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

1.1 Product identifier

Trade name : G587-AE4 hebro®split S

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

Use of the Sub-: separating agent

stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : hebro chemie- ZN der Rockwood Specialties Group

GmbH

Rostocker Str. 40

41199 Mönchengladbach

Contact person : Wolfgang Schaffers Telephone : +49 (0) 2166 6009-0

: +49 (0) 2166 6009-99 Telefax

Contact person product safety Abteilung Produktsicherheit : +49(0)2166 6009-176 Telephone

E-mail address : wolfgang.schaffers@chemetall.com

1.4 Emergency telephone number

Giftinformationszentrum Erfurt:

+49 (0) 361 730 730

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1 H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

H336: May cause drowsiness or dizziness.

Skin irritation, Category 2 H315: Causes skin irritation.

Specific target organ toxicity - single ex-

posure, Category 3, Central nervous system

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting ef-

fects.

Classification (67/548/EEC, 1999/45/EC)

Extremely flammable R12: Extremely flammable. Irritant R38: Irritating to skin.

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R67: Vapours may cause drowsiness and dizzi-

ness.

Dangerous for the environment R52/53: Harmful to aquatic organisms, may cause

long-term adverse effects in the aquatic environ-

ment.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





Signal word Danger

Hazard statements H222 Extremely flammable aerosol.

Pressurised container: May burst if heated. H229

H315 Causes skin irritation.

May cause drowsiness or dizziness. H336 H412 Harmful to aquatic life with long lasting ef-

fects.

Precautionary statements P102 Keep out of reach of children.

Prevention:

P260 Do not breathe spray.

P210 Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No

smokina.

P251 Do not pierce or burn, even after use. Do not spray on an open flame or other P211

ignition source.

Response:

P362 + P364 Take off contaminated clothing and wash it

before reuse.

Storage:

P410 + P412 Protect from sunlight. Do not expose to

temperatures exceeding 50 °C/ 122 °F.

Disposal:

P501 Dispose of contents/ container to an ap-

proved waste disposal plant.

Hazardous components which must be listed on the label:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Labelling according to EC Directives (1999/45/EC)

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Hazard pictograms





Extremely flammable

Irritant

R-phrase(s) : R12 Extremely flammable.

R38 Irritating to skin.

R52/53 Harmful to aquatic organisms, may cause

long-term adverse effects in the aquatic

environment.

R67 Vapours may cause drowsiness and dizzi-

ness.

S-phrase(s) : S23 Do not breathe spray.

S33 Take precautionary measures against stat-

ic discharges.

S37 Wear suitable gloves. S43 In case of fire, use .?.

S60 This material and its container must be

disposed of as hazardous waste.

Special labelling of certain

mixtures

: Pressurized container. Protect from sunlight and do not ex-

pose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Keep away from sources of ignition - No smoking.

Keep out of the reach of children.

2.3 Other hazards

The information required is contained in this Material Safety Data Sheet.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical nature : Polysiloxane dissolved in hydrocarbon mixture

Hazardous components

Chemical Name	CAS-No. EC-No.	Classification (67/548/EEC)	Classification (REGULATION	Concentration [%]
	Registration num-	,	` (EC) No	

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	ber		1272/2008)	
Propane	74-98-6 200-827-9 01-2119486944-21	F+; R12	Flam. Gas 1; H220 Press. Gas Liquefied gas; H280	>= 10 - < 25
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	01-2119475514-35	F; R11 Xi; R38 Xn; R65 R67 N; R51/53	Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336 Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 20 - < 25
Isobutane	75-28-5 200-857-2 01-2119485395-27	F+; R12 Nota C	Flam. Gas 1; H220 Press. Gas Compr. Gas; H280	>= 10 - < 25

Substances with	a workplace exposure lir	nit :		
Butane	106-97-8 203-448-7 01-2119474691-	F+; R12	Flam. Gas 1; H220	>= 10 - < 25
		Nota C	Press. Gas Liquefied gas; H280	

For the full text of the R-phrases mentioned in this Section, see Section 16. For the full text of the H-Statements mentioned in this Section, see Section 16. For the full text of the Notas mentioned in this Section, see Section 16.

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SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Call a physician if symptoms occur.

If inhaled : Provide fresh air.

Keep patient warm and at rest. If symptoms persist, call a physician.

In case of skin contact : Take off immediately all contaminated clothing.

Wash skin thoroughly with soap and water or use recognized

skin cleanser.

Do NOT use solvents or thinners.

In case of eye contact : Irrigate copiously with clean, fresh water for at least 10

minutes, holding the eyelids apart.

If eye irritation persists, consult a specialist.

If swallowed : Call a physician immediately.

Keep at rest.

Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or car-

bon dioxide.

Unsuitable extinguishing : High volume water jet

media

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire- : C

fighting

: Combustion may cause: Carbon dioxide (CO2) Carbon monoxide

5.3 Advice for firefighters

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Special protective equipment

for firefighters

: Wear self-contained breathing apparatus for firefighting if nec-

essary.

Further information : Use water spray to cool unopened containers.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Provide sufficient air exchange and/or exhaust in work rooms.

Remove all sources of ignition.

Do not breathe vapour.

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Inform the relevant authorities if it enters sewers, aquatic envi-

ronment or soil.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Contain spillage, soak up with non-combustible absorbent

material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local /

national regulations (see section 13).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See chapter 8 and 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours or spray mist.

When using do not eat, drink or smoke. For personal protection see section 8.

Take precautionary measures against static discharges. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn,

even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep away

from children.

Advice on protection against

fire and explosion

: Vapours are heavier than air and may spread along floors.

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7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Electrical installations / working materials must comply with

the technological safety standards. Follow the water regulations.

Further information on stor-

age conditions

: Keep only in the original container in a cool, well-ventilated

place.

Keep away from sources of ignition - No smoking.

Keep away from heat.

Advice on common storage : Incompatible with oxidizing agents.

7.3 Specific end use(s)

Specific use(s) : separating agent

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	C	AS-No.	Value	Control param- eters	Update	Basis
Butane	10	06-97-8	TWA	600 ppm 1,450 mg/m3	2007-08-01	GB EH40
Further infor- mation	:	Carc: Capable of causing cancer and/or heritable genetic damage. The identified substances include those which: - are assigned the risk phrases 'R45: May cause cancer'; 'R46: may cause heritable genetic damage'; 'R49: May cause cancer by inhalation' or - a substance or process listed in Schedule 1 of COSHH. Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene				
	10	06-97-8	STEL	750 ppm 1,810 mg/m3	2007-08-01	GB EH40
Further infor- mation	:	Carc: Capable of causing cancer and/or heritable genetic damage. The identified substances include those which: - are assigned the risk phrases 'R45: May cause cancer'; 'R46: may cause heritable genetic damage'; 'R49: May cause cancer by inhalation' or - a substance or process listed in Schedule 1 of COSHH. Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene				

8.2 Exposure controls

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

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Personal protective equipment

Respiratory protection : Do not breathe gas/fumes/vapour/spray.

When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators.

Hand protection : Solvent-resistant gloves (butyl-rubber)

Protective gloves complying with EN 374.

Eye protection : Safety glasses with side-shields

Skin and body protection : protective suit

Protective measures : Handle in accordance with good industrial hygiene and safety

practice

Follow the skin protection plan.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.

Inform the relevant authorities if it enters sewers, aquatic envi-

ronment or soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : aerosol

Colour : colourless

Odour : aromatic

Flash point : $< 1.0 \, ^{\circ}\text{C}$

Ignition temperature : 365 °C

Lower explosion limit : 1.10 %(V)

Upper explosion limit : 10.90 %(V)

pH : Not applicable

Boiling point/boiling range : Method: DIN 51751

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Density : 0.65 g/cm³

at 20 °C

Method: DIN 51757

Water solubility : insoluble

9.2 Other information

Explosivity : In use, may form flammable/explosive vapour-air mixture.

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

Risk of decomposition. : In case of fire hazardous decomposition products may be

produced such as: Carbon dioxide (CO2) Carbon monoxide Nitrogen oxides (NOx)

Smoke

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Skin irritation : Repeated or prolonged contact with the mixture may cause

removal of natural fat from the skin resulting in desiccation of

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the skin.

May cause eye and skin irritation.

Serious eye damage/eye irritation

Eye irritation : The liquid splashed in the eyes may cause irritation and re-

versible damage.

Respiratory or skin sensitisation

Sensitisation : This information is not available.

Carcinogenicity

Remarks : Not classifiable as a human carcinogen.

Further information : Health injuries are not known or expected under normal use.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish : No data available

12.2 Persistence and degradability

Biodegradability : No data available

12.3 Bioaccumulative potential

Bioaccumulation : No data available

12.4 Mobility in soil

Mobility : No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

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Additional ecological infor-

mation

: Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.

Do not let product enter drains.

Do not dispose of with domestic refuse.

Packaging : The hazard and precautionary statements displayed on the

label also apply to any residues left in the container.

Do not dispose of with domestic refuse.

Contaminated packaging : Dispose of in accordance with local regulations.

Waste Code : 160504 gases in pressure containers (including halons) con-

taining dangerous substances

SECTION 14: Transport information

ADR

UN number : 1950

UN proper shipping name : AEROSOLS

Transport hazard class(es) : 2 Classification Code : 5F Limited Quantity (LQ) Inner : 1.00 L

Packaging

Maximum quantity : 30.00 KG

Labels : 2.1
Tunnel restriction code : (D)
Environmentally hazardous : no

IATA

UN number : 1950

Description of the goods : Aerosols, flammable

Class : 2.1 Labels : 2.1

IATA_C

Packing instruction (cargo : 203

aircraft)

Packing instruction (LQ) : Y203 Maximum quantity : 150.00 KG

Environmentally hazardous : no

IATA_P

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Packing instruction (passen: 203

ger aircraft)

Packing instruction (LQ) : Y203
Maximum quantity : 75.00 KG

Environmentally hazardous : no

IMDG

UN number : 1950

Description of the goods : AEROSOLS

Class : 2.1
Labels : 2.1
EmS Number 1 : F-D
EmS Number 2 : S-U
Marine pollutant : no

Shaded from sources of heat.

"IMDG-Code segregation group not applicable".

Shaded from sources of heat.

"IMDG-Code segregation group not applicable".

RID

UN number : 1950

Description of the goods : AEROSOLS

Transport hazard class(es) : 2
Classification Code : 5F
Hazard Identification Number : 23
Labels : 2.1
Limited Quantity (LQ) Inner : 1.00 L

Packaging

Maximum quantity : 30.00 KG

Environmentally hazardous : no

SECTION 15: Regulatory information

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

Other regulations : The product is classified and labelled in accordance with EC

directives or respective national laws.

Regional or national implementations of GHS may not imple-

ment all hazard classes and categories.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

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SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

R11 Highly flammable.
R12 Extremely flammable.
R38 Irritating to skin.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in

the aquatic environment.

R65 Harmful: may cause lung damage if swallowed. Vapours may cause drowsiness and dizziness.

Full text of H-Statements referred to under sections 2 and 3.

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.

H229 Pressurised container: May burst if heated.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Full text of Notas referred to under section 3

Nota C Some organic substances may be marketed either in a specific isomeric

form or as a mixture of several isomers. In Annex I, a general designation of the following type is sometimes used: "xylenol". In this case the manufacturer or any other person who markets such a substance must state on the label whether the substance is a specific isomer (a) or a mixture of isomers (b). Example: (a) 2,4-dimethylphenol (b) xylenol

(mixture of isomers).

Further information

The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.