

according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 1 of 12

### 1. Identification

### **Product identifier**

**DINITROL 4941/CAR Spray** 

# Recommended use of the chemical and restrictions on use

### Use of the substance/mixture

Anti-corrosive coating

### 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

e-mail: msds@dinol.com

Contact person: Labor

Responsible Department: msds@dinol.com

**Supplier** 

Company name: DINOL U.S. Inc.

Street: 8500 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

Flammable aerosols: Flam. Aerosol 1 Gases under pressure: Compressed gas Serious eye damage/eye irritation: Eye Irrit. 2A

Germ cell mutagenicity: Muta. 1B Carcinogenicity: Carc. 1B

Specific target organ toxicity single exposure: STOT SE 3 (narcotic effects)

## **Label elements**

# 29 CFR Part 1910.1200

Signal word: Danger

Pictograms:









Print date: 10/20/2022

Telefax: + 49 (0) 5281 9829860

#### **Hazard statements**

Extremely flammable aerosol Contains gas under pressure; may explode if heated Causes serious eye irritation

May cause drowsiness or dizziness



according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 2 of 12

May cause genetic defects

May cause cancer

### **Precautionary statements**

Obtain special instructions before use.

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

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container: Do not pierce or burn, even after use.

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

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Call a poison center/doctor if you feel unwell.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

If exposed or concerned: Get medical advice/attention.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

### Hazards not otherwise classified

No information available.

### 3. Composition/information on ingredients

### **Mixtures**

#### **Hazardous components**

CAS No	Components	Quantity		
64742-49-0	9-0 Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics			
78-93-3	butanone; ethyl methyl ketone			
74-98-6	propane	11.5 %		
106-97-8	n-butane	7.5 %		
	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	4 %		
64742-95-6	Hydrocarbons, C9, aromatics	2 %		
64742-49-0	64742-49-0 Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane			

#### **Further Information**

Hydrocarbons meet the requirements for not being classified as carcinogenic (<0,1% benzene alt<3% (w/w) DMSO extract (IP 346)).

### 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 but breathing normally, 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. If skin irritation occurs: Get medical advice/attention.



## **Safety Data Sheet**

according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 3 of 12

### 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.

## 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 information available.

## 5. Fire-fighting measures

### Extinguishing media

### Suitable extinguishing media

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

#### 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

Use appropriate respiratory protection.

#### **Additional information**

Use water spray/stream to protect personnel and to cool endangered containers. Supress gases/vapors/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 advice

Provide adequate ventilation.

Wear personal protection equipment.

Avoid contact with skin, eves and clothes.

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

### For emergency responders

For further specification, refer to section 8 of the SDS.

#### **Environmental precautions**

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

### 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 (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.



## **Safety Data Sheet**

according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 4 of 12

#### 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/vapour/aerosol.

#### Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Keep away from sources of ignition - No smoking. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

## Advice on general occupational hygiene

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.

### Further information on handling

No further relevant information available.

# Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### Hints on joint storage

Not required.

### Further information on storage conditions

Keep container tightly closed.

## 8. Exposure controls/personal protection

## **Control parameters**



## **Safety Data Sheet**

according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 5 of 12

### **Exposure limits**

CAS No	Substance	ppm	mg/m³	f/cc	Category	Origin
78-93-3	2-Butanone (Methyl ethyl ketone)	200	590		TWA (8 h)	PEL
78-93-3	2-Butanone	200	590		TWA (8 h)	REL
		300	885		STEL (15 min)	REL
75-28-5	Butane: isobutane	1000			STEL (15 min)	ACGIH-2022
106-97-8	Butane: n-butane	1000			STEL (15 min)	ACGIH-2022
75-28-5	Isobutane	800	1900		TWA (8 h)	REL
78-93-3	Methyl ethyl ketone	200			TWA (8 h)	ACGIH-2022
		300			STEL (15 min)	ACGIH-2022
106-97-8	n-Butane	800	1900		TWA (8 h)	REL
74-98-6	Propane	1000	1800		TWA (8 h)	PEL
		1000	1800		TWA (8 h)	REL
		-	-		Asphyxiant	ACGIH-2022

## **Biological Exposure Indices (BEI-ACGIH)**

CAS	S No	Substance	Determinant	Value	Test material	Sampling time
78-9	3-3	METHYL ETHYL KETONE	Methyl ethyl ketone	2 mg/L	urine	End of shift

# **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.

# Individual protection measures, such as personal protective equipment

### Eye/face protection

Eye glasses with side protection (DIN EN 166)

# Hand protection

Recommended glove articles

FKM (fluoro rubber), Breakthrough time:: 480 min.

NBR (Nitrile rubber), Breakthrough 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. gas filtering equipment (EN 141)., Filter material/medium: A

short-term Filter material/medium : A1/P1 long-term Filter material/medium : A1/P2



## **Safety Data Sheet**

according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 6 of 12

### 9. Physical and chemical properties

#### Information on basic physical and chemical properties

Physical state: Aerosol
Color: black
Odor: characteristic
Odour threshold: not determined

Test method

Melting point/freezing point:

Boiling point or initial boiling point and

not determined

-42 °C

boiling range: Flammability

Solid/liquid: not determined
Gas: not determined
Lower explosion limits: 0,6 vol. %
Upper explosion limits: 11,5 vol. %

Flash point: < -20 °C DIN 53213

Auto-ignition temperature: > 200 °C

Decomposition temperature: not determined
pH-Value: not determined
Viscosity / kinematic: not determined
Water solubility: not applicable

Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined Vapor pressure: 8300 hPa

(at 20 °C)

Density (at 20 °C): 0,82 g/cm³ DIN 51757

Relative vapour density: not determined Particle characteristics: not applicable

## Other information

### Information with regard to physical hazard classes

Explosive properties not determined

Sustaining combustion:

No data available

Self-ignition temperature

Solid: not determined
Gas: not determined

Oxidizing properties not determined

Other safety characteristics

Solvent content: 65,1 %
Solid content: 35,2 %
Softening point: not determined
Viscosity / dynamic: not determined

**Further Information**No information available.

## 10. Stability and reactivity

### Reactivity

No hazardous reaction when handled and stored according to provisions.



according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 7 of 12

# **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.

# **Hazardous decomposition products**

Carbon monoxide

# 11. Toxicological information

# Information on toxicological effects

### **Acute toxicity**

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



# **Safety Data Sheet**

according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 8 of 12

CAS No	Components					
	Exposure route	Dose	Species	Source	Method	
64742-49-0	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics					
	oral	LD50 >5000 mg/kg	Rat			
	dermal	LD50 >2800 mg/kg	Rabbit			
	inhalation (4 h) vapour	LC50 >23,3 mg/l	Rat			
78-93-3	butanone; ethyl methyl ketone					
	oral	LD50 2740 mg/kg	Rat			
	dermal	LD50 6480 mg/kg	Rabbit			
	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics					
	oral	LD50 4951 mg/kg	Rat			
	dermal	LD50 > 5000 mg/kg	Rat			
	inhalation (4 h) vapour	LC50 4951 mg	/I Rat			
64742-95-6	Hydrocarbons, C9, aromatics					
	oral	LD50 3492 mg/kg	Rat			
	dermal	LD50 >3160 mg/kg	Rabbit			
	inhalation (4 h) vapour	LC50 >6193 mg/l	Rat			
64742-49-0	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane					
	oral	LD50 >5000 mg/kg	4			
	dermal	LD50 >5000 mg/kg	7			

# Irritation and corrosivity

Causes serious eye irritation

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

## Sensitizing effects

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

## Carcinogenic/mutagenic/toxic effects for reproduction

May cause genetic defects (Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

May cause cancer (Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane)

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

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

May cause drowsiness or dizziness (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics; butanone; ethyl methyl ketone)

# 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): No ingredient of this mixture is listed.



according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 9 of 12

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

**Aspiration hazard** 

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

### Information on other hazards

### **Endocrine disrupting properties**

Endocrine disrupting potential No information available.

#### Further information

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

# 12. Ecological information

## 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.

### **Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### Other adverse effects

No information available.

## **Further information**

There are no data available on the mixture itself.

#### 13. Disposal considerations

### Waste treatment methods

### **Disposal recommendations**

Dispose of waste according to applicable legislation.

Do not mix with other wastes.

# Contaminated packaging

Dispose according to legislation.

## 14. Transport information

## U.S. DOT 49 CFR 172.101

UN number or ID number:UN 1950Proper shipping name:AEROSOLS

Transport hazard class(es): 2.1
Hazard label: 2.1



# Marine transport (IMDG)

UN 1950
UN proper shipping name:
UN 1950
AEROSOLS

Transport hazard class(es):

Packing group:

Hazard label:

2.1

2.1



# **Safety Data Sheet**

according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 10 of 12



Marine pollutant:

Special Provisions: 63, 190, 277, 327, 344, 381, 959

Limited quantity: 1000 mL Excepted quantity: E0 EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 1950

**UN proper shipping name:** AEROSOLS, FLAMMABLE

Transport hazard class(es): 2.1
Packing group: Hazard label: 2.1



Special Provisions: A145 A167 A802

Limited quantity Passenger: 30 kg G
Passenger LQ: Y203
Excepted quantity: E0

IATA-packing instructions - Passenger:203IATA-max. quantity - Passenger:75 kgIATA-packing instructions - Cargo:203IATA-max. quantity - Cargo:150 kg

**Environmental hazards** 

ENVIRONMENTALLY HAZARDOUS: No

Special precautions for user

Warning: gas

#### Other applicable information

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: SG69 For AEROSOLS with a maximum capacity of 1

litre:

Segregation as for class 9. Stow "separated from" class

1 except for division 1.4.

For AEROSOLS with a capacity above 1 litre:

Segregation as for the appropriate subdivision of class

2.

For WASTE AEROSOLS:

Segregation as for the appropriate subdivision of class

2.

Category C, Clear of living quarters.

# 15. Regulatory information

### **U.S. Regulations**

### **National Inventory TSCA**

Substance/product listed in the following inventories: TSCA

**National regulatory information** 



according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 11 of 12

SARA Section 304 CERCLA:

Methyl ethyl ketone (78-93-3): Reportable quantity = 5,000 (2270) lbs. (kg)

SARA Section 311/312 Hazards:

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics (64742-49-0): Fire hazard, Immediate (acute) health

hazard

Methyl ethyl ketone (78-93-3): Fire hazard, Immediate (acute) health hazard

Propane (74-98-6): Fire hazard, Sudden release of pressure Isobutane (75-28-5): Fire hazard, Sudden release of pressure

Butane (106-97-8): Fire hazard, Sudden release of pressure

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (-): Fire hazard, Delayed (chronic) health hazard,

Immediate (acute) health hazard

Hydrocarbons, C9, aromatics (64742-95-6): Fire hazard, Immediate (acute) health hazard

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane (64742-49-0): Fire hazard, Delayed

(chronic) health hazard, Immediate (acute) health hazard

Clean Air Act Section 112(r):

Propane (74-98-6): Threshold quantities = 10,000 lbs. Isobutane (75-28-5): Threshold quantities = 10,000 lbs. Butane (106-97-8): Threshold quantities = 10,000 lbs.

Clean Air Act Section 112(b):

Methyl ethyl ketone (78-93-3)

# State Regulations

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

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: none

# 16. Other information

#### **Hazardous Materials Information Label (HMIS)**

Health: 2
Flammability: 4
Physical Hazard: 3

# **NFPA Hazard Ratings**

Health: 2
Flammability: 4
Reactivity: 3
Unique Hazard: none



## Changes

Revision date: 10/20/2022

Revision No: 1,3

This data sheet contains changes from the previous version in section(s): 2.

## 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%



# **Safety Data Sheet**

according to 29 CFR 1910.1200(g)

# **DINITROL 4941/CAR Spray**

Revision date: 10/20/2022 Product code: 21707 Page 12 of 12

#### 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.)