

according to 29 CFR 1910.1200(g)

D-501 HV

Revision date: 11/18/2020

Product code: 10702

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1. Identification

Product identifier

D-501 HV

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

	Manalacturer		
	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	
E	mergency 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: Pictograms: Danger



Hazard statements

May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause an allergic skin reaction 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.

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

<u>Mixtures</u>

Hazardous components

CAS No	Components	Quantity
1333-86-4	Carbon Black	49.9 %
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	0.9 %
107-66-4	Dibutyl hydrogen phosphate	0.1 %
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane	0.1 %

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.

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. Seek medical advice immediately.

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.

Indication of any immediate medical attention and special treatment needed

No information available.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

alcohol resistant foam, Carbon dioxide (CO2), Extinguishing powder, Water fog.

Unsuitable extinguishing media



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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. Supress 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

Provide adequate ventilation. Clear contaminated areas thoroughly. Do not rinse down with water.

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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fume/vapour/spray.

Advice on protection against fire and explosion

No further relevant information available.

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.

Further information on storage conditions

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



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8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No.	Substance	ppm	mg/m³	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
107-66-4	Dibutyl phosphate	1	5		TWA (8 h)	PEL
		1	5		TWA (8 h)	REL
		2	10		STEL (15 min)	REL
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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Test method

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9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Paste
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:	164 °C	
Explosive properties not determined		
Lower explosion limits:	0,4 vol. %	DIN 51649
Upper explosion limits:	2,9 vol. %	DIN 51649
Auto-ignition temperature:	> 300 °C	
Decomposition temperature:	not determined	
Oxidizing properties not determined		
Density (at 20 °C):	1,13 - 1,15 g/cm³	
Water solubility:	Immiscible	
Solubility in other solvents not determined		
Partition coefficient n-octanol/water:	not determined	
Viscosity / dynamic:	not determined	
Viscosity / kinematic:	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

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

Hazardous reactions:

Will not occur

No known hazardous reactions.

Conditions to avoid

No further relevant information available.

Incompatible materials

No information available.



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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 mg/kg	> 15400	Rat	GESTIS	
	dermal	LD50 mg/kg	> 3000	Rabbit	GESTIS	
101-68-8 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate						
	oral	LD50 mg/kg	9200	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; Dibutyl hydrogen phosphate) 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 (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.

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

There are no data available on the mixture itself.

Persistence and degradability

There are no data available on the mixture itself.

Bioaccumulative potential



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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)				
<u>UN number:</u>	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			
<u>Special precautions for user</u> not applicable <u>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</u> not applicable				
15. Regulatory information				
U.S. Regulations				

National Inventory TSCA

All components of the product are publicly listed or excluded.

National regulatory information

SARA Section 304 CERCLA:

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



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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

Dibutyl hydrogen phosphate (107-66-4): Delayed (chronic) health hazard, Immediate (acute) health hazard dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane (77-58-7): Delayed (chronic) 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.

16. Other information

Hazardous Materials Information	on Label (HMIS)
Health:	0
Flammability:	1
Physical Hazard:	0
NFPA Hazard Ratings	
Health:	0
Flammability:	1
Reactivity:	0
Unique Hazard:	none
Revision date:	11/18/2020
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.

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