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

- **1.1 Product identifier**
  - Trade name: DINITROL 3624
  - Article number: Dipro 1674

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - No further relevant information available.

- **Application of the substance / the mixture**
  - Anticorrosion additive

- **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**
  - Information concerning particular hazards for human and environment:
    - The product does not have 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:
    - Observe the general safety regulations when handling chemicals.
    - The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
  - Special labelling of certain preparations:
    - Contains Fatty acids, C6-C19 branched, cobalt salts, 2-Butanone oxime. May produce an allergic reaction.

- **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: Void
  - 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: No special measures required.
  - After skin contact: If skin irritation continues, consult a doctor.
SECTION 5: Firefighting measures

- 5.1 Extinguishing media
  - Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
  - Protective equipment: Mount respiratory protective device.
  - Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- 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).
- 6.4 Reference to other sections
  No dangerous substances are released.
  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
  - No special measures required.
  - Use only in well ventilated areas.
  - Information about fire - and explosion protection: No special measures required.
- 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: None.
- 7.3 Specific end use(s) No further relevant information available.

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:
    The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - CAS No. Designation of material % Type Value Unit Not required.
  - Additional information: The lists valid during the making were used as basis.
- 8.2 Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection**: Not required.
- **Protection of hands**: Not required.
- **Material of gloves**
  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.
  - **Nitrile rubber**
    - Recommended thickness of the material: $\geq 0.12$ mm
  - **Penetration time of glove material**
    - $> 480$ min.
    - The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be
      observed.
- **Eye protection**: Goggles recommended during refilling

**SECTION 9: Physical and chemical properties**

- **9.1 Information on basic physical and chemical properties**
- **General Information**
  - **Appearance**:
    - **Form**: Fluid
    - **Colour**: Grey
  - **Odour**: Characteristic
  - **Odour threshold**: Not determined.
  - **pH-value**: Not determined.
  - **Change in condition**
    - **Melting point/Melting range**: Undetermined.
    - **Boiling point/Boiling range**: $251 \, ^{\circ}C$
  - **Flash point**: $178 \, ^{\circ}C$ (DIN 53213)
  - **Flammability (solid, gaseous)**: Not applicable.
  - **Ignition temperature**: $270 \, ^{\circ}C$
  - **Decomposition temperature**: Not determined.
  - **Self-igniting**: Product is not selfigniting.
  - **Danger of explosion**: Product does not present an explosion hazard.
  - **Explosion limits**:
    - **Lower**: Not determined.
    - **Upper**: Not determined.
  - **Vapour pressure**: Not determined.
  - **Density At 20 °C**: $0.97 \, g/cm^3$ (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**: $200 \, mPas$
    - **Kinematic**: Not determined.
38.0.6

· Solvent content:
  Organic solvents: 0.2 %

· Solids content: 99.6 % (DIN 53216)

· 9.2 Other information
  No further relevant information available.

· VOC (EU): 0.24 %

· VOC (EU): 2.3 g/l

· VOCV: 0.24 %

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.
· 10.6 Hazardous decomposition products
  Carbon monoxide

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects
· Acute toxicity:
· Primary irritant effect:
  on the skin: No irritant effect.
  on the eye: No irritating effect.
· Sensitization: No sensitizing effects known.
· Additional toxicological information:
  The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.
  When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

SECTION 12: Ecological information

· 12.1 Toxicity
· Aquatic toxicity: No further relevant information available.
· 12.2 Persistence and degradability
  No further relevant information available.
· 12.3 Bioaccumulative potential
  No further relevant information available.
· 12.4 Mobility in soil
  No further relevant information available.
· Additional ecological information:
· General notes:
  Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· 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: Smaller quantities can be disposed of with household waste.

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

SECTION 14: Transport information

- 14.1 UN-Number
  - ADR, ADN, IMDG, IATA: Void

- 14.2 UN proper shipping name
  - ADR, ADN, IMDG, IATA: Void

- 14.3 Transport hazard class(es)
  - ADR, ADN, IMDG, IATA: Void

- 14.4 Packing group
  - ADR, IMDG, IATA: Void

- 14.5 Environmental hazards:
  - Marine pollutant: No

- 14.6 Special precautions for user
  - Not applicable.

- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Labelling according to EU guidelines:
    - Observe the general safety regulations when handling chemicals.
    - The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).
  - Special labelling of certain preparations:
    - Contains Fatty acids, C6-C19 branched, cobalt salts, 2-Butanone oxime. May produce an allergic reaction.
  - National regulations:
    - Technical instructions (air):
      - Class Share in %
        - I 0.2
        - NK 0.2
  - Waterhazard class: Water hazard class 1 (Self-assessment): slightly 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.

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