

according to 1907/2006/EC, Article 31

Printing date 09.08.2016 Revision: 29.01.2015

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

- · 1.1 Product identifier
- · Trade name: BETEK ROAD MARKING PAINT (BLACK)
- 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 Road marking paint.
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Betek Boya ve Kimya Sanayi A.S.

G.O.S.B. Tembelova Alani 3200 Sokak No:3206

41400 Gebze/ Kocaeli/ Türkiye Tel: 00 90 262 678 30 00

Fax: 00 90 262 641 21 68
murat.kucukkul@betek.com.tr

- · Further information obtainable from: R&D Department
- 1.4 Emergency telephone number: 0090 262 678 3000

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Carc. 1B H350 May cause cancer.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS02

GHS08

- · Signal word Danger
- · Hazard-determining components of labelling:

Naphtha (petroleum), hydrotreated heavy

· Hazard statements

H225 Highly flammable liquid and vapour.

H350 May cause cancer.

H304 May be fatal if swallowed and enters airways.

(Contd. on page 2)

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

09.08.2016 Revision: 29.01.2015

Trade name: BETEK ROAD MARKING PAINT (BLACK)

(Contd. of page 1)

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

Additional information:

Contains 2-butanone oxime. May produce an allergic reaction.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable. · **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description:

· Dangerous compone	ents:	
CAS: 64742-48-9	Naphtha (petroleum), hydrotreated heavy	10-25%
EINECS: 265-150-3	🗞 Carc. 1B, H350; Asp. Tox. 1, H304	
CAS: 78-93-3	butanone	2.5-10%
EINECS: 201-159-0	♦ Flam. Liq. 2, H225; ♦ Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 1333-86-4	Carbon black	<i>≤</i> 2.5%
EINECS: 215-609-9	♦ Self-heat. 1, H251	
CAS: 96-29-7	2-butanone oxime	≤ 2.5%
EINECS: 202-496-6	� Carc. 2, H351; � Eye Dam. 1, H318; ◆ Acute Tox. 4, H312; Skin Sens. 1, H317	

[·] 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
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · 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.

GB



according to 1907/2006/EC, Article 31

Trade name: BETEK ROAD MARKING PAINT (BLACK)

(Contd. of page 2)

Revision: 29.01.2015

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · 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.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

78-93-3 butanone

WEL Short-term value: 899 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm

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(Contd. on page 4)

SAFETY DATA SHEET according to 1907/2006/EC, Article 31 09.08.2016

Revision: 29.01.2015

name: BETEK ROAD MARKING PAINT (BLACK)

(Contd. of page 3)

1333-86-4 Carbon black

WEL Short-term value: 7 mg/m³ Long-term value: 3.5 mg/m³

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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 exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- **General Information**
- · Appearance:

Form: Fluid

Colour: According to product specification

· Odour: Characteristic

· Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.

-4 °C · Flash point:

Ignition temperature: 240 °C

Product is not selfigniting. Self-igniting:

Product is not explosive. However, formation of explosive air/vapour mixtures Danger of explosion:

are possible.

(Contd. on page 5)

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Trade name: BETEK ROAD MARKING PAINT (BLACK)

(Contd. of page 4)

Revision: 29.01.2015

	(Contd. of	page 4
Explosion limits:		
Lower:	0.6 Vol %	
Upper:	7.0 Vol %	
· Vapour pressure at 20 °C:	1 hPa	
Density at 20 °C:	1.52 g/cm^3	
· Solubility in / Miscibility with	'n	
water:	Fully miscible.	
· Solvent content:		
Solids content:	79.0 %	
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 according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values relevant for classification:

64742-48-9 Naphtha (petroleum), hydrotreated heavy

 Oral
 LD50
 >5000 mg/kg (rat)

 Dermal
 LD50
 >3000 mg/kg (rab)

- Primary irritant effect:
- on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitisation: No sensitising effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Carc. 1B

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.

(Contd. on page 6)

according to 1907/2006/EC, Article 31

name: BETEK ROAD MARKING PAINT (BLACK)

(Contd. of page 5)

Revision: 29.01.2015

· Additional ecological information:

09.08.2016

· General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

4.4.13131 1		
14.1 UN-Number ADR, IMDG, IATA	1263	
14.2 UN proper shipping name ADR IMDG, IATA	1263 PAINT, special provision 640D PAINT	
14.3 Transport hazard class(es)		
ADR		
Class	3 (F1) Flammable liquids.	
Label	3	
IMDG, IATA		
Class Label	3 Flammable liquids. 3	
14.4 Packing group		
ADR, IMDG, IATA	II	
14.5 Environmental hazards:		
Marine pollutant:	No	
14.6 Special precautions for user Danger code (Kemler):	Warning: Flammable liquids. 33	

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Trade name: BETEK ROAD MARKING PAINT (BLACK)

(Contd. of page 6)

Revision: 29.01.2015

• EMS Number: F-E,S-E

• 14.7 Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code Not applicable.

• UN "Model Regulation": UN1263, PAINT, 3, II

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations:

Class	Share in %
Ι	0.3
NK	6.6

• 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

H225 Highly flammable liquid and vapour.

H251 Self-heating: may catch fire.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H350 May cause cancer.

H351 Suspected of causing cancer.

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

Self-heat. 1: Self-Heating Substances and Mixtures, Hazard Category 1

Acute Tox. 4: Acute toxicity, Hazard Category 4

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Carc. 1B: Carcinogenicity, Hazard Category 1B

Carc. 2: Carcinogenicity, Hazard Category 2

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

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



according to 1907/2006/EC, Article 31

Printing date 09.08.2016 Revision: 29.01.2015

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

- · 1.1 Product identifier
- · Trade name: BETEK ROAD MARKING PAINT (WHITE)
- · 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 Road Marking Paint
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

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- · Further information obtainable from: R&D Department
- 1.4 Emergency telephone number: 0090 262 678 3000

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Repr. 2 H361d Suspected of damaging the unborn child.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS02

GHS08

- · Signal word Danger
- · Hazard-determining components of labelling:

toluene

· Hazard statements

H225 Highly flammable liquid and vapour.

H361d Suspected of damaging the unborn child.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

(Contd. on page 2)

according to 1907/2006/EC, Article 31

Trade name: BETEK ROAD MARKING PAINT (WHITE)

(Contd. of page 1)

Revision: 29.01.2015

P103 Read label before use.

09.08.2016

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Additional information:

Contains 2-butanone oxime. May produce an allergic reaction.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable. · **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- Description:

· Dangerous compone	ents:	
CAS: 7727-43-7 EINECS: 231-784-4	barium sulphate, natural	10-25%
CAS: 1332-58-7	Kaolin	10-25%
CAS: 78-93-3 EINECS: 201-159-0	butanone	2.5-10%
CAS: 108-88-3 EINECS: 203-625-9	toluene Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	2.5-10%
CAS: 64742-48-9 EINECS: 265-150-3	Naphtha (petroleum), hydrotreated heavy Carc. 1B, H350; Asp. Tox. 1, H304	≤ 2.5%
CAS: 96-29-7 EINECS: 202-496-6	2-butanone oxime Carc. 2, H351; Eye Dam. 1, H318; Acute Tox. 4, H312; Skin Sens. 1, H317	≤ 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
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- 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.

GE

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Trade name: BETEK ROAD MARKING PAINT (WHITE)

(Contd. of page 2)

Revision: 29.01.2015

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

(Contd. on page 4)



according to 1907/2006/EC, Article 31

Trade name: BETEK ROAD MARKING PAINT (WHITE)

(Contd. of page 3)

Revision: 29.01.2015

· 8.1 Control parameters

· Ingre	dients with limit values that require monitoring at the workplace:
7727-	43-7 barium sulphate, natural
WEL	Long-term value: 10* 4** mg/m³ *inhalable dust **respirable dust
1332-	58-7 Kaolin
WEL	Long-term value: 2 mg/m³
78-93	-3 butanone
	Short-term value: 899 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm Sk
108-8	8-3 toluene
	Short-term value: 384 mg/m³, 100 ppm Long-term value: 191 mg/m³, 50 ppm Sk

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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 exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

according to 1907/2006/EC, Article 31

Trade name: BETEK ROAD MARKING PAINT (WHITE)

(Contd. of page 4)

Revision: 29.01.2015

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

09.08.2016

Colour: According to product specification

· Odour: Characteristic

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 79 °C

• Flash point: -4 °C

• Ignition temperature: 514 °C

· Self-igniting: Product is not selfigniting.

• Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures

are possible.

• **Density at 20 °C:** 1.50-1.54 g/cm³

· Solubility in / Miscibility with

water: Fully miscible.

· Solvent content:

Solids content: 72-76 %

• 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 according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:

· LD/LC50	· LD/LC50 values relevant for classification:		
108-88-3 t	oluene		
Oral	LD50	5000 mg/kg (rat)	
Dermal	LD50	12124 mg/kg (rabbit)	
Inhalative	LC50/4 h	5320 mg/l (mouse)	
64742-48-	64742-48-9 Naphtha (petroleum), hydrotreated heavy		
Oral	LD50	>5000 mg/kg (rat)	
Dermal	LD50	>3000 mg/kg (rab)	

(Contd. on page 6)

SAFETY DATA SHEET according to 1907/2006/EC, Article 31

Revision: 29.01.2015

Trade name: BETEK ROAD MARKING PAINT (WHITE)

(Contd. of page 5)

- · Primary irritant effect:
- on the skin: No irritant effect.

09.08.2016

- · on the eye: No irritating effect.
- · Sensitisation: No sensitising effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Repr. 2

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

· 14.1 UN-Number	
· ADR, IMDG, IATA	1263
· 14.2 UN proper shipping name	
$\cdot ADR$	1993 FLAMMABLE LIQUID, N.O.S. (ETHYL METHY)
	KETONE (METHYL ETHYL KETONE), TOLUENE), specia
	provision 640D
· IMDG, IATA	PAINT

(Contd. on page 7)

according to 1907/2006/EC, Article 31

t<mark>ing date</mark> 09.08.2016 Revision: 29.01.2015

Trade name: BETEK ROAD MARKING PAINT (WHITE)

(Contd. of page 6)

- · 14.3 Transport hazard class(es)
- $\cdot ADR$



- · Class 3 (F1) Flammable liquids.
- · Label
- · IMDG, IATA



- · Class 3 Flammable liquids.
- · Label 3
- · 14.4 Packing group
- · ADR, IMDG, IATA
- · 14.5 Environmental hazards:
- · Marine pollutant: No
- 14.6 Special precautions for user Warning: Flammable liquids.
- Danger code (Kemler):EMS Number:F-E,S-E
- · 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)
 Transport category
 Tunnel restriction code
- · UN "Model Regulation": UN1993, FLAMMABLE LIQUID, N.O.S., 3, II

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations:

Class	Share in %
Ι	0.3
NK	17.7

· 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.

(Contd. on page 8)



according to 1907/2006/EC, Article 31

Printing date 09.08.2016 Revision: 09.08.2016

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

- · 1.1 Product identifier
- · Trade name: BETEK ROAD MARKING PAINT (YELLOW)
- · 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 Road marking paint.
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Betek Boya ve Kimya Sanayi A.S.

G.O.S.B. Tembelova Alani 3200 Sokak No:3206

41400 Gebze/ Kocaeli/ Türkiye Tel: 00 90 262 678 30 00

Fax: 00 90 262 641 21 68 murat.kucukkul@betek.com.tr

- · Further information obtainable from: R&D Department
- · 1.4 Emergency telephone number: 0090 262 678 3000

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS08 health hazard

Carc. 1B H350 May cause cancer.

Repr. 1A H360Df May damage the unborn child. Suspected of damaging fertility.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms







GHS02

GHS08

CHOO

according to 1907/2006/EC, Article 31

Printing date 09.08.2016

Trade name: BETEK ROAD MARKING PAINT (YELLOW)

(Contd. of page 1)

Revision: 09.08.2016

· Signal word Danger

Hazard-determining components of labelling:

Lead sulfochromate yellow

Naphtha (petroleum), hydrotreated heavy

· Hazard statements

H225 Highly flammable liquid and vapour.

H350 May cause cancer.

H360Df May damage the unborn child. Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways. H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Additional information:

Contains 2-butanone oxime. May produce an allergic reaction.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description:

· Dangerous compone		1
	Lead sulfochromate yellow	10-25%
EINECS: 215-693-7	Carc. 2, H351; Repr. 1A, H360Df; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	
CAS: 64742-48-9	Naphtha (petroleum), hydrotreated heavy	10-25%
EINECS: 265-150-3	🕸 Carc. 1B, H350; Asp. Tox. 1, H304	
CAS: 78-93-3	butanone	2.5-10%
EINECS: 201-159-0	♦ Flam. Liq. 2, H225; ♦ Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 96-29-7	2-butanone oxime	≤ 2.5%
EINECS: 202-496-6	� Carc. 2, H351; � Eye Dam. 1, H318; � Acute Tox. 4, H312; Skin Sens. 1, H317	

·SVHC

1344-37-2 Lead sulfochromate yellow

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

GF

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Trade name: BETEK ROAD MARKING PAINT (YELLOW)

(Contd. of page 2)

Revision: 09.08.2016

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- 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, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

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

Do not allow to enter sewers/surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.

(Contd. on page 4)

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Trade name: BETEK ROAD MARKING PAINT (YELLOW)

(Contd. of page 3)

Revision: 09.08.2016

· Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

1344-37-2 Lead sulfochromate yellow

WEL Long-term value: 0.05 mg/m³ as Cr; Carc, Sen

70.03.3.1

78-93-3 butanone

WEL Short-term value: 899 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm

Sk

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Protection of hands:



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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 exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 5)

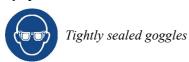
according to 1907/2006/EC, Article 31

Trade name: BETEK ROAD MARKING PAINT (YELLOW)

(Contd. of page 4)

Revision: 09.08.2016

· Eye protection:



09.08.2016

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid

Colour: According to product specification

· Odour: Characteristic

Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.

· Flash point: -4 °C

• Ignition temperature: 240 °C

• Self-igniting: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures

are possible.

· Explosion limits:

 Lower:
 0.6 Vol %

 Upper:
 7.0 Vol %

· Vapour pressure at 20 °C: 1 hPa

• **Density at 20 °C:** 1.61 g/cm³

· Solubility in / Miscibility with

water: Fully miscible.

· Solvent content:

Solids content: 76.0 %

• 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 according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

GB



according to 1907/2006/EC, Article 31

rinting date 09.08.2016 Revision: 09.08.2016

Trade name: BETEK ROAD MARKING PAINT (YELLOW)

(Contd. of page 5)

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity:

1344-37-2 Lead sulfochromate yellow

Oral | LD50 | >10000 mg/kg (rat)

64742-48-9 Naphtha (petroleum), hydrotreated heavy

 Oral
 LD50
 >5000 mg/kg (rat)

 Dermal
 LD50
 >3000 mg/kg (rab)

- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- Sensitisation: No sensitising effects known.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Carc. 1B, Repr. 1A

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

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

Danger to drinking water if even small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 7)

according to 1907/2006/EC, Article 31

09.08.2016 Revision: 09.08.2016

name: BETEK ROAD MARKING PAINT (YELLOW)

(Contd. of page 6)

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14.1 UN-Number ADR, IMDG, IATA	1263
14.2 UN proper shipping name ADR IMDG, IATA	1263 PAINT, special provision 640D PAINT
14.3 Transport hazard class(es)	
ADR	
Class Label	3 (F1) Flammable liquids.
Class	3 Flammable liquids.
Label	3 Transmatic riquitus.
Class Label	3 Flammable liquids. 3
14.4 Packing group	
ADR, IMDG, IATA	II
14.5 Environmental hazards: Marine pollutant:	Product contains environmentally hazardous substances: Le sulfochromate yellow No Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)
14.6 Special precautions for user Danger code (Kemler): EMS Number:	Warning: Flammable liquids. 33 F-E,S-E

(Contd. on page 8)

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

rade name: BETEK ROAD MARKING PAINT (YELLOW)

(Contd. of page 7)

Revision: 09.08.2016

· UN "Model Regulation":

UN1263, PAINT, 3, II

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations:

Class	Share in %
Ι	0.4
II	15.0
NK	7.4

- · Other regulations, limitations and prohibitive regulations
- · Substances of very high concern (SVHC) according to REACH, Article 57

1344-37-2 Lead sulfochromate yellow

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

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H350 May cause cancer.

H351 Suspected of causing cancer.

H360Df May damage the unborn child. Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

Acute Tox. 4: Acute toxicity, Hazard Category 4

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

(Contd. on page 9)

09.08.2016

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

name: BETEK ROAD MARKING PAINT (YELLOW)

(Contd. of page 8)

Revision: 09.08.2016

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Carc. 1B: Carcinogenicity, Hazard Category 1B

Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 1A: Reproductive toxicity, Hazard Category 1A

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2 Asp. Tox. 1: Aspiration hazard, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, 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

09.08.2016 name: BETEK ROAD MARKING PAINT (WHITE)

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

(Contd. of page 7)

Revision: 29.01.2015

· Relevant phrases

- H225 Highly flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H350 May cause cancer.
- H351 Suspected of causing cancer.
- H361d Suspected of damaging the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

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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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Carc. 1B: Carcinogenicity, Hazard Category 1B

Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

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