Safety data sheet in accordance with 91/155/EEC

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1. Identification of the substance/preparation and company

Product details ZUBORA 92 F

WATER-MISC. COOLING LUBRICANT

96990 SENSITIVE TO FROST

Recommended use:

Water miscible coolant

Identification of the manufacturer / supplier

Zeller + Gmelin GmbH & Co. KG

Schloßstr. 20

D-73054 Eislingen/Fils

Phone: +49(0)7161/802-0 Fax: +49(0)7161/802-599

Emergency phone: +49(0)7161/802-400

Advising personal/Phone: Product safety: +49(0)7161/802-297

2. Composition / information on ingredients

Chemical characterization

Water-miscible cooling lubricant, containing mineral oil, fatty components, anionic and non-ionic surfactants, corrosion inhibitors and specific components.

Hazardous ingredients:

	EINECS-No. CAS-No.	Name R-phrases	Symb.	Cor	nc%	5
	CAD NO.	oxazolidine derivate				
	66204-44-2	22-36/37/38	Xn	1	-	3
		fatty alcohol polyglycolether 22-36/38	Xn	3	_	5
	Additional	information:				
Meanings of R-phrases see under chapt.16.						

3. Hazards possibilities

Hazard designation:

The product does not require a hazard warning label in accordance with EC directives/ GefStoffV (German regulations on dangerous substances).

4. First aid measures

General information

Remove contaminated clothing immediately and dispose of safely.

After skin contact

In case of contact with skin wash off immediately with plenty of

After eye contact

In case of contact with the eyes rinse thoroughly with plenty of water or with an eye-cleaning solution.

In case of irritation consult an occulist.

After ingestion

Do not induce vomiting.

Rinse out mouth and give plenty of water to drink.

Summon a doctor immediately.

5. Firefighting measures

Suitable extinguishing media

Foam

Dry powder

Carbon dioxide

Extinguishing media that must not be used for safety reasons

Full water jet

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Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases

In the event of fire the following can be released:

Carbon monoxide (CO)

Carbon dioxide (CO2)

In case of combustion evolution of dangerous gases possible.

Special protective equipment for firefighting

Do not inhale explosion and/or combustion gases.

Use self-contained breathing apparatus.

Other information

Cool endangered containers with water spray jet.

6. Accidental release measures

Personal precautions

Use personal protective clothing.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up

Take up with absorbent material (eg sand, kieselguhr, universal binder). Dispose of absorbed material in accordance with the regulations.

7. <u>Handling and storage</u>

Handling

Advice on safe handling

Use personal protective clothing.

Open and handle container with care.

Avoid formation of aerosols.

Advice on protection against fire and explosion

No special measures necessary.

Storage

Requirements for storage rooms and vessels

Protect from frost.

Protect from heat and direct sunlight.

Keep container tightly closed.

8. Exposure controls / personal protection

Additional hints on technical system design.

See chapter 7; no measures exceeding the ones mentioned are necessary. Ingredients with occupational exposure limits to be monitored

EINECS-No. Name

Type Value Unit

Personal protective equipment

Respiratory protection

Breathing apparatus in the event of aerosol or mist formation.

Hand protection

Recommendation: Impermeable safety gloves made of nitrile as per EN 374; penetration time more than 480 min. at a thickness of 0.4 mm.

Eye protection

Safety glasses with side protection shield

General protective measures

Do not inhale gases/vapours/aerosols.

Avoid contact with eyes and skin.

At work do not eat, drink, smoke or take drugs.

Keep away from foodstuffs and beverages.

Wash hands before breaks and after work.

9. Physical and chemical properties

Form liquid Colour brown Odour typical Productname: ZUBORA 92 F

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	<u> Value Unit</u>	Method
Flash point	150 °C	ISO 2592
Viscosity 20 °C	$350 \text{mm}^2/\text{s}$	DIN 51562
Density: 15 °C	0.98 g/cm3	DIN 51757
Lower explosion limit :	0.6 Vol.%	
Upper explosion limit:	6.5 Vol.%	
Solubility in water / method	miscible	
Pourpoint	not to apply°C	
Boiling point:	n.b. °C	
Bulk density :	n.a. kg/m3	
Vapour pressure: 20 °C	< 0,1 mbar	
pH value : 20 °C	9.1	DIN 51369 (50 g/l)

10. Stability and reactivity

Materials to avoid

Reactions with strong oxidising agents.

Hazardous decomposition products

No hazardous reactions when stored and handled according to prescribed instructions.

11. Toxicological information

General remarks.

No toxicological data are available.

Experience in practice

Keeping to the general worker's protection rules and the industrial hygienics, there is no risk in handling this product through the personnel.

12. Ecological information

Do not discharge into the drains/surface waters/groundwater. The formulation was evaluated using the conventional method of the Dangerous Preparations Directive 1999/45/EC and not classified as hazardous to the environment.

13. Disposal considerations

Product Waste code

1001

120107 mineral-based machining oils free of halogens (except

emulsions and solutions)

120109 machining emulsions and solutions free of halogens

The listed waste code numbers, according to the European Waste Catalogue (EWC), are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.

Uncleaned packaging

Uncontaminated packaging may be taken for recycling. Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

14. Transport information

"Product is not subject to the regulations for dangerous goods".

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15. Regulatory information

Labelling in accordance with EC directives

The product does not require a hazard warning label in accordance with EC directives/ GefStoffV (German regulations on dangerous substances).

National regulations

Water hazard class / source 2

(VwVwS)

TA-Luft / paragraph (for Germany only): Not listed.

VbF (Germany): -

16. Other information

22 Harmful if swallowed.

36/37/38 Irritating to eyes, respiratory system and skin.

36/38 Irritating to eyes and skin.

The data mentioned in the present safety data sheet correspond to our latst knowledge and experience and may be used to precise safety requirements for the different products. The information given therein is no warranty as to quality.

Revised chapters: 1,2,3,8,11,12,16.

n.a.: not applicable
n.b.: not determinet