

## Safety data sheet according to Regulation (EC) No 1272/2008, Annex II

**1. Identification**

<b>Material Name</b>	Bauer-Kompressorenöl
<b>Product Code</b>	N28355
<b>Product Use</b>	Compressor oil
<b>Uses Advised Against</b>	This product must not be used in applications other than those recommended in Section 1, without first seeking the advice off the supplier.
<b>Manufacturer/Supplier</b>	BAUER KOMPRESSOREN GmbH, Stäblistraße 8, D-81477 München Telefon +49(0)89-78049-0, Telefax +49(0)89-78049-167
<b>Emergency Telephone Number</b>	Telefon +49(0)89-78049-0

**2. Hazards Identification**

<b>Classification of the substance or mixture</b>	67/548/EEC or 1999/45/EC Hazard Characteristics: Not classified as dangerous under EC criteria
<b>EC Symbols</b>	No Hazard Symbol required
<b>EC Classification</b>	Not classified as dangerous under EC criteria
<b>EC Risk Phrases</b>	Not classified
<b>EC Safety Phrases</b>	Not classified
<b>Health Hazards</b>	Not expected to be a health hazard when used under normal conditions. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Used oil contain harmful impurities.
<b>Safety Hazards</b>	Used oil may contain harmful impurities.
<b>Environmental Hazards</b>	Not classified as dangerous for the environment

### 3. Composition/information on ingredients

**Material Name** Not applicable  
**Mixture Description** Blend of synthetic esters and additives

**Classification of components according to Regulation (EC) No 1272/2008**

Chemical Name	CAS No.	EC Number	REACH Registration No.	Conc.
Alkarylamine	68411-46-1	270-128-1	01-2119491299-23	1,00 – 3,00%

Chemical Name	Hazard Class & Category	Hazard Statement
Alkarylamine	Aquatic Chronic, 3	H412

**Classification of components according to 67/548/EEC**

Chemical Name	CAS No.	EC Number	REACH Registration No.	R-phrase(s)	Conc.
Alkarylamin	68411-46-1	270-128-1	01-2119491299-23	R52/53	1,00 – 3,00%

**Additional Information** Refer to Ch 16 for full text of R- and H- phrases.  
 This mixture does not contain any REACH registered substances that are assessed to be a PBT or a vPvB

### 4. First aid measures

**General Information** Not expected to be a health hazard when used under normal conditions.

**Inhalation** No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.

**Skin contact** Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

**Eye contact** Remove contact lenses. Was thoroughly for several minutes using copious water. Seek medical help if necessary.

**Most important symptoms and effects, both acute and delayed** Oil acne/folliculitis and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhea.

**Indication of any immediate medical attention and special treatment needed**

Notes to doctor/physician: Treat symptomatically.

## 5. Firefighting measures

**Suitable extinguishing media**

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only

**Unsuitable extinguishing media**

High volume water jet

**Special hazards arising from the substance or mixture**

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds.

**Advice for firefighters**

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469)

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

For non emergency personnel: Avoid contact with skin and eyes.  
For emergency responders: Avoid contact with skin and eyes.

**Environmental precautions**

Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or river by using sand, earth, or other appropriate barriers.

**Methods and material for containment and cleaning up**

Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

**Additional advice**

Local authorities should be advised if significant spillages cannot be contained.

**Reference to other sections**

For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Material Safety Data Sheet.

## 7. Handling and storage

<b>General precautions</b>	Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
<b>Precautions for safe handling</b>	Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closeable containers.
<b>Conditions for safe storage, including any incompatibilities</b>	Store at ambiente temperature.
<b>Recommended materials</b>	For containers or container linings, use mild steel or high density polyethylene.
<b>Unsuitable materials</b>	PVC
<b>Specefic end use(s)</b>	Not applicable
<b>Additional information</b>	Polyethylene containers should net be exposed to high temperatures because of possible risk of distortion. Storage class according to TRGS 510:10 Fire hazard classification: B

## 8. Exposure controls/personal protection

<b>Biological Exposure Index (BEI)</b>	No biological limit allocated.
<b>Monitoring methods</b>	Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory. Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH),  
USA: Manual of Analytical methods <http://www.cds.gov/niosh/>

Occupational Safety and Health Administration (OSHA), USA:  
Sampling and Analytical Methods <http://www.osha.gov/>

Health and Safety Executive (HSE), UK: Methodes for the  
Determination of Hazardous Substances <http://www.hse.gov.uk/>

Institut für Arbeitsschutz Deutschen Gesetzlichen  
Unfallversicherung (IFA), Germany.  
<http://www.dguv.de/inhalt/index.jsp>

L'Institut Nationalde Recherche et de Sécurité, (INRS), France  
<http://www.inrs.fr/accueil>

## **Exposure Controls General Information**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

Define procedures for safe handling and maintenance of controls. Educate and train workers in the hazards and control measures relevant to normal activities associated with this product. Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation. Drain down system prior to equipment break-in or maintenance. Retain drain downs in sealed storage pending disposal or for subsequent recycle. Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

## **Personal protective equipment**

The provided information is made in consideration of the PPE directive (Council Directive 89/686/EEC) and the CEN European Committee for Standardisation (CEN) standards. Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

## **Eye/face protection**

Tight fitting protective goggles (EN 166) with side protection, with danger of projections.

## **Skin protection/Hand protection**

Chemical resistant protective gloves (EN 374)  
If applicable: Protective nitrile gloves (EN 374), Protective PVC

gloves (EN374), Protective hand cream recommended. The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time.

**Skin protection – other**

Protective working garments (e. g. safety shoes EN ISO 20345, long-sleeved protective working garments).

**Respiratory protection**

Normally not necessary.

**Thermal hazards**

If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

**Additional information on hand protection – No tests have been performed**

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications. Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer. In the case of mixtures, the resistance of glove materials can not be predicted and must therefore be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

**Environmental exposure controls**

Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

**9. Physical and chemical properties**

**Physical state**  
**Colour**  
**Odour**

Liquid at room temperature  
 Clear colourless  
 Slight hydrocarbon

<b>pH-value</b>	Not applicable
<b>Initial boiling point and boiling range</b>	>280°C/536°F estimated value(s)
<b>Pour point</b>	Typical -39°C/-38°F
<b>Flash point</b>	Typical 260°C/500°F (COC)
<b>Upper/lower Flammability</b>	Typical 1-10 % (V)
<b>Auto-ignition temperature</b>	>320°C/608°F
<b>Vapour pressure</b>	<0.5 Pa at 20°C/68°F (estimated value(s))
<b>Relative Density</b>	Typical 0.988 at 15°C/59°F
<b>Density</b>	Typical 0.988 kg/m <sup>3</sup> at 15°C/59°F
<b>Water solubility</b>	Negligible
<b>Partition coefficient (n-octanol/water)</b>	>6 (based on information on similar products)
<b>Kinematic viscosity</b>	Typical 100 mm <sup>2</sup> /s at 40°C/104°F
<b>Vapour density (air=1)</b>	>1 (estimated value(s))
<b>Electrical conductivity</b>	This material is not expected to be a static accumulator
<b>Evaporation rate (nBuAc=1)</b>	Data not available

## 10. Stability and reactivity

<b>Reactivity</b>	The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
<b>Chemical stability</b>	No hazardous reaction is expected when handled and stored according to provisions
<b>Possibility of hazardous reactions</b>	Reacts with strong oxidizing agents
<b>Conditions to avoid</b>	Extremes of temperature and direct sunlight
<b>Incompatible materials</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Hazardous decomposition products are not expected to form during normal storage.

## 11. Toxicological information

<b>Basis for Assessment</b>	Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).
<b>Acute toxicity, by oral route</b>	Expected to be of low toxicity: LD50 > 5000mg/kg, Rat
<b>Acute toxicity, by dermal route</b>	Expected to be of low toxicity: LD50 > 5000mg/kg, Rabbit
<b>Acute toxicity, by inhalation</b>	Not considered to be an inhalation hazard under normal conditions of use.

<b>Skin corrosion/irritation</b>	Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
<b>Serious eye damage/irritation</b>	Expected to be slightly irritating
<b>Respiratory irritation</b>	Inhalation of vapours or mists may cause irritation
<b>Sensitisation</b>	Not expected to be a skin sensitizer
<b>Repeated Dose Toxicity</b>	Not expected to be a hazard
<b>Mutagenicity</b>	Not considered a mutagenic hazard
<b>Carcinogenicity</b>	Not expected to be carcinogenic. Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).
<b>Reproductive toxicity</b>	Not expected to be a hazard.
<b>Additional Information</b>	Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible. Classifications by other authorities under varying regulatory frameworks may exist.

## 12. Ecological information

<b>Generell informations</b>	Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).
<b>Acute Toxicity</b>	Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract.
<b>Mobility</b>	Liquid under most environmental conditions. If it enters soil, it will adsorb to soil particles and will not be mobile. Floats on water.



<b>Persistence and degradability</b>	Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
<b>Bioaccumulative potential</b>	Contains components with the potential to bioaccumulate.
<b>Other Adverse Effects</b>	Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

### 13. Disposal considerations

<b>Material Disposal</b>	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
<b>Container Disposal</b>	Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.
<b>Local Legislation</b>	Disposal should be in accordance with applicable regional, national, and local laws and regulations. EU Waste Disposal Code (EWC): 13 02 06 synthetic engine, gear and lubricating oils. Classification of waste is always the responsibility of the end user.

### 14. Transport information

<b>ADR</b>	This product is not classified as dangerous for this mode of transport.
<b>RID</b>	This product is not classified as dangerous for this mode of transport.
<b>Inland waterways transport (AND)</b>	This product is not classified as dangerous for this mode of transport.
<b>IMDG</b>	This product is not classified as dangerous under IMDG regulations.
<b>IATA</b>	This product is not classified as dangerous for this mode of transport.

**Additional Information** MARPOL Annex 1 rules apply for bulk shipments by sea.

## 15. Regulatory information

<b>Generell informations</b>	The regulatory information is not intended to be comprehensive. Other regulations may apply to this material
<b>Other regulatory information authorisations and/or restrictions On use</b>	Product is not subject to Authorisation under REACH
<b>Recommended Restrictions on use</b>	This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier
<b>Notification Status</b>	EINECS – All components listed or polymer exempt. TSCA – All components listed.
<b>Water pollution class</b>	WGK 2 – hazard to water (appendix 2, VwVwS, preparations)
<b>Chemical safety assessment</b>	No chemical safety assessment has been carried out for this substance/mixture by the supplier.

## 16. Other information

<b>R-phrases(s)</b>	Not classified
<b>R52/53</b>	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>CLP hazard statements</b>	Harmful to aquatic life with long lasting effects.
<b>Additional information</b>	No exposure scenario annex is attached to this safety data sheet. It is a non-classified mixture containing hazardous substances as detailed in Section 3, relevant information from exposure scenarios for the hazardous substances contained have been integrated into the core sections 1-16 of this SDS.

## 17. Legend

<b>AC</b>	Article Categories
<b>Acc., acc to</b>	According, according to
<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>ADR</b>	Accord européen relative au transport international des marchandises Dangereuses par Route (=European Agreement

	concerning the International Carriage of Dangerous Goods by Road)
<b>AOEL</b>	Acceptable Operator Exposure Level
<b>AOX</b>	Adsorbable organic halogen compounds
<b>Approx.</b>	Approximately
<b>Art., Art. No</b>	Article number
<b>ATE</b>	Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
<b>BAM</b>	Bundesanstalt für Materialforschung und –prüfung (Federal Institute for Materials Research and Testing, Germany)
<b>BAuA</b>	Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (=Federal Institute for Occupational Health and Safety, Germany)
<b>BCF</b>	Bioconcentration factor
<b>BGV</b>	Berufsgenossenschaftliche Vorschrift (=Accident Prevention Regulation)
<b>BHT</b>	Butylhydroxytoluol (=2,6-Di-t-butyl-4-methyl-phenol)
<b>BMGV</b>	Biological monitoring guidance value (EH40, UK)
<b>BOD</b>	Biochemical oxygen demand
<b>BSEF</b>	Bromine Science and Environmental Forum
<b>bw</b>	Body weight
<b>CAS</b>	Chemical Abstracts Service
<b>CEC</b>	Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids
<b>CESIO</b>	Comité Européen des Agents de Surface et de leuts Intermédiaires Organiques
<b>CIPAC</b>	Collaborative International Pesticides Analytical Council
<b>CLP</b>	Classification, Labelling and Packaging (Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures)
<b>CMR</b>	Carcinogenic, mutagenic, reproductive toxic
<b>COD</b>	Chemical oxygen demand
<b>CTFA</b>	Cosmetic, Toiletry, and Fragrance Association
<b>DMEL</b>	Derived Minimum Effect Level
<b>DNEL</b>	Derived No Effect Level
<b>DOC</b>	Dissolved organic carbon
<b>DT50</b>	Dwell Time – 50% reduction of start concentration
<b>DVS</b>	Deutscher Verband für Schweißen und verwandte Verfahren e.V. (=German Association for Welding and Allied Processes)
<b>dw</b>	Dry weight
<b>e.g.</b>	For example, for instance
<b>EC</b>	European Community
<b>ECHA</b>	European Chemicals Agency
<b>EEA</b>	European Economic Area
<b>EEC</b>	European Economic Community
<b>EINECS</b>	European Inventory of Existing Commercial Chemical Substances
<b>ELINCS</b>	European List of Notified Chemical Substances
<b>EN</b>	European Norms
<b>EPA</b>	United States Environmental Protection Agency (USA)
<b>ERC</b>	Environmental Release Categories

<b>ES</b>	Exposure scenario
<b>Etc.</b>	Et cetera
<b>EU</b>	European Union
<b>EWC</b>	European Waste Catalogue
<b>Fax.</b>	Fax number
<b>Gen.</b>	General
<b>GHS</b>	Globally Harmonized System of Classification and Labelling of Chemicals
<b>GWP</b>	Global warming potential
<b>HET-CAM</b>	Hen`s Egg Test – Chorionallantoic Membrane
<b>HGWP</b>	Halocarbon Global Warming Potential
<b>IARC</b>	International Agency for Research on Cancer
<b>IATA</b>	International Air Transport Association
<b>IBC</b>	Intermediate Bulk Container
<b>IBC (Code)</b>	Intermediate Bulk Container (Code)
<b>IC</b>	Inhibitory concentration
<b>IMDG-code</b>	International Maritime Code for Dangerous Goods
<b>Incl.</b>	Including, inclusive
<b>IUCLID</b>	International Uniform Chemical Information Database
<b>LC</b>	Lethal concentration
<b>LC50</b>	Lethal concentration 50 percent kill
<b>LCLo</b>	Lowest published lethal concentration
<b>LD</b>	Lethal Dose of a chemical
<b>LD50</b>	Lethal Dose, 50% kill
<b>LDLo</b>	Lethal Dose Low
<b>LOAEL</b>	Lowest Observed Adverse Effect Level
<b>LOEC</b>	Lowest Observed Effect Concentration
<b>LOEL</b>	Lowest Observed Effect Level
<b>LQ</b>	Limited Quantities
<b>MARPOL</b>	International Convention for the Prevention of Marine Pollution from Ships
<b>n.a.</b>	Not applicable
<b>n.av.</b>	Not available
<b>n.c.</b>	Not checked
<b>n.d.a.</b>	No data available
<b>NIOSH</b>	National Institute of Occupational Safety und Health (USA)
<b>NOAEC</b>	No Observed Adverse Effective Concentration
<b>NOAEL</b>	No Observed Adverse Effect Level
<b>NOEC</b>	No Observed Effect Concentration
<b>NOEL</b>	No Observed Effect Level
<b>ODP</b>	Ozone Depletion Potential
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>Org.</b>	Organic
<b>PAH</b>	Polycyclic aromatic hydrocarbon
<b>PBT</b>	Persistent, bioaccumulative and toxic
<b>PC</b>	Chemical product category
<b>PE</b>	Polyethylene
<b>PNEC</b>	Predicted No Effect Concentration
<b>POCP</b>	Photochemical ozone creation potential

<b>Ppm</b>	Parts per million
<b>PROC</b>	Process category
<b>PTFE</b>	Polytetrafluorethylene
<b>REACH</b>	Registration, Evaluation, Authorisation and Restriction of Chemical (Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
<b>REACH-IT Lis-No.</b>	9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
<b>RID</b>	Réglement concernant le transport International ferroviaire de marchandises Dangereuses (=Regulation concerning the International Carriage of Dangerous Goods by Rail)
<b>SADT</b>	Self-Accelerating Decomposition Temperature
<b>SAR</b>	Structure Activity Relationship
<b>SU</b>	Sector of use
<b>SVHC</b>	Substance of Very High Concern
<b>Tel.</b>	Telephone
<b>ThOD</b>	Theoretical oxygen demand
<b>TOC</b>	Total organic carbon
<b>TRGS</b>	Technische Regeln für Gefahrenstoffe (=Technical Regulations for Hazardous Substances)
<b>UN RTDG</b>	United Nations Recommendations on the Transport of Dangerous Goods
<b>VbF</b>	Verordnung über brennbare Flüssigkeiten (=Regulation for flammable liquids (Austria))
<b>VOC</b>	Volatile organic compounds
<b>vPvB</b>	Very persistent and very bioaccumulative
<b>WEL-TWA, WEL-STEL,</b>	WEL-TWA = Workplace Exposure Limit –Long-term exposure limit (8-hour TWA(=time weighted average) WEL-STEL = Workplace Exposure Limit – Short-term exposure limit (15-minute reference period)(EH40, UK)
<b>WHO</b>	World Health Organization
<b>Wwt</b>	Wet weight

The statements made here should describe the product with regard to the necessary safety precautions – they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.