

This form has been prepared according to regulation (EC) No 453/2010 and regulation on Material Safety Data Sheet related to Hazardous Substances and Mixtures (R.G. 13.12.2014-29204).

**PERMOLİT PERMO YOL ÇİZGİ BOYASI / PERMOLIT PERMO ROAD MARKING PAINT**

Preparation Date : 01.12.2012  
Form No : GBF 04.050

Revision Date : 01.01.2018  
Revision No : 4

**1. Identification of the Substance/Mixture and of the Company/Undertaking****1.1. Product identifier**

Permolit Permolit Permo Road Marking Paint

**1.2. Relevant identified uses of the mixture and uses advised against**

Solvent-based, cold traffic marking paint

**1.3. Details of the supplier of the safety data sheet**

Name : Akçalı Boya ve Kimya San. Tic. A.Ş.  
Address : Osmangazi M. Mareşal Fevzi Çakmak C. No:5 Esenyurt – İstanbul / Türkiye  
Tel / Fax : +90 0212 886 23 43 (Pbx) / +90 0212 886 18 11  
Contact e-mail : zekir.senol@akcaliboya.com.tr

**1.4. Emergency telephone number**

Emergency telephone number : +90 212 886 23 43  
National Toxic Consultation Center : 114 (UZEM)

**2. Hazards Identification****2.1. Classification of the substance/mixture**

Classification according to regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures and Turkish regulation R.G. 11.12.2013-No: 28848 (repeating):

GHS02  
Flammable Liquid 2 H225 Highly flammable liquid and vapour.

GHS07  
Skin Irritation 2 H315 Causes skin irritation  
STOT SE 3 H336 May cause drowsiness or dizziness

GHS08  
Aspiration Toxicity 1 H304 May be fatal if swallowed and enters airways  
Reproductive Toxicity 2 H361d Suspected of damaging the unborn child  
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure

**2.2. Label elements**

Signal Word : Danger  
Pictograms : GHS02, GHS08, GHS07



**MATERIAL SAFETY DATA SHEET**

This form has been prepared according to regulation (EC) No 453/2010 and regulation on Material Safety Data Sheet related to Hazardous Substances and Mixtures (R.G. 13.12.2014-29204).

**PERMOLİT PERMO YOL ÇİZGİ BOYASI / PERMOLIT PERMO ROAD MARKING PAINT**

Preparation Date : 01.12.2012  
Form No : GBF 04.050

Revision Date : 01.01.2018  
Revision No : 4

**Hazard Statements**

H225 : Highly flammable liquid and vapour  
H304 : May be fatal if swallowed and enters airways  
H315 : Causes skin irritation  
H336 : May cause drowsiness or dizziness  
H361d : Suspected of damaging the unborn child  
H373 : May cause damage to organs through prolonged or repeated exposure  
EUH208 : Contains 2-butanone oxime (Cas No: 96-29-7). May produce an allergic reaction.

**Precautionary Statements**

P210 : Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.  
P271 : Use only outdoors or in a well-ventilated area.  
P280 : Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P302+P352 : IF ON SKIN: Wash with plenty of soap and water.  
P304+P340 : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P403+P233 : Store in a well-ventilated place. Keep container tightly closed.  
P501 : Dispose of contents/container through licensed companies.

Hazardous components requiring labelling: Toluene (Cas No: 108-88-3).

**2.3. Other hazards**

It has not been classified to according to PBT and vPvB.

**3. Composition/Information on the Ingredients**
**3.2. Mixture**

Ingredient name	EC No	CAS No	%	Classification (EC 1272/2008)
Toluene	203-625-9	108-88-3	10-20	GHS02; Flam.Liq.2-H225 GHS08; Repr.2-H361d*** Asp Tox 1-H304 STOT RE 2*-H373** GHS07; Skin Irrit.2-H315 STOT SE 3-H336
Xylene	215-535-7	1330-20-7	<10	GHS02; Flam.Liq.2-H226 GHS07; Skin.Irrit.2-H315 Acute Tox.4*-H332 Acute Tox.4*-H312
Butyl Glycol	203-905-0	111-76-2	<3	GHS07;Acute Tox.4*-H332 Acute Tox.4*-H312 Acute Tox.4*-H302 Eye Irrit.2-H319 Skin Irrit.2-H315

This form has been prepared according to regulation (EC) No 453/2010 and regulation on Material Safety Data Sheet related to Hazardous Substances and Mixtures (R.G. 13.12.2014-29204).

**PERMOLİT PERMO YOL ÇİZGİ BOYASI / PERMOLIT PERMO ROAD MARKING PAINT**

Preparation Date : 01.12.2012  
Form No : GBF 04.050

Revision Date : 01.01.2018  
Revision No : 4

Methyl ethyl ketone	201-159-0	78-93-3	<3	GHS02; Flam.Liq. 2-H225 GHS07; Eye Irrit.2-H319 STOT SE 3-H336 EUH066
2-butanone oxime	202-496-6	96-29-7	<0,8	GHS08; Carc. 2-H351 GHS05; Eye Dam. 1-H318 GHS07; Acute Tox. 4*-H312 Skin Sens. 1-H317

\*For the explanation of the listed hazard statements refer to Section 16.

**4. First Aid Measures**
**4.1 Description of first aid measures**

Inhalation : Remove to fresh air. In case of persistent complaints obtain medical attention.

Ingestion : Do not induce vomiting. Immediately obtain medical attention.

Skin contact : Remove contaminated clothing. Clean the skin with water, soap and special cleaning cream.

Eye contact : Flush eye with copious quantities of water. If irritation occurs, obtain medical attention.

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

Other information is not available.

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

Other information is not available.

**5. Firefighting Measures**

The product contains flammable solvents.

**5.1 Extinguishing media**

Suitable extinguishing media : Dry chemical powder, foam, CO<sub>2</sub>, inert absorbent sand, waterfog.

Unsuitable extinguishing media : Never response to fire with pressured water. Water causes to fire releasing. Only water can be used for cooling the environment.

**5.2 Special hazards arising from the substance or mixture**

If fire starts, toxic fumes may be released, so not breathe the fume

**5.3 Advice for firefighters**

Wear suitable protective clothes, boots, gloves, eye and face protective, self-contained breathing apparatus. Keep adjacent containers cool by spraying with water, immediately remove from the fire place.

**6. Accidental Release Measures**
**6.1 Personal precautions, protective equipment and emergency procedures**

If leak and spilt occurs, ventilate the environment sufficiently, wear personal protective equipment. Remove ignition sources and do not smoke. Be carefully, because solvents which product include can be collected close to ground and pit. It is heavy from air.

**6.2 Environmental precautions**

Keep away from drains, surface and ground water and soil.

**6.3 Methods and material for containment and cleaning up**

Use sand, sawdust or inert absorbent material to limit product leakage. Transfer the leaky material to

This form has been prepared according to regulation (EC) No 453/2010 and regulation on Material Safety Data Sheet related to Hazardous Substances and Mixtures (R.G. 13.12.2014-29204).

**PERMOLİT PERMO YOL ÇİZGİ BOYASI / PERMOLIT PERMO ROAD MARKING PAINT**

Preparation Date : 01.12.2012  
Form No : GBF 04.050

Revision Date : 01.01.2018  
Revision No : 4

suitable containers for safe disposal. Soak up with an appropriate absorbent material and put it in a closed container for safe disposal in accordance with current legislation (Section 13).

**6.4 Reference to other sections**

Responding to accident place, wear personal protective equipment in Section 8 and dispose of waste in accordance with procedure in Section 13.

**7. Handling and Storage**
**7.1 Precautions for safe handling**

Use only in well-ventilated areas. Do not breath vapour or spray. Take measure against static electricity. Keep ignition sources away and do not smoke. Avoid eye and skin contact.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in closed package at ambient temperature, in a well ventilated shady cool place. Keep ignition sources away and do not smoke.

**7.3 Specific end use(s)**

Use by looking product label.

**8. Exposure Controls/Personal Protection**
**8.1 Control parameters**

Indicative occupational exposure limit values:

Ingredient name	TWA-8 hours		STEL-15 minutes		Notation
Toluene (Cas No:108-88-3)	192 mg/m <sup>3</sup>	50 ppm	384 mg/m <sup>3</sup>	100 ppm	Skin
Xylene (Cas No: 1330-20-7)	221 mg/m <sup>3</sup>	50 ppm	442 mg/m <sup>3</sup>	100 ppm	Skin
Butyl glycol (Cas No: 11-76-2)	98 mg/m <sup>3</sup>	20 ppm	246 mg/m <sup>3</sup>	50 ppm	Skin
Methyl ethyl ketone (Cas No: 78-93-3)	600 mg/m <sup>3</sup>	200 ppm	900 mg/m <sup>3</sup>	300 ppm	-

**8.2 Exposure controls**

Provide sufficient ventilation. Do not breathe vapours or aerosols. Do not eat, drink or smoke at work.

Personal protective equipment

Respiratory protection : Use A1 type organic solvent mask. Provide ventilation in working area.

Hand protection : Wear solvent resistant nitril gloves with CE marking. Wash your hands after pulling off gloves.

Eye protection : Use solvent resistant eyewear with CE marking, designed to protect against splash of liquids.

Skin protection : Not require special clothes. Take off working-clothes after usage.

**9. Physical and Chemical Properties**
**9.1 Information on basic physical and chemical properties**

Appearance : Liquid

Colour : White and Yellow

Odour : Special characteristic odour

Viscosity : 90 ± 5 KU (25°C)

Density : White 1,58 ± 0,10 gr/cm<sup>3</sup> (25°C)  
Yellow 1,53 ± 0,10 gr/cm<sup>3</sup> (25°C)

This form has been prepared according to regulation (EC) No 453/2010 and regulation on Material Safety Data Sheet related to Hazardous Substances and Mixtures (R.G. 13.12.2014-29204).

**PERMOLİT PERMO YOL ÇİZGİ BOYASI / PERMOLIT PERMO ROAD MARKING PAINT**

Preparation Date	: 01.12.2012	Revision Date	: 01.01.2018
Form No	: GBF 04.050	Revision No	: 4

Solid	: 74 ± 2 (120°C 30 min)
pH	: Not applicable
Flash point	: >6°C
Self igniting	: Product is not self igniting
Boiling point	: 109°C
Melting point	: Not determined
Solubility	: Insoluble in water. Soluble organic solvent (aromatic solvent, ester)

**9.2 Other information**

Other information is not available.

**10. Stability and Reactivity**

<b>10.1 Reactivity</b>	: Under normal conditions, product does not react.
<b>10.2 Chemical stability</b>	: Stable under normal conditions of storage and use.
<b>10.3 Possibility of hazardous reactions</b>	: Not expected under normal conditions of storage and use.
<b>10.4 Conditions to avoid</b>	: Avoid overheating and all kinds of ignition sources.
<b>10.5 Incompatible materials</b>	: Avoid strong acids, bases, oxidizing materials to prevent heat dependent reactions,
<b>10.6 Hazardous decomposition products</b>	: In case of thermal decomposition and fire, toxic gases or vapours may occur.

**11. Toxicological Information**
**11.1 Information on toxicological effects**

No toxicity data are available for the product.

Ingestion	: May cause nausea, vomiting and diarrhoea.
Inhalation of vapour	: May cause headache, dizziness, fatigue, muscle pain.
Skin contact	: Concentration in excess of the stated occupational exposure limit may cause skin irritation.
Eye contact	: At liquid state or spray may cause irritation eyes.

Toxicological effects of ingredients of product:

Ingredient name	Acute toxicity
Toluene (Cas No:108-88-3)	LD 50 rat: >5580 mg/kg, acute oral toxicity LC 50 rat: 12500-28800 mg/m <sup>3</sup> , 4 hours, acute inhalation toxicity LD 50 rabbit: 12196 mg/kg, acute dermal toxicity
Xylene (Cas No: 1330-20-7)	LC 50 rat: 5000 ppm, 4 hours, acute inhalation toxicity, gas LC 50 rat: 6350 ppm, 4 hours, acute inhalation toxicity, vapor LD 50 rabbit: > 2000 mg/kg, rabbit, acute dermal toxicity LD 50 rat: 4300 mg/kg, acute oral toxicity
2-butanone oxime (Cas No: 96-29-7)	LD 50 rat: 20mg/l, 4 hours, acute inhalation toxicity LD 50 rat: 930 mg/kg, acute oral toxicity Eyes, rabbit: severe irritation

**12. Ecological Information**

No ecotoxicity data are available for the product.

<b>12.1 Toxicity</b>	: No available data
<b>12.2 Persistence and degradability</b>	: No available data
<b>12.3 Bioaccumulative potential</b>	: No bioaccumulative potential for product
<b>12.4 Mobility in soil</b>	: No mobility

**MATERIAL SAFETY DATA SHEET**

Page No : 6 / 7

This form has been prepared according to regulation (EC) No 453/2010 and regulation on Material Safety Data Sheet related to Hazardous Substances and Mixtures (R.G. 13.12.2014-29204).

**PERMOLİT PERMO YOL ÇİZGİ BOYASI / PERMOLIT PERMO ROAD MARKING PAINT**

Preparation Date : 01.12.2012  
Form No : GBF 04.050

Revision Date : 01.01.2018  
Revision No : 4

**12.5 Results of PBT and vPvB assessment** : No available data

**12.6 Other adverse effects** : No available data

**13. Disposal Considerations**

Disposal of waste/surplus and contaminated packaging should be carried out in accordance with applicable regional, national and local laws and regulations. According to Turkish regulation of Waste Management (R.G. 02.04.2015 No: 29314), waste codes:

Waste paint and varnish : 080111  
Contaminated package : 150110  
Contaminated waste : 150202

**13.1 Waste treatment methods**

Do not allow product to reach sewage system.  
Wastes should be sent to licensed recycling facility.

**14. Transport Information**

	<b>ADR</b>	<b>IMDG</b>	<b>IATA/ICAO</b>
<b>14.1 UN number</b>	: 1263	1263	1263
<b>14.2 UN proper shipping name</b>	: Paint	Paint	Paint
<b>14.3 Transport hazard class(es)</b>	: 3 (Flam. Liq.)	3 (Flam. Liq.)	3 (Flam. Liq.)
Class code	: F1		
<b>14.4 Packing group</b>	: II	II	II
<b>14.5 Environmental hazards</b>	: Not applicable		
<b>14.6 Special precautions for user</b>	: Not applicable		
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:</b>	Not applicable		

**15. Regulatory Information**

The product has been classified and marked according to Globally Harmonized System (GHS).

Regulation EC No 1272/2008 of the European Parliament and of the Council 16 December 2008 on Classification, Labelling and Packaging of Substances and Mixtures and Turkish Regulation about Classification, Labelling and Packaging of Substances and Mixtures-R.G. 11.12.2013-No: 28848 (repeating),

Regulation (EC) No 453/2010 and regulation on Material Safety Data Sheet related to Hazardous Substances and Mixtures (R.G. 13.12.2014-29204),

This form has been prepared according to regulations above.

Indicative occupational exposure limit values have been written in accordance with Directive 98/24/EC and Turkish regulation Health and Safety Precautions on Working with Chemical Material 12.08.2013-28733 and suppliers.

**16. Other Information**

Revision has been carried out due to change in section 2 and 3.

Explanation of the hazard and precautionary statements according to (EC) No 1272/2008 and Turkish regulation R.G. 11.12.2013-No: 28848 (repeating):

This form has been prepared according to regulation (EC) No 453/2010 and regulation on Material Safety Data Sheet related to Hazardous Substances and Mixtures (R.G. 13.12.2014-29204).

**PERMOLİT PERMO YOL ÇİZGİ BOYASI / PERMOLIT PERMO ROAD MARKING PAINT**

Preparation Date : 01.12.2012  
Form No : GBF 04.050

Revision Date : 01.01.2018  
Revision No : 4

**Hazard Statements**

H225 : Highly flammable liquid and vapour  
H226 : Flammable liquid and vapour  
H302 : Harmful if swallowed  
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  
H332 : Harmful if inhaled  
H336 : May cause drowsiness or dizziness  
H351 : Suspected of causing cancer  
H361d: Suspected of damaging the unborn child  
H373 : May cause damage to organs through prolonged or repeated exposure  
EUH066: Repeated exposure may cause skin dryness or cracking

Name-surname : Zekir ŞENOL  
MSDS certificate no : GBF – 1904  
Document date : 13.04.2015

**Not** : The data given here is based on our current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. However, it shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.