign of deterioration.  
 Protect skin by using skin protective cream.

**Skin protection**

Wear anti-static footwear and clothing

**Respiratory protection**

Work in well-ventilated zones or use proper respiratory protection.  
 In case of inadequate ventilation wear respiratory protection. gas filtering equipment (EN 141), Filter material/medium: A/P2

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**9. Physical and chemical properties****Information on basic physical and chemical properties**

Physical state:	Liquid	
Color:	black	
Odor:	characteristic	
Odour threshold:	not determined	
pH-Value:		not determined

**Changes in the physical state**

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	270 °C
Flash point:	100 - < 200 °C

**Flammability**

Solid/liquid:	not applicable
Gas:	not applicable

**Explosive properties**

not determined

Lower explosion limits:	0,4 vol. %
Upper explosion limits:	2,9 vol. %
Auto-ignition temperature:	> 300 °C
Decomposition temperature:	not determined

**Oxidizing properties**

not determined

Density (at 20 °C):	1,18-1,21 g/cm <sup>3</sup>
Water solubility:	Immiscible

**Solubility in other solvents**

not determined

Partition coefficient n-octanol/water:	not determined
Viscosity / dynamic:	not determined

**Other information**

No information available.

**10. Stability and reactivity****Reactivity**

No hazardous reaction when handled and stored according to provisions.

**Chemical stability**

Stability:	Stable
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The product is stable under storage at normal ambient temperatures.

**Possibility of hazardous reactions**

Hazardous reactions:	Will not occur
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No known hazardous reactions.

**Conditions to avoid**

No further relevant information available.

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**Incompatible materials**

No further relevant information available.

**Hazardous decomposition products**

No known hazardous decomposition products.

**11. Toxicological information**
**Information on toxicological effects**
**Acute toxicity**

Based on available data, the classification criteria are not met.

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
1333-86-4	Carbon Black				
	oral	LD50 > 15400 mg/kg	Rat	GESTIS	
	dermal	LD50 > 3000 mg/kg	Rabbit	GESTIS	
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate				
	oral	LD50 9200 mg/kg	Rat	GESTIS	
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			

**Irritation and corrosivity**

Based on available data, the classification criteria are not met.

**Sensitizing effects**

May cause allergy or asthma symptoms or breathing difficulties if inhaled (4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate)

May cause an allergic skin reaction (4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate)

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Suspected of causing cancer (Carbon Black; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

**Specific target organ toxicity (STOT) - single exposure**

Based on available data, the classification criteria are not met.

**Specific target organ toxicity (STOT) - repeated exposure**

Based on available data, the classification criteria are not met.

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): Carbon black (CAS 1333-86-4) is listed in group 2B. 4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8) is listed in group 3.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Further information**

There are no data available on the preparation/mixture itself.

**12. Ecological information**
**Ecotoxicity**

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There are no data available on the mixture itself.

**Persistence and degradability**

There are no data available on the mixture itself.

**Bioaccumulative potential**

There are no data available on the mixture itself.

**Mobility in soil**

There are no data available on the mixture itself.

**Other adverse effects**

No information available.

**Further information**

There are no data available on the preparation/mixture itself.

Do not allow to enter into surface water or drains.

**13. Disposal considerations****Waste treatment methods****Disposal recommendations**

Dispose of waste according to applicable legislation. Do not mix with other wastes.

**RCRA Hazardous wastes (Resource Conservation and Recovery Act)**

None

**Contaminated packaging**

Remove according to the regulations.

**14. Transport information****US DOT 49 CFR 172.101****Proper shipping name:**

No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)****UN number:**

No dangerous good in sense of this transport regulation.

**UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**Packing group:**

Marine pollutant:

No dangerous good in sense of this transport regulation.  
no**Air transport (ICAO-TI/IATA-DGR)****UN number:**

No dangerous good in sense of this transport regulation.

**UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**Packing group:**

No dangerous good in sense of this transport regulation.

**Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**Special precautions for user**

not applicable

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

not applicable

**15. Regulatory information****U.S. Regulations**

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**National Inventory TSCA**

Substance/product listed in the following inventories: TSCA

**National regulatory information**

SARA Section 304 CERCLA:

Methylenebis(phenylisocyanate)(MDI) (101-68-8): Reportable quantity = 5,000 (2270) lbs. (kg)

SARA Section 311/312 Hazards:

Carbon Black (1333-86-4): Delayed (chronic) health hazard

Methylenebis(phenylisocyanate)(MDI) (101-68-8): Delayed (chronic) health hazard, Immediate (acute) health hazard

SARA Section 313 Toxic release inventory:

Methylenebis(phenylisocyanate)(MDI) (101-68-8): De minimis limit = 1.0 %, Reportable threshold = Standard

Clean Air Act Section 112(b):

Methylenebis(phenylisocyanate)(MDI) (101-68-8)

**State Regulations**
**Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

WARNING: This product can expose you to chemicals including Carbon black (airborne, unbound particles of respirable size) (cancer), which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**16. Other information**
**Hazardous Materials Information Label (HMIS)**

Health:	0
Flammability:	1
Physical Hazard:	0

**NFPA Hazard Ratings**

Health:	0
Flammability:	1
Reactivity:	0
Unique Hazard:	none
Revision date:	11/19/2020
Revision No:	1,0


**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road )  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service  
 LC50: Lethal concentration, 50%  
 LD50: Lethal dose, 50%

**Other data**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.





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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*