

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

KAESER OMEGA FLUID SB 220 (894344.0, 894344.00020, 831057.0, 831057.00010, 831057.00020)

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Cooling oil with Corrosion inhibitor

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet**Supplier**

Company name: Kaeser Compressors Pty Ltd
Street: 45 Zenith Road Dandenong
Place: Melbourne Vic 3175
Telephone: .61 3 9791 5999
Responsible Department: msds.au@kaeser.com

SECTION 2: Hazards identification**Emergency response**

Mon – Fri 8.30am -5pm Tel: 61 3 9791 5999

number:**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements**Regulation (EC) No. 1272/2008****Special labelling of certain mixtures**

EUH066 Repeated exposure may cause skin dryness or cracking.
EUH210 Safety data sheet available on request.
Contains 5 - < 10 % of components with unknown hazards to the aquatic environment.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
9003-29-6	Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)			>=25 - =<50 %
	500-004-7			
	Asp. Tox. 1; H304 EUH066			

Full text of H and EUH statements: see section 16.

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH).

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

Take off immediately all contaminated clothing. Rinse skin with water/shower. In case of skin irritation, consult a physician.

After contact with eyes

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Observe risk of aspiration if vomiting occurs. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

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

After eye contact : No information available.

Inhalation : No information available.

Skin contact : Has de-greasing effect on the skin.

ingestion. : No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

In case of fire:

Carbon dioxide (CO₂)

Dry extinguishing powder

Foam

In case of major fire and large quantities:

Water spray jet

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide. Nitrogen oxides (NO_x). Sulfur oxides.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. In case of fire and/or explosion do not breathe fumes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray jet to protect personnel and to cool endangered containers.

Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders: Avoid contact with skin, eyes and clothes. Wear personal protection equipment (refer to section 8).

For non-emergency personnel: Avoid contact with skin, eyes and clothes. Wear personal protection equipment (refer to section 8).

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Cover drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

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****Advice on safe handling**

Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.

Wear personal protection equipment (refer to section 8).

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

Advices on general occupational hygiene: See section 8.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed and in a well-ventilated place.

Keep only in original container.

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

Advice on storage compatibility

Do not store together with: Gas. Explosive hazardous substances. Oxidising substances (solid). Oxidising substances (liquid) Radioactive substances. Infectious substances.

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Protect against: UV-radiation/sunlight. Heat.

7.3. Specific end use(s)

refer to section 1.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Additional advice on limit values**

Air limit values:

Possibility of exposure to: Aerosol

Limit value = 5 mg/ m³ - Source: ACGIH

Recommended monitoring procedures:

DIN-/EN-Norms: EN 689, EN 14042, EN 482

8.2. Exposure controls**Appropriate engineering controls**

Vapours / aerosols should be extracted by suction directly at point of origin.

Protective and hygiene measures

Always close containers tightly after the removal of product. Do not eat, drink or smoke when using this product.
Wash hands before breaks and after work. Take off contaminated clothing.
Do not put any product-impregnated cleaning rags into your trouser pockets.

Eye/face protection

Recommended eye protection articles: Eye glasses with side protection DIN EN 166

Hand protection

In case of prolonged or frequently repeated skin contact: Wear suitable gloves. DIN EN 374

Suitable material: NBR (Nitrile rubber).

Thickness of glove material: 0,35 mm

Breakthrough time > 480 min.

Check leak tightness/impermeability prior to use. Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Protective clothing. DIN-/EN-Norms: 469

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

generation/formation of aerosols

Recommended respiratory protection articles: Combination filtering device (EN 14387) Type: AP-2/3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state: Liquid
Colour: golden
Odour: Characteristic

Test result Test method

pH-Value: Not determined Not applicable

Changes in the physical state

Melting point: Not determined Not applicable

Initial boiling point and boiling range: >371 °C Not known

Pour point: -42 °C Not known

Flash point: 229 °C Open Cup
Sustaining combustion: No data available Not applicable

Flammability

Solid: Not applicable
Gas: Not applicable

Explosive properties

none

Lower explosion limits: Not determined
Upper explosion limits: Not determined
Ignition temperature: Not determined Not applicable

Auto-ignition temperature

Gas: Not determined

Decomposition temperature: Not determined Not applicable

Oxidizing properties

none

Vapour pressure: 0,1 hPa Not applicable
(at 25 °C)

Vapour pressure:

Density (at 15 °C): 0,87 g/cm³ Not known

Bulk density: The product has not been tested. Not applicable

Water solubility: Immiscible Not applicable

Solubility in other solvents

Not determined

Partition coefficient: The product has not been tested.

Viscosity / dynamic: Not determined Not applicable

Viscosity / kinematic: 220 mm²/s Not known
(at 40 °C)

Flow time: Not determined Not applicable

Vapour density: >1[Air=1] Not known

Evaporation rate: Not determined Not applicable

Solvent separation test: Not determined

Solvent content: Not determined

9.2. Other information

Solid content: Not determined

Auto-ignition temperature: > 315°C

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Reacts with : Oxidizing agents, strong.

10.4. Conditions to avoid

UV-radiation/sunlight. Heat

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition productsCan be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide. Nitrogen oxides (NO_x). Sulfur oxides.**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No information available.

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix tested

	Dose	Species	Source
LD50, oral	>5000 mg/kg	Rat	-
LD50, dermal	>5000 mg/kg	Rabbit	-

CAS No	Chemical name	Exposure route	Dose	Species	Source
9003-29-6	Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	oral	LD50 >10000 mg/kg	Rat	ECHA Dossier
		dermal	LD50 >2000 mg/kg	Rat	ECHA Dossier
		inhalative (4 h) vapour	LC50 [>19,17] mg/l	Rat	ECHA Dossier

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene):

Serious eye damage/eye irritation:

Method : OECD Guideline 405 (Acute Eye Irritation / Corrosion)

Species: Rabbit

Result / evaluation : Not an irritant.; Literature information: ECHA Dossier

Sensitising effects

Based on available data, the classification criteria are not met.

Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene):

Skin sensitisation:

Method: OECD Guideline 406

Species: Guinea pig

Result / evaluation: not sensitising. Literature information: ECHA Dossier

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene):

In-vitro mutagenicity:

Method: OECD Guideline 471, OECD Guideline 473

Result: negative. Literature information: ECHA Dossier

In-vivo mutagenicity:

Method: OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Result: negative. Literature information: ECHA Dossier

Reproductive toxicity:

Method: OECD Guideline 421
 Species: Rat.; Exposure route: oral.
 Result: NOAEL (P) = 1000 mg/kg ; NOAEL (F1) = 1000 mg/kg; Literature information: ECHA Dossier
 Developmental toxicity/teratogenicity:
 Method: OECD Guideline 422
 Species: Rat.; Exposure route: oral.
 Result: NOAEL > 1000 mg/kg; Literature information: ECHA Dossier

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.
 Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene):
 Subchronic oral toxicity:
 Method: OECD Guideline 408
 Species: Rat
 Exposure time: 90 d.
 Result: NOAEL >= 1000 mg/kg; Literature information: ECHA Dossier

Subchronic inhalation toxicity:

Method: -
 Species: Rat
 Exposure time: OECD Guideline 413
 Result / evaluation: NOEC = 1000 mg/m³; Literature information: ECHA Dossier

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information
12.1. Toxicity

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h] [d]	Species	Source
9003-29-6	Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)				
	Acute algae toxicity	ErC50 >19,2 mg/l	72 h	Desmodesmus subspicatus (OECD 201)	ECHA Dossier

12.2. Persistence and degradability

Some of the components are poorly biodegradable. The statement is derived from the properties of the single components.

Due to its low solubility in water the product is almost completely mechanically separated in biological sewage plants.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
9003-29-6	Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)			
	OECD Guideline 310	93,9%	28	ECHA Dossier
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential
Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
9003-29-6	Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	7,6-7,8

BCF

CAS No	Chemical name	BCF	Species	Source
9003-29-6	Butene, homopolymer (products derived from either/or But-1-ene/But-2-ene)	920-3340	Carp	ECHA Dossier

12.4. Mobility in soil

No data 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. Other adverse effects

No data available

Further information

Contains 5,5 % of components with unknown hazards to the aquatic environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process. Waste codes/waste designations according to EWC/AVV

Waste disposal number of waste from residues/unused products

130206 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils; hazardous waste

Waste disposal number of used product

130206 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); waste engine, gear and lubricating oils; synthetic engine, gear and lubricating oils; hazardous waste

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)****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.

Inland waterways transport (ADN)**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.

Marine transport (IMDG)

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: -

Air transport (ICAO-TI/IATA-DGR)

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: -

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

Danger releasing substance: Not relevant

14.6. Special precautions for user

See section 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

2010/75/EU (VOC): Not determined

2004/42/EC (VOC): Not determined

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

REACH 1907/2006 appendix XVII: Not relevant

National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

SECTION 16: Other information**Changes**

Rev. 11.00; 29.05.2015, Initial release

Rev. 12.00: 24.11.2017; Changes in chapter: 1-16

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

ACGIH: The American Conference of Governmental Industrial Hygienists

CAS Chemical Abstracts Service

DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

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)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect level
NTP: National Toxicology Program
N/A: not applicable
OSHA: Occupational Safety and Health Administration
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
SARA: Superfund Amendments and Reauthorization Act
SVHC: substance of very high concern
TRGS Technische Regeln fuer Gefahrstoffe
TSCA: Toxic Substances Control Act
VOC: Volatile Organic Compounds
VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe
WGK: Wassergefaehrungsklasse

Relevant H and EUH statements (number and full text)

H304 May be fatal if swallowed and enters airways.
EUH066 Repeated exposure may cause skin dryness or cracking.
EUH210 Safety data sheet available on request.

Further Information

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data. and / or calculated and / or estimated.

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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)