

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : KADIOL 90  
Revision date : 24.11.2023  
Print date : 24.11.2023

Version (Revision) : 1.0.2 (1.0.1)

## SECTION 1: Identification of the substance/mixture and of the company/ undertaking

### 1.1 Product identifier

KADIOL 90  
UFI-Code: 4UW2-D18V-R405-71CE

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

#### Relevant identified uses

Metal working fluids

#### Uses advised against

No information available.

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

#### Supplier (manufacturer/importer/downstream user/distributor)

KADIA Produktion GmbH + Co.

**Street :** Fabrikstraße 2

**Postal code/City :** D-72622 Nürtingen

**Telephone :** +49 7022 6006-0

**Telefax :** +49 7022 6006-21

**E-mail address :** info@kadia.com

### 1.4 Emergency telephone number

+49 55119240 (GIZ-Nord Poisons Center: 24h/7d)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 [CLP]

Asp. Tox. 1 ; H304 - Aspiration hazard : Category 1 ; May be fatal if swallowed and enters airways.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

##### Hazard pictograms



Health hazard (GHS08)

##### Signal word

Danger

##### Hazard components for labelling

Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8

##### Hazard statements

H304 May be fatal if swallowed and enters airways.

##### Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...

P331 Do NOT induce vomiting.

P405 Store locked up.

### 2.3 Other hazards

None

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### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

##### Description

Base Oil and Additives

##### Hazardous ingredients

Distillates (petroleum), hydrotreated light paraffinic ; REACH No. : 01-2119487077-29-xxxx ; EC No. : 265-158-7; CAS No. : 64742-55-8

Weight fraction :  $\geq 70 - < 75$  %  
Classification 1272/2008 [CLP] : Asp. Tox. 1 ; H304

Amines, C12-14-tert-alkyl, mixed sec-Bu and iso-Bu phosphate ; REACH No. : 01-2120769710-51-0000 ; EC No. : 306-227-4; CAS No. : 96690-34-5

Weight fraction :  $\geq 0,5 - < 1$  %  
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Aquatic Chronic 2 ; H411

2,6-DI-TERT-BUTYL-P-CRESOL ; REACH No. : 01-2119565113-46-0000 ; EC No. : 204-881-4; CAS No. : 128-37-0

Weight fraction :  $< 0,25$  %  
Classification 1272/2008 [CLP] : Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

##### Additional information

For full text of Hazard- and EU Hazard-statements: see SECTION 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General information

When in doubt or if symptoms are observed, get medical advice.

##### Following inhalation

Remove casualty to fresh air and keep warm and at rest. Where appropriate artificial ventilation. In case of respiratory tract irritation, consult a physician.

##### In case of skin contact

Change contaminated, saturated clothing. After contact with skin, wash with plenty of water and soap. In case of skin irritation, consult a physician.

##### After eye contact

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

##### Following ingestion

Do NOT induce vomiting. Call a physician immediately. Rinse mouth thoroughly with water. Observe risk of aspiration if vomiting occurs.

##### Self-protection of the first aider

No direct artificial respiration to be given by first aider.

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

The following symptoms may occur: Cough, Respiratory complaints, Dyspnoea, Fever, Pulmonary oedema, Pneumonia  
Symptoms can occur only after several hours.

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

First Aid, decontamination, treatment of symptoms. Observe risk of aspiration if vomiting occurs.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

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Foam, Extinguishing powder, Carbon dioxide (CO<sub>2</sub>), Water spray, Water mist,

### Unsuitable extinguishing media

Strong water jet

## 5.2 Special hazards arising from the substance or mixture

### Hazardous combustion products

In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>), Carbon monoxide, Nitrogen oxides (NO<sub>x</sub>), Smoke and other incomplete combustion products.

## 5.3 Advice for firefighters

### Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

## 5.4 Additional information

Do not inhale explosion and combustion gases. Use water spray jet to protect personnel and to cool endangered containers. Move undamaged containers from immediate hazard area if it can be done safely. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

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

Use personal protection equipment. Avoid contact with skin, eyes and clothes. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Ventilate affected area. Remove all sources of ignition.

### 6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

#### For containment

Stop and contain spill/release if it can be done safely. If this cannot be done, allow fire to burn under control. Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

#### For cleaning up

Clear spills immediately. Wipe up with absorbent material (eg. cloth, fleece). Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Take up mechanically, placing in appropriate containers for disposal. Ventilate affected area. Clean contaminated articles and floor according to the environmental legislation.

### 6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Use only in well-ventilated areas. Put lids on containers immediately after use. Avoid contact with skin, eyes and clothes. Do not breathe gas/fumes/vapour/spray. Keep away from sources of ignition - No smoking.

#### Protective measures

##### Measures to prevent fire

Only use the material in places where open light, fire and other flammable sources can be kept away.

##### Environmental precautions

Do not allow to enter into surface water or drains.

#### Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

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

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## Technical measures and storage conditions

Ensure adequate ventilation of the storage area.

## Packaging materials

Only use containers specifically approved for the substance/product.

## Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Protect containers against damage.

## Hints on joint storage

**Storage class :** 10

**Storage class (TRGS 510) :** 10

### Materials to avoid

Oxidizing agent

### Do not store together with

Food and feedingstuffs

## Further information on storage conditions

**Recommended storage temperature :** 5 - 40°C / 40 - 105°F.

**Protect against :** Frost Heat. UV-radiation/sunlight Water Humidity.

**Storage stability :** Product may be stored for up to 24 months under described conditions.

## 7.3 Specific end use(s)

None

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

To date, no national critical limit values exist.

### 8.2 Exposure controls

#### Appropriate engineering controls

Use only in well-ventilated areas. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Technical measures and the application of suitable work processes have priority over personal protection equipment.

#### Personal protection equipment

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

#### Eye/face protection

Eye glasses with side protection EN 166

#### Skin protection

##### Hand protection

Hand protection is not required.

By long-term hand contact: Tested protective gloves must be worn: ( DIN EN 374 ).

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Check leak tightness/impermeability prior to use.

##### Suitable material :

Wearing time with permanent contact:

Material: NBR (Nitrile rubber), , CR (polychloroprene, chloroprene rubber), , PVA (Polyvinyl alcohol),

Thickness of the glove material: 0,70 mm

Breakthrough time (maximum wearing time): > 480 min

Wearing time with occasional contact (splashes):

Material: NBR (Nitrile rubber), , CR (polychloroprene, chloroprene rubber), , PVA (Polyvinyl alcohol),

Thickness of the glove material: 0,40 mm

Breakthrough time (maximum wearing time): > 30 min

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**Breakthrough time (maximum wearing time):** : 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.

### Body protection

Body protection: not required. If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.

### Other protection measures

When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

### Respiratory protection

Usually no personal respiratory protection necessary.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Respiratory protection necessary at: insufficient ventilation, aerosol or mist formation.

### Suitable respiratory protection apparatus

Combination filtering device

### General information

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Wash contaminated clothing prior to re-use. Do not put any product-impregnated cleaning rags into your trouser pockets. Apply skin care products after work.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Physical state :** Liquid

**Colour :** brown

**Odour :** characteristic

#### Safety characteristics

<b>Melting point/freezing point :</b>		No data available		
<b>Initial boiling point and boiling range :</b>	( 1013 hPa )	not applicable		
<b>Lower explosion limit :</b>		0,6	Vol-%	
<b>Upper explosion limit :</b>		6,5	Vol-%	
<b>Flash point :</b>		153	°C	DIN EN ISO 2592
<b>Auto-ignition temperature :</b>		No data available		
<b>Decomposition temperature :</b>		not determined		
<b>pH :</b>		No data available		
<b>Cinematic viscosity :</b>	( 40 °C )	approx. 10	mm <sup>2</sup> /s	DIN EN ISO 3104
<b>Water solubility :</b>	( 20 °C )	practically insoluble		
<b>log P O/W :</b>		not applicable		
<b>Vapour pressure :</b>	( 20 °C )	No data available		
<b>Density :</b>	( 15 °C )	0,869	g/cm <sup>3</sup>	DIN EN ISO 12185
<b>Odour threshold :</b>		No data available		
<b>Relative vapour density :</b>	( 20 °C )	No data available		
<b>Evaporation rate :</b>		No data available		
<b>Vapourisation rate :</b>		No data available		
<b>Maximum VOC content (Switzerland) :</b>		0	Weight-%	
<b>Oxidising liquids :</b>		Not oxidising.		
<b>Explosive properties :</b>		Not explosive according to EU A.14.		

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

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No information available.

### 10.2 Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

### 10.4 Conditions to avoid

No information available.

### 10.5 Incompatible materials

Oxidising agent, strong.

### 10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological data are not available. The statement is derived from the properties of the single components.

#### Acute toxicity

No data available to indicate product may be an acute toxic oral, dermal or inhalation hazard.

##### Acute oral toxicity

Parameter : LD50 ( Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8 )  
Exposure route : Oral  
Species : Rat  
Effective dose : > 5000 mg/kg

##### Acute dermal toxicity

Parameter : LD50 ( Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8 )  
Exposure route : Dermal  
Species : Rabbit  
Effective dose : > 5000 mg/kg

##### Acute inhalation toxicity

Parameter : LC50 ( Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : > 5 mg/l  
Exposure time : 4 h

#### Corrosion

non-irritant.

##### Skin corrosion/irritation

Parameter : Skin corrosion/irritation ( Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8 )  
Result : Mild effects but not relevant for classification.

##### Serious eye damage/eye irritation

Parameter : Serious eye damage/eye irritation ( Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8 )  
Result : Mild effects but not relevant for classification.

#### Respiratory or skin sensitisation

not sensitising.

##### Skin sensitisation

Parameter : Skin sensitisation ( Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8 )  
Species : Guinea pig  
Result : negativ

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### **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

#### **Carcinogenicity**

no known significant effects or critical hazards.

#### **Germ cell mutagenicity**

no known significant effects or critical hazards.

#### **Reproductive toxicity**

no known significant effects or critical hazards.

### **STOT-single exposure**

#### **STOT SE 1 and 2**

Not expected to cause organ damage from a single exposure.

### **STOT-repeated exposure**

#### **STOT RE 1 and 2**

Not expected to cause organ damage from prolonged or repeated exposure.

### **Aspiration hazard**

May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material. For viscosity data, see section 9.

## **11.2 Information on other hazards**

No information available.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

For the product ecotoxicological data are not available. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

#### **Aquatic toxicity**

Harmless to aquatic organisms up to the tested concentration.

##### **Acute (short-term) fish toxicity**

Parameter :	LC50 ( Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8 )
Effective dose :	> 100 mg/l
Evaluation :	Harmless to fish up to the concentration tested.
Parameter :	LC50 ( 2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0 )
Species :	Danio rerio (zebrafish)
Effective dose :	> 0,57 mg/l
Exposure time :	96 h
Evaluation :	Very toxic to fish.

##### **Acute (short-term) toxicity to crustacea**

Parameter :	EC50 ( Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8 )
Effective dose :	> 100 mg/l
Evaluation :	Harmless to daphnia up to the tested concentration.
Parameter :	EC50 ( 2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0 )
Species :	Daphnia magna (Big water flea)
Effective dose :	> 0,17 mg/l
Exposure time :	48 h
Evaluation :	Very toxic to daphnia.

##### **Acute (short-term) toxicity to algae and cyanobacteria**

Parameter :	EC50 ( Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8 )
Effective dose :	> 100 mg/l
Evaluation :	Harmless to algae up to the concentration tested.
Parameter :	IC50 ( 2,6-DI-TERT-BUTYL-P-CRESOL ; CAS No. : 128-37-0 )
Species :	Desmodesmus subspicatus
Effective dose :	> 0,42 mg/l

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Exposure time : 72 h  
Evaluation : Very toxic to algae.

## 12.2 Persistence and degradability

### Biodegradation

Moderately/partially biodegradable.

## 12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

## 12.4 Mobility in soil

No information available.

## 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## 12.6 Endocrine disrupting properties

No information available.

## 12.7 Other adverse effects

No information available.

## 12.8 Additional ecotoxicological information

Do not allow uncontrolled discharge of product into the environment.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Directive 2008/98/EC (Waste Framework Directive)

Consult the appropriate local waste disposal expert about waste disposal. Dispose of waste according to applicable legislation.

#### Before intended use

##### Waste codes/waste designations according to EWC/AVV

12 01 07\* (Mineral-based machining oils free of halogens (except emulsions and solutions))

#### Remark

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

#### Additional information

Non-contaminated packages may be recycled.

Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Do not pressurise, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition.

## SECTION 14: Transport information

### 14.1 UN number

No dangerous good in sense of these transport regulations.

### 14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

### 14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

### 14.4 Packing group

No dangerous good in sense of these transport regulations.

### 14.5 Environmental hazards

No dangerous good in sense of these transport regulations.



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### 14.6 Special precautions for user

None

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### National regulations

##### Technische Anleitung zur Reinhaltung der Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : < 5 %

#### Water hazard class

Classification according to AwSV - Class : 1 (Slightly hazardous to water)

### 15.2 Chemical Safety Assessment

No information available.

## SECTION 16: Other information

### 16.1 Indication of changes

None

### 16.2 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)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

CAS: Chemical Abstracts Service (division of the American Chemical Society)

GHS: Globally Harmonized System on the Classification and Labelling of Chemicals

CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

EC50: Effective concentration, 50 percent

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

### 16.3 Key literature references and sources for data

Sources of information used in preparing this SDS included one or more of the following: Product Dossiers and SDS from suppliers, complemented by public sources, as appropriate (GESTIS, the EU IUCLID Data Base, U.S. NTP publications, e.g.).

### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

### 16.5 Relevant H- and EUH-phrases (Number and full text)

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.

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H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.

## 16.6 Training advice

Provide adequate information, instruction and training for operators.

## 16.7 Additional information

None

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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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