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

1. Identification

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

2. Hazards Identification

Classification of the substance or mixture	67/548/EEC or 1999/45/EC Hazard Characteristics: Not classified as dangerous under EC criteria
EC Symbols	No Hazard Symbol required
EC Classification	Not classified as dangerous under EC criteria
EC Risk Phrases	Not classified
EC Safety Phrases	Not classified
Health Hazards	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.
Safety Hazards	Used oil may contain harmful impurities.
Environmental Hazards	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, erth 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

General precautions	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.
Precautions for safe handling	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.
Conditions for safe storage, including any incompatibilities	Store at ambiente temperature.
Recommended materials	For containers or container linings, use mild steel or high density polyethylene.
Unsuitable materials	PVC
Specefic end use(s)	Not applicable
Additional information	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

Biological Exposure Index (BEI)	No biological limit allocated.
Monitoring methods	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 Securité, (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	Liquid at room temperature
Colour	Clear colourless
Odour	Slight hydrocarbon

pH-value	Not applicable
Initial boiling point and boiling range	>280°C/536°F estimated value(s)
Pour point	Typical -39°C/-38°F
Flash point	Typical 260°C/500°F (COC)
Upper/lower Flammability	Typical 1-10 % (V)
Auto-ignition temperature	>320°C/608°F
Vapour pressure	<0.5 Pa at 20°C/68°F (estimated value(s))
Relative Density	Typical 0.988 at 15°C/59°F
Density	Typical 0.988 kg/m3 at 15°C/59°F
Water solubility	Negligible
Partition coefficient (n-octanol/water)	>6 (based on information on similar products)
Kinematic viscosity	Typical 100 mm2/s at 40°C/104°F
Vapour density (air=1)	>1 (estimated value(s))
Electrical conductivity	This material is not expected tob e a static accumulator
Evaporation rate (nBuAc=1)	Data not available

10. Stability and reactivity

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

11. Toxicological information

Basis for Assessment	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).
Acute toxicity, by oral route	Expected to be of low toxicity: LD50 > 5000mg/kg, Rat
Acute toxicity, by dermal route	Expected to be of low toxicity: LD50 > 5000mg/kg, Rabbit
Acute toxicity, by inhalation	Not considered tob e an inhalation hazard under normal conditions of use.

Skin corrosion/irritation	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.
Serious eye damage/irritaion	Expected to be slightly irritating
Respiratory irritation	Inhalation of vapours or mists may cause irritation
Sensitisation	Not expected to be a skin sensitizer
Repeated Dose Toxicity	Not expected to be a hazard
Mutagenicity	Not considered a mutagenic hazard
Carcinogenicity	Not expected tob e 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).
Reproductive toxicity	Not expected to be a hazard.
Additional Information	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

Generell informations	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).
Acute Toxicity	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.
Mobility	Liquid under most environmental conditions. If it enters soil, it will adsorb to soil particles and will not be mobile. Floats on water.

Persistence and degradability	Ecpected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
Bioaccumulative potential	Contains components with the potential to bioaccumulate.
Other Adverse Effects	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

Material Disposal	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.
Container Disposal	Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.
Local Legislation	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

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

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

16. Other information

R-phrase(s)	Not classified
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
CLP hazard statements	Harmful to aquatic life with long lasting effects.
Additional information	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

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

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

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

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