



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

- **1.1 Product identifier**
- **Trade name: DINITROL 6090 Metalu**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** Knife filler/ Surfacer
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
DINOL GmbH
Pyrmonter Str. 76
D-32676 Lügde
Tel: +49 5281 9829 80
Fax: +49 5281 9829 860
E-mail: msds@dinol.com
- **Further information obtainable from:** Research & Development
- **1.4 Emergency telephone number:** Giftnotruf Berlin +49(0)30 30686 790 Beratung in Deutsch und Englisch.

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
-  **Xn; Harmful**
R20-48/20: Harmful by inhalation. Harmful: danger of serious damage to health by prolonged exposure through inhalation.
-  **Xi; Irritant**
R36/37/38: Irritating to eyes, respiratory system and skin.
- R10: Flammable.
- **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **2.2 Label elements**
- **Labelling according to EU guidelines:**
The product has been marked in accordance with EU Directives / respective national laws.
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
The R and S phrases may be omitted if packaging contains no more than 0.125 litre.
- **Code letter and hazard designation of product:**
Xn Harmful
- **Hazard-determining components of labelling:**
Styrene
- **Risk phrases:**
10 Flammable.
20 Harmful by inhalation.
36/37/38 Irritating to eyes, respiratory system and skin.
48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

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· **Safety phrases:**

- 2 Keep out of the reach of children.
- 9 Keep container in a well-ventilated place.
- 13 Keep away from food, drink and animal feedingstuffs.
- 23 Do not breathe vapour/spray.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 56 Dispose of this material and its container to hazardous or special waste collection point.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterization: Mixtures**

· **Description:** Mixture of substances listed below with additions.

· **Dangerous components:**

CAS: 100-42-5 EINECS: 202-851-5	Styrene ☒ Xn R20-48/20-65; ☒ Xi R36/37/38 R10 ☠ Flam. Liq. 3, H226; ☠ STOT RE 1, H372; Asp. Tox. 1, H304; ☠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	10-<5%
EINECS: 231-072-3	aluminium powder (stabilized) ☠ F R11 R15 ☠ Flam. Liq. 1, H224; Flam. Sol. 2, H228; Water-react. 2, H261	1-<5%
CAS: 14808-60-7 EINECS: 238-878-4	Quartz (SiO ₂) ☒ Xn R48/20 ☠ STOT RE 2, H373	1-<5%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. ☒ Xn R65; ☒ Xi R37; ☠ N R51/53 R10-66-67 ☠ Flam. Liq. 3, H226; ☠ Asp. Tox. 1, H304; ☠ Aquatic Chronic 2, H411; ☠ STOT SE 3, H336	1-<5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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- **4.2 Most important symptoms and effects, both acute and delayed**
Headache
Dizziness
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:**
Water
Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

100-42-5 Styrene

WEL	Short-term value: 1080 mg/m ³ , 250 ppm
	Long-term value: 430 mg/m ³ , 100 ppm

· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

· **Material of gloves**

Neoprene gloves (0,47 mm)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Not suitable are gloves made of the following materials:**

Natural rubber

Strong material gloves

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Pasty

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Colour:	Silver grey
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	145 °C
· Flash point:	31 °C (DIN 53213)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	480 °C
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	1.2 Vol %
Upper:	8.9 Vol %
· Vapour pressure At 20 °C:	6 hPa
· Density At 20 °C:	1.45 g/cm ³ (DIN 51757)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic At 20 °C:	110000 mPas
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	20.5 %
Solids content:	78.8 % (DIN 53216)
· 9.2 Other information	No further relevant information available.
· VOC (EU):	19.30 %
· VOC (EU):	250.0 g/l
· VOCV:	19.30 %

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.

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· **10.6 Hazardous decomposition products:** Carbon monoxide

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

100-42-5 Styrene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (RAT) (OECD-Prüfrichtlinie 402)
Inhalative	LC50/4 h	11.8 mg/l (rat)

· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritating effect.

· **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability** No further relevant information available.

· **Other information:** There is no data available for the product.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:** There is no data available for the product.

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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· **European waste catalogue**

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 04 00	wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous substances
15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00	packaging (including separately collected municipal packaging waste)
15 01 10*	packaging containing residues of or contaminated by dangerous substances

· **Uncleaned packaging:**· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**· **ADR, IMDG, IATA** UN3269· **14.2 UN proper shipping name**· **ADR** 3269 POLYESTER RESIN KIT
· **IMDG, IATA** POLYESTER RESIN KIT· **14.3 Transport hazard class(es)**· **ADR, IMDG, IATA**· **Class** 3 Flammable liquids.· **Label** 3· **14.4 Packing group**· **ADR, IMDG, IATA** III· **14.5 Environmental hazards:**· **Marine pollutant:** No· **14.6 Special precautions for user**

Warning: Flammable liquids.

· **Danger code (Kemler):**

-

· **EMS Number:**

F-E,S-D

· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **ADR**· **Limited quantities (LQ)** 5L· **Transport category** 3· **Tunnel restriction code** E

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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
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The R and S phrases may be omitted if packaging contains no more than 0.125 litre.
 - **Code letter and hazard designation of product:**
Xn Harmful
 - **Hazard-determining components of labelling:**
Styrene
 - **Risk phrases:**
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 - 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
 - **Safety phrases:**
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 - 9 Keep container in a well-ventilated place.
 - 13 Keep away from food, drink and animal feedingstuffs.
 - 23 Do not breathe vapour/spray.
 - 46 If swallowed, seek medical advice immediately and show this container or label.
 - 56 Dispose of this material and its container to hazardous or special waste collection point.
 - **National regulations:**
 - **Technical instructions (air):**
- | Class | Share in % |
|-------|------------|
| NK | 20.5 |
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
 - **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
 - H224 Extremely flammable liquid and vapour.
 - H226 Flammable liquid and vapour.
 - H228 Flammable solid.
 - H261 In contact with water releases flammable gases.
 - H304 May be fatal if swallowed and enters airways.
 - H315 Causes skin irritation.
 - H319 Causes serious eye irritation.
 - H332 Harmful if inhaled.
 - H335 May cause respiratory irritation.
 - H336 May cause drowsiness or dizziness.
 - H372 Causes damage to organs through prolonged or repeated exposure.
 - H373 May cause damage to organs through prolonged or repeated exposure.

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- H411 Toxic to aquatic life with long lasting effects.*
- R10 Flammable.*
- R11 Highly flammable.*
- R15 Contact with water liberates extremely flammable gases.*
- R20 Harmful by inhalation.*
- R36/37/38 Irritating to eyes, respiratory system and skin.*
- R37 Irritating to respiratory system.*
- R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.*
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*
- R65 Harmful: may cause lung damage if swallowed.*
- R66 Repeated exposure may cause skin dryness or cracking.*
- R67 Vapours may cause drowsiness and dizziness.*

- **Department issuing MSDS:** Research & Development
- **Contact:** Kontakt: msds@dinol.com oder Tel.: 0049 (0)5281 982 980
- *** Data compared to the previous version altered.**