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

1.1. Product identifier

25650 STABILISER SC

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

Use of the substance/mixture

Additional agent for coolants

1.3. Details of the supplier of the safety data sheet

Company name:	Zeller+Gmelin GmbH & Co. KG		
Street:	Schlossstr. 20		
Place:	D-73054 Eislingen		
Telephone:	+49 (0) 7161 / 802-0	Telefax:	+49 (0) 7161 / 802-290
e-mail:	info@zeller-gmelin.de		
Contact person:	Uwe Allmendinger	Telephone:	+49 (0) 7161 / 802-297
e-mail:	produktsicherheit@zeller-gmelin.de		
Internet:	www.zeller-gmelin.de		
Responsible Department:	Produktsicherheit / Product Safety		

1.4. Emergency telephone number:

Germany: +49 (0) 7161 / 802-400
In England and Wales: NHS Direct: 0845 4647 or 111 In Scotland: NHS 24 - 08454 24 24 24 In Republic of Ireland: 01 809 2166

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Skin corrosion/irritation: Skin Corr. 1B
Serious eye damage/eye irritation: Eye Dam. 1
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 3
Hazard Statements:
Causes severe skin burns and eye damage.
Causes serious eye damage.
May cause respiratory irritation.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

2-aminoethanol
diethanolamine

Signal word: Danger

Pictograms:

Hazard statements

H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.

2.3. Other hazards

Results of PBT and vPvB assessment: not applicable.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Water-soluble cooling lubricant

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
112-34-5	2-(2-butoxyethoxy)ethanol			25 - <= 100 %
	203-961-6	603-096-00-8	01-2119475104-44	
	Eye Irrit. 2; H319			
68002-96-0	alcohols, C16-18, ethoxylated, propoxylated			10 - < 20 %
	614-209-5			
	Aquatic Chronic 3; H412			
141-43-5	2-aminoethanol			10 - < 20 %
	205-483-3	603-030-00-8	01-2119486455-28	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, STOT SE 3, Aquatic Chronic 3; H332 H312 H302 H314 H335 H412			
111-42-2	diethanolamine			5 - < 10 %
	203-868-0	603-071-00-1	01-2119488930-28	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, STOT RE 2, Aquatic Chronic 3; H302 H315 H318 H373 H412			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Remove contaminated, saturated clothing immediately.

After inhalation

Remove casualty to fresh air and keep warm and at rest.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Let water be drunken in little sips (dilution effect). Call a physician immediately. Do NOT induce vomiting.

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

When in doubt or if symptoms are observed, get medical advice.

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

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, Extinguishing powder, Carbon dioxide (CO2).

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon monoxide Carbon dioxide (CO2). Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Do not allow to enter into soil/subsoil.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Clean contaminated articles and floor according to the environmental legislation.

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.

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use personal protection equipment. Do not eat, drink or smoke when using this product. Provide fresh air. Handle and open container with care. Conditions to avoid: generation/formation of aerosols.

Advice on protection against fire and explosion

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Vapours of flammable solvents can accumulate in the gas phase of closed container , especially during heat treatment. Therefore keep away from fire and sources of ignition. Provide earthing of containers, equipment, pumps and ventilation facilities. Use non-sparking tools. Recommendation: Wear anti-static footwear and clothing

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Protect against: Frost. Keep away from heat. Protect against direct sunlight. Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	WEL
		15	101.2		STEL (15 min)	WEL
141-43-5	2-Aminoethanol	1	2.5		TWA (8 h)	WEL
		3	7.6		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
112-34-5	2-(2-butoxyethoxy)ethanol			
Worker DNEL, long-term		dermal	systemic	20 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	10 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	5 mg/m³
Consumer DNEL, acute		inhalation	local	7,5 mg/m³
Consumer DNEL, long-term		inhalation	local	5 mg/m³
Consumer DNEL, long-term		oral	systemic	1,3 mg/kg bw/day
141-43-5	2-aminoethanol			
Worker DNEL, long-term		dermal	systemic	1 mg/kg bw/day
Worker DNEL, long-term		inhalation	local	3,3 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,24 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	2 mg/m³
Consumer DNEL, long-term		oral	systemic	3,75 mg/kg bw/day
111-42-2	diethanolamine			
Worker DNEL, long-term		dermal	systemic	0,13 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,06 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	0,07 mg/kg bw/day
Worker DNEL, long-term		inhalation	local	1 mg/m³
Consumer DNEL, long-term		inhalation	local	0,25 mg/m³

PNEC values

CAS No	Substance
Environmental compartment	Value
112-34-5	2-(2-butoxyethoxy)ethanol
Freshwater	1 mg/l
Marine water	0,1 mg/l
Freshwater sediment	4 mg/l
Marine sediment	0,4 mg/l
Soil	0,4 mg/l
141-43-5	2-aminoethanol
Freshwater	0,085 mg/l
Marine water	0,0085 mg/l
Freshwater sediment	0,425 mg/kg
Marine sediment	0,0425 mg/kg
Soil	0,035 mg/kg
111-42-2	diethanolamine
Freshwater	0,0022 mg/l
Marine water	0,00022 mg/l
Freshwater sediment	0,019 mg/kg
Marine sediment	0,0019 mg/kg
Soil	0,00108 mg/kg

8.2. Exposure controls

Appropriate engineering controls

See chapter 7. No additional measures necessary.

Protective and hygiene measures

When using do not eat, drink, smoke, sniff.

Eye/face protection

Eye glasses with side protection.

Hand protection

Wear suitable gloves. Recommended glove articles: DIN EN 374. Suitable material: NBR (Nitrile rubber). Breakthrough time (maximum wearing time): > 120 min (Thickness of the glove material: 0.4 mm). Breakthrough times and swelling properties of the material must be taken into consideration. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Skin protection

Protective clothing.

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient , respiratory protection must be worn. Suitable respiratory protection apparatus: Filtering Half-face mask (DIN EN 149), e.g. FFA P /
Full-/half-/quarter-face masks (DIN EN 136/140) + Combination filtering device (EN 14387) , e.g. A P.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	yellowish
Odour:	characteristic

		Test method
pH-Value (at 20 °C):	11,4	DIN 51369 (100 g/L)

Changes in the physical state

Melting point:	not determined	
Initial boiling point and boiling range:	> 170 °C	
Pour point:	not determined	
Flash point:	> 100 °C	DIN 51755
Lower explosion limits:	0,8 vol. %	
Upper explosion limits:	5,9 vol. %	
Ignition temperature:	not determined	
Decomposition temperature:	No information available.	
Vapour pressure:	not determined	
Density (at 20 °C):	1,01 g/cm³	DIN EN ISO 12185
Water solubility:	very soluble	
Partition coefficient:	not determined	
Viscosity / dynamic:	not determined	
Viscosity / kinematic:	not determined	
Flow time:	not determined	
Vapour density:	not determined	
Evaporation rate:	not determined	

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-34-5	2-(2-butoxyethoxy)ethanol				
	oral	LD50 5660 mg/kg	Rat		
	dermal	LD50 4120 mg/kg	Rabbit		
141-43-5	2-aminoethanol				
	oral	LD50 1510-3320 mg/kg	Rat		
	dermal	ATE 1100 mg/kg			
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			
111-42-2	diethanolamine				
	oral	LD50 676 mg/kg	Rat		
	dermal	LD50 8328 mg/kg	Rabbit		

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause respiratory irritation. (2-aminoethanol)

STOT-repeated exposure

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

Aspiration hazard

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

Practical experience

Other observations

Keeping to the general worker's protection rules and the industrial hygienics, there is no risk in handling this product through the personnel. Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
68002-96-0	alcohols, C16-18, ethoxylated, propoxylated					
	Acute fish toxicity	LC50 >100 mg/l	96 h	Brachydanio rerio (zebra-fish)	OECD 203	
	Acute algae toxicity	ErC50 >10 mg/l	72 h	Pseudokirchneriella subcapitata	OECD 202	
	Acute crustacea toxicity	EC50 >10 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	

12.2. Persistence and degradability

There are no data available on the mixture itself.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
141-43-5	2-aminoethanol			
	Biochemical oxygen demand (BOD)	800 mg/g	5	
	BOD5/COD ratio:	0,5		
	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	> 90 %	28	

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-34-5	2-(2-butoxyethoxy)ethanol	0,56 (25°C)
141-43-5	2-aminoethanol	-1,91--1,31
111-42-2	diethanolamine	-1,43

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to EC directives 75/442/EEC and 91/689/EEC in the corresponding versions, covering waste and dangerous waste.

Waste disposal number of waste from residues/unused products

070104 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of basic organic chemicals; other organic solvents, washing liquids and mother liquors; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Consult the appropriate local waste disposal expert about waste disposal.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 2491

14.2. UN proper shipping name: ETHANOLAMINE SOLUTION

14.3. Transport hazard class(es): 8

14.4. Packing group: III

Hazard label: 8

Classification code: C7
Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 80
Tunnel restriction code: E

Marine transport (IMDG)

14.1. UN number:	UN 2491
14.2. UN proper shipping name:	ETHANOLAMINE SOLUTION
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8

Marine pollutant:	NO
Special Provisions:	223
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 2491
14.2. UN proper shipping name:	ETHANOLAMINE SOLUTION
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8

Special Provisions:	A3 A803
Limited quantity Passenger:	1 L
Passenger LQ:	Y841
Excepted quantity:	E1
IATA-packing instructions - Passenger:	852
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	856
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No data available

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

No data available

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Restrictions on use (REACH, annex XVII):
Entry 55: 2-(2-butoxyethoxy)ethanol

2010/75/EU (VOC):	10 % (101,3 g/l)
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,15.

Abbreviations and acronyms

ADR: Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement concernant le transport international ferroviaire des marchandises dangereuses (Regulations concerning the International Carriage of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
CAS: Chemical Abstracts Service (a division of the American Chemical Society)
DNEL/DMEL: Derived No-Effect Level / Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
WEL (UK): Workplace Exposure Limits
TWA (EC): Time-Weighted Average
STEL (EC): Short Term Exposure Limit
ATE: Acute Toxicity Estimate
LD50: Lethal Dose, 50% (median lethal dose)
LC50: Lethal Concentration, 50% (median lethal concentration)
EC50: half maximal Effective Concentration
ErC50: EC50 in terms of reduction of growth rate
AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen
VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Further Information

Safety Data Sheet according to COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

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.)