

Safety Data Sheet

complying with Regulation 1907/2006/EC (REACH Regulation), EU
2015/830 and Regulation No 1272/2008/EC (CLP)

Printing date 29.09.2015

Version number 1

Revision: 08.07.2015

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

1.1 Product identifier

Trade name: EUROCELL® F

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

No further relevant information available.

Application of the substance / the mixture:

Used mainly as raw material for the manufacturing of foamed thermal insulation and for an extensive range of cushioning and insulation packaging. The finished goods are produced with a molding process combined with the use of steam.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Ravago Petrokimya Uretim A.S.

Address: Akse Mah. Fevzi Cakmak Cad. No:130 Cayirova / KOCAELI – TURKEY

Tel: +90(262) 672 10 50

Fax: +90(262) 672 10 51

e-mail: info@eastchem.com.tr

1.4 Emergency telephone number:



Emergency telephone number: 112

Emergency telephone number (Ravago Petrokimya Uretim A.S.): +90(232) 621 50 85

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation EC No 1272/2008 CLP:

The product is not classified according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation EC No 1272/2008 CLP: Void

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.

P243 Take precautionary measures against static discharge.

P273 Avoid release to the environment.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

Additional information:

EUH018 In use may form flammable/explosive vapour-air mixture.

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2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

3194-55-6	1,2,5,6,9,10- hexabromocyclododecane
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vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description:

Polystyrene (CAS N° 9003-53-6), containing pentane isomers as blowing agent and a brominated flame retardant.

Ingredients:

CAS: 109-66-0 EINECS: 203-692-4 Index number: 601-006-00-1 Reg.nr.: 01-2119459286-30-XXXX	pentane ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H336	2.5-<10%
CAS: 78-78-4 EINECS: 201-142-8 Index number: 601-006-00-1 Reg.nr.: 01-2119475602-38-XXXX	isopentane ⚠ Flam. Liq. 1, H224; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H336	0.1-≤2.5%
CAS: 3194-55-6 EINECS: 221-695-9 Index number: 602-109-00-4 Reg.nr.: 01-2119539454-36-XXXX	1,2,5,6,9,10- hexabromocyclododecane PBT ⚠ Repr. 2, H361-H362; ⚠ Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100)	0.1-≤2.5%

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

No special measures required.

Take affected persons out into the fresh air.

After inhalation:

Symptom: vertigo, dizziness, headache, incoordination

Take affected persons into fresh air and keep quiet.

In case of unconsciousness place patient stably in side position for transportation.

Seek medical treatment in case of complaints.

After skin contact: Symptom: Irritation

After eye contact:

Symptom: Irritation

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Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Seek immediate medical advice.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media**Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures.

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbon dioxide (CO₂)

5.3 Advice for firefighters**Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

Keep people at a distance and upwind.

Keep away from ignition sources.

6.2 Environmental precautions:

Solidified product may clog drains and sewers.

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special precautions are necessary if used correctly.

Before unloading, ventilate transport equipment by allowing it to stand for at least 30 minutes with the doors open.

Information about fire - and explosion protection:



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store in a cool location.

Prevent any seepage into the ground.

Information about storage in one common storage facility:

Store away from flammable substances.

Further information about storage conditions:

Store only outside or in explosion proof rooms.

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

109-66-0 pentane

WEL (Great Britain)	Long-term value: 1800 mg/m ³ , 600 ppm
IOELV (EU)	Long-term value: 3000 mg/m ³ , 1000 ppm

78-78-4 isopentane

WEL (Great Britain)	Long-term value: 1800 mg/m ³ , 600 ppm
IOELV (EU)	Long-term value: 3000 mg/m ³ , 1000 ppm

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

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Protection of hands:


Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Eye protection:


Safety glasses

Body protection:


Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance:

Form:	Solid
Colour:	White
Odour:	Characteristic
Odour threshold:	Not determined

pH value:	Not applicable
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	36 °C

Flash point:	<-50 °C (Pentane)
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Flammability (solid, gaseous):	Not determined
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Auto-ignition temperature:	285 °C (Pentane)
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Decomposition temperature:	Not determined
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard. In use, may form flammable/explosive vapour-air mixture.
Explosion limits:	
Lower:	1.3 Vol % (Pentane)
Upper:	7.8 Vol % (Pentane)
Vapour pressure:	Not applicable
Density:	
Bulk density at 20 °C:	600 kg/m ³
Relative density at 20 °C	1020-1050 kg/m ³
Vapour density	2.5 (air=1) (Pentane)
Evaporation rate	Not applicable
Solubility in / Miscibility with	
water:	Insoluble
ketones:	Fully miscible.
aromatic hydrocarbons:	Fully miscible.
halogenated solvents	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined
Viscosity:	
Dynamic:	Not applicable
Kinematic:	Not applicable
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be avoided

No decomposition if used and stored according to specifications.

Stable at environment temperature.

10.3 Possibility of hazardous reactions

Danger of polymerisation.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

Release rate of pentane increases with temperature. Beads expand with rapid evolution of pentane at 70-75 °C. The product decomposes above 200 °C

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Bromine compounds
Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Primary irritant effect:

Skin corrosion/irritation It may cause irritation

Serious eye damage/irritation It may cause irritation

Respiratory or skin sensitisation No sensitising effects known.

Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

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

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

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

STOT-single exposure Based on available data, the classification criteria are not met.

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.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

3194-55-6 1,2,5,6,9,10- hexabromocyclododecane

EC50-72h 0.052 mg/l (Skeletonema costatum)

LC50-96h >0.0068 mg/l (Rainbow Trout)

>0.0068 mg/l (Selenastrum capricornutum)

12.2 Persistence and degradability

Pentane (CAS 109-66-0):

Easily biodegradable

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous to water.

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12.5 Results of PBT and vPvB assessment

PBT:

3194-55-6	1,2,5,6,9,10- hexabromocyclododecane
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vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation


Dispose according to National Regulations.

Uncleaned packaging:
Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Disposal must be made according to official regulations.

Packaging may be reused or recycled after cleaning.

Otherwise incineration with residence time of 2 seconds above 1200 °C, wet scrubbing facilities or licensed landfill.

SECTION 14: Transport information

14.1 UN-Number

ADR, IMDG, IATA

UN2211

14.2 UN proper shipping name

ADR

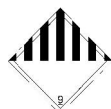
 2211 POLYMERIC BEADS, EXPANDABLE,
evolving flammable vapour

IMDG, IATA

 POLYMERIC BEADS, EXPANDABLE,
evolving flammable vapour

14.3 Transport hazard class(es)

ADR, IMDG, IATA


Class

9 Miscellaneous dangerous substances and articles.

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Label	9
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
Danger code (Kemler):	30
EMS Number:	F-A,S-I
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5 kg
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
Transport category	3
Tunnel restriction code	D/E
IMDG	
Limited quantities (LQ)	0
Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
UN "Model Regulation":	UN2211, POLYMERIC BEADS, EXPANDABLE, evolving flammable vapour, 9, III

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

No further relevant information available.

Directive 2012/18/EU**Named dangerous substances - ANNEX I** None of the ingredients is listed.

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National regulations:**Other regulations, limitations and prohibitive regulations****Substances of very high concern (SVHC) according to REACH, Article 57**

3194-55-6 | 1,2,5,6,9,10- hexabromocyclododecane

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

- H224 Extremely flammable liquid and vapour.
- H225 Highly flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H336 May cause drowsiness or dizziness.
- H361 Suspected of damaging fertility or the unborn child.
- H362 May cause harm to breast-fed children.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.

Training hints

Suitable training on safety in handling, storing and converting the product should be given to the employees based on all the existing information.

Recommended restriction of use Restricted to professional users.

Department issuing MSDS:

SUSTCHEM Engineering Ltd
REACH & Chemical Services Department
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Website: www.sustchem.gr

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
Flam. Liq. 1: Flammable liquids, Hazard Category 1

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Flam. Liq. 2: Flammable liquids, Hazard Category 2

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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