Safety Data Sheet

according to 2001/58/EC

KOMET Extrakt S15

Product code: 654006-3010

1. Identification of the substance/preparation and company

1.1 Commercial product name: **KOMET Extrakt S15**
Product code: 654006-3010
Product group: blowing agent

Use of the substance/preparation
Fire extinguishing agent: blowing agent

1.2 Information manufacturer/supplier
TOTAL Feuerschutz GmbH
Industriestraße 13
D-68526 Ladenburg
Telephone : +49/(0)6203/75-0
Telefax : +49/(0)6203/75-252
Contact person : Jürgen Joseph Telephone : +49/(0)6203/75-201
e-mail : juejoseph@tycoint.com

Inquiry office : Vertrieb
Emergency telephone number : +49/(0)6203/75-0

Additional information
liquid concentrate for the production of foam for fire fighting

2. Composition/information on ingredients

Chemical characterization : (preparation)

Hazardous components
(Full text of each relevant R phrase can be found in heading 16)

EC No.	CAS No.	Components	Value	Symbols	R-phrases
203-905-0	111-76-2	2-Butoxyethanol	10-40 %	Xn, Xi	R20/21/22 36/38
203-473-3	107-21-1	1,2-Ethandiole	2-10 %	Xn	R22

3. Hazards identification

Classification
Symbols : Harmful, Irritant
R-phrases :
Harmful by inhalation, in contact with skin and if swallowed.
Irritating to eyes and skin.

Explication of special hazards for human health and environment
Within expanded foam respiration is not possible, danger of suffocation!

4. First aid measures

General information
Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use.

After inhalation
In case of shortness of breath, give oxygen. Keep under medical supervision for at least 48 hours. Show this safety data sheet to the doctor in attendance. No artificial aspiration mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus.

After contact with skin
Wash off with warm water.

After contact with eyes
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion
Remove from exposure, lie down. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). No artificial aspiration mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus.

5. Fire-fighting measures

Suitable extinguishing media
The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media that must not be used for safety reasons
None known.

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases
None known.

Special protective equipment for firefighters
No special technical protective measures required.

Additional information
No special protective measures against fire required

6. Accidental release measures

Personal precautions
Use personal protective equipment. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Environmental precautions
Dam up. Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up/taking up
Wipe up with absorbent material (e.g. cloth, fleece). Take up mechanically and collect in suitable container for disposal.

7. Handling and storage

7.1 Handling

Advice on safe handling
Use working solution immediately - Do not store. Never mix concentrates directly. Never return unused material to storage receptacle

Advice on protection against fire and explosion
No special handling advice required

7.2 Storage

Requirements for storage rooms and vessels
Store at room temperature in the original container. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

Further information on storage conditions
Keep container tightly closed.

8. Exposure controls/personal protection

8.1 Exposure limit values

Exposure limits (EH40)

Components CAS No.	Exposure limit ml/m³	mg/m³	F/ml	Category	Origin
2-Butoxyethanol (butyl cellosolve)					
111-76-2	25	-		TWA (8 h)	OES
	50	-		STEL (15 min)	OES
Ethylene glycol (ethane-1,2-diol) (vapour)					
107-21-1	-	52		TWA (8 h)	OES
	-	104		STEL (15 min)	OES

BAT-parameters (TRGS 903)

Bezeichnung CAS-Nr.	Parameter	BAT-Wert	Unters.-material	Proben.-zeitpunkt
2-Butoxyethanol				
111-76-2	Butoxyessigsäure	100 mg/l	U	c

8.2 Exposure controls

Protective and hygiene measures
Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Keep away from food, drink and animal feeding stuffs. When using do not eat or drink.

Respiratory protection
not required under normal use. May be harmful by inhalation (after often repeated exposure).

Hand protection
impervious gloves

Eye protection
safety glasses with side-shields

Body protection
Avoid contact with skin.

9. Physical and chemical properties

9.1 Appearance

Form: liquid
Colour: light red
Odour: slightly soapy

9.2 Important health, safety and environmental information

			Test method
pH Value (at 20 °C)	6,5-8		
Changes in the physical state			
Boiling point:	>100	°C	
Stock point	-15	°C	
Flash point:	no data available	°C	DIN 51758
Flammability			
Density: (at 20 °C)	1,04-1,045	g/cm³	
Water solubility: (at 20 °C)	completely miscible	g/l	
(at 20 °C)			
(at 20 °C)			
Flow time:	no data available		

9.3 Other information

Autoignition temperature

10. Stability and reactivity

Materials to avoid
strong oxidising agents strong acids and strong bases

Hazardous decomposition products
No decomposition if stored and applied as directed.

11. Toxicological information

Acute toxicity
None known.

Specific effects in experiment on an animal
None known.

Irritancy and corrosiveness
The liquid splashed in the eyes may cause irritation and reversible damage.

Sensitising effect
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Subacute, subchronic and prolonged toxicity
Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Carcinogenity, mutagenicity and reproductive toxicity
None known.

Additional information on tests
No persistent or cumulative effects were observed.

Empirical data on effects on humans
Ingestion may cause irritation to mucous membranes. May cause eye or skin irritation with susceptible persons.

12. Ecological information

Ecotoxicity
Acute fish toxicity = 48h, LC50=35.500mg/ltr (Leuciscus idus; DIN 38412, Tl. 15)
Toxicity to algae, 72h, EC50=20.000mg/ltr (Scenedemus subspicatus; EN 28692)
Daphnia, 24h, EC50=12.500mg/ltr (DIN 38412, Tl. 11)

Persistence and degradability
Chemical oxygen demand (COD) 9.933mg O2/ltr (3% sln.)
Biochemical oxygen demand within 5 days (BOD5) = 8.115mg O2/ltr (3% sln.)

Bioaccumulative potential
Does not bioaccumulate. Ecological injuries are not known or expected under normal use.

Other adverse effects
slightly water contaminating

Additional information
Waste water from subsequent processing should be given appropriate treatment in line with regulations of local sewerage undertaking or the NRA.

13. Advice on disposal

Dispose
If recycling is not practicable, dispose of in compliance with the Environmental Protection (Duty of Care) Regulations 1991. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
The following Waste Codes are only suggestions: 07 06 99

14. Transport information

14.1 Land transport (ADR/RID)

Warnings plate :

Description of the goods:
Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

14.2 Inland waterways transport

Description of the goods
Not dangerous goods

14.3 Marine transport

Description of the goods
Not dangerous goods

14.4 Air transport

Description of the goods
Not dangerous goods

14.5 Further Information

15. Regulatory information

15.1 Labelling

Indication of danger
Xn - Harmful

Labelling according to EC-guidelines
Classification according to European directive on classification of hazardous preparations 1999/45/EC.

R phrases
20/21/22-36/38
Harmful by inhalation, in contact with skin and if swallowed.
Irritating to eyes and skin.

S phrases
36/37
Wear suitable protective clothing and gloves.

Additional information
Classification according to European directive on classification of hazardous preparations 1999/45/EC. Safety datasheet avaliable on request for professionasl users.

15.2 National regulations

Water contaminating class: 1 - slightly water contaminating

16. Other information

List of relevant R phrases

22	Harmful if swallowed.
20/21/22	Harmful by inhalation, in contact with skin and if swallowed.
36/38	Irritating to eyes and skin.

Other data
The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singulary responsible for adhering to existing laws and regulations.