

SAFETY DATA SHEET

According to Regulation (EC) No 2015/830

Date Prepared: 06.08.2019
Form No: SDS201908060431

Product Name: **BOYDUR®MARKER 564**

1.PRODUCT AND COMPANY IDENTIFICATION

Product Name : BOYDUR®MARKER 564

Chemical Family : MMA based paint.

Identified Use : Two component MMA based road marking paint.

Uses advised against : Uses other than those identified are not recommended.

Details of the manufacturer and supplier of the safety data sheet :

Company name: Boytorun Kimya Sanayi A.Ş.

Address : İ.E.T.T. Sitesi,3. Blok, D:1, Emirgan/İstanbul /TÜRKİYE

Factory address : Maslak mahallesi, Dereboyu 2. Cad. Zağra İş Merkezi 14A Maslak- Sarıyer/
İstanbul/TÜRKİYE

Contact Person : Sadun Boytorun

Email: sadun@boytorun.com

Telephone no : +90 212 229 18 29-34 **Fax no :** +90 212 229 18 59

Emergency telephone number : +90 542 437 90 05

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture :

Classification according to Regulation (EC) No 1272/2008 (CLP):

Flam. Liq. 2; H225

GHS02



Skin Irrit. 2;H315

Eye Irrit.2;H319

Skin Sens. 1; H317

STOT SE 3;H335

GHS07



Hazard Statements (H):

H225 : Highly flammable liquid and vapour.

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.

H319 : Causes serious eye irritation.

H335 : May cause respiratory irritation.

Precautionary Statements:

P102 : Keep out of reach of children.

P210 : Keep away from heat/sparks/open flames/hot surfaces.No smoking.

P233 : Keep container tightly closed.

P243 : Take precautionary measures against static discharge.

P260 : Do not breathe dust/fume/gas/mist/vapours/spray.

SAFETY DATA SHEET

According to Regulation (EC) No 2015/830

Date Prepared: 06.08.2019
Form No: SDS201908060431

Product Name: **BOYDUR® MARKER 564**

P262 : Do not get in eyes, on skin, or on clothing.
P280 : Wear protective gloves, eye and face protection.
P305/351/338 IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337/P313 If eye irritation persists: Get medical advice/attention.
P302 /352 IF ON SKIN : Wash with plenty of soap and water.
P333/P313 If skin irritation or rash occurs: Get medical advice/attention.
P304/P340 IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 : Call a POISON CENTER/doctor if you feel unwell.
P403 : Store in a well-ventilated place.
P501 : Dispose of contents/container in accordance with local regulations.

Physical hazards : Highly flammable.

Human Health : Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. May cause respiratory irritation.

Environment : Not classified.

Label Elements :

Label In Accordance With (EC) No. 1272/2008

GHS Pictogram code : GHS02. GHS07.

Signal Word : Danger.

Hazard-determining components of labelling : Methyl methacrylate.

See hazard pictograms, H and P statements above.

Other Hazards : None.

This product does not contain any PBT or vPvB substances.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture: consisting of the following components (Chemical Analysis) :

Components	Cons. % w/w	EC no	CAS no	Classification according to Regulation(EC) No. 1272/2008 [CLP]
Acrylic Polymer	10-40	-	-	-
Methyl methacrylate	5-20	201-297-1	80-62-6	Flam. Liq. 2;H225 STOT SE 3;H335 Skin Irrit. 2;H315 Eye Irrit. 2;H319 Skin Sens.1;H317
Glass,oxide,chemicals	10-40	266-046-0	65997-17-3	
Calcium Carbonate (CaCO ₃) Calcite	10-40	207-439-9	471-34-1	-

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According to Regulation (EC) No 2015/830

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Composition Comments : The data shown are in accordance with the latest EC Directives.

4. FIRST AID MEASURES

Description of first aid measures :

General information: Remove affected persons from hazardous area. Take off all contaminated clothes.

Inhalation: Remove to fresh air. If rapid recovery does not occur, get medical attention.

Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention.

Skin contact: Wash skin thoroughly with water. Get medical attention if irritation persists.

Ingestion: Get medical attention immediately . Do not induce vomiting. Rinse mouth with plenty of water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed :

Acute Effects:

Eyes : May cause severe eye irritation or damage. Symptoms include eye burns, redness, swelling and watering eyes.

Skin : Causes skin irritation, may cause an allergic skin reaction.

Ingestion: Causes irritation of the mouth, gullet and gastrointestinal tract if swallowed. Symptoms include nausea, vomiting and diarrhea.

Inhalation : Inhalation of high vapour concentrations may cause central nervous system depression resulting in dizziness, light-headedness, headache, coughing ,nausea , shortness of breath and loss of coordination.

Chronic Effects : May effect central nervous system causing respiratory tract irritation and narcotic effects.

Indication of any immediate medical attention and special treatment needed : Eyes, skin or respiratory system irritation or damage, skin allergy.

Notes to physician : Beta metazone dosing aerosol spray after inhalation of chemical, Paraffin oil.

5. FIRE FIGHTING MEASURES

Specific Hazards: Highly flammable liquid. Keep away from all sources of ignition. Airborne mixtures can be explosive. Do not spray water into the leak source.

Extinguishing Media: Dry chemical, carbon dioxide or foam is recommended..

Unsuitable Extinguishing Media : Water jet.

Unusual Fire and Explosion Hazards: In case of fire carbon and metal oxides, aldehydes, ketones, acetaldehyde, formaldehyde, acrolein and various hydrocarbons can be released.

Advice for fire-fighters : Wear self-contained respiratory protective device. Wear fully protective suit.

SAFETY DATA SHEET

According to Regulation (EC) No 2015/830

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Form No: SDS201908060431

Product Name: **BOYDUR® MARKER 564**

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Wear protective clothing as described in section 8 of this safety data sheet. Remove all possible sources of ignition. Do not operate electrical equipment. Take precautionary measures against static discharge. Shut off leaks, if possible without personal risks. Provide good ventilation. Avoid eyes and skin contact. Do not breathe gases or vapours.

Methods and material for containment and cleaning up : Immediate cleanup of any spill is recommended. Build dike far ahead of spill for containment and later recovery or disposal of spilled material. Absorb spill with inert material such as sand or vermiculite and place in suitable container for disposal. If spilled on water, remove with appropriate equipment like skimmers, booms or absorbents. In case of soil contamination, remove contaminated soil for remediation or disposal in accordance with applicable regulations. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment.

Environmental precautions : Prevent entry into sewers, basements or confined areas. Spillages or uncontrolled discharges into watercourses must be alerted to the Environmental Agency or other appropriate regulatory body.

7. HANDLING AND STORAGE

Usage : Do not expose to heat and flame.

Precautions for safe Handling: : Extremely flammable. May vaporize easily at ambient temperatures. Use away from heat, sparks, open flame or any other ignition sources. Take precautionary measures against electrostatic discharges. Provide good ventilation. Avoid eyes and skin contact. Observe good chemical hygiene practices. Do not eat, drink or smoke during use. Avoid inhalation. Provide eyewash stations.

Conditions for Safe Storage, including any incompatibilities: Store away from food and beverages. Store in a cool, dry, well ventilated area under 25°C. Keep tightly closed in original container. Store and use away from heat, sparks, open flame or any other ignition sources. Do not eat, drink or smoke in the storage area. Keep away from incompatibles such as oxidizing agents, combustible materials, acids and alkalis. The maximum storage period is 6 months.

Specific end use(s) : The identified uses for this product are detailed in Section 1.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits :

Methyl methacrylate	TLV/TWA : 50 ml/m ³ = 208 mg/m ³
	TLV/STEL : 100 ml/m ³ = 416 mg/m ³
	DNEL : 208 mg/m ³ (inhalation-worker)
	DNEL : 13.67 mg/kg/gün (dermal-worker)
	PNEC : 0.94 mg/l (freshwater)
Calcite (CaCO₃)	PNEC : 0.94 mg/l (marine water)
	TWA : 10 mg/m ³

SAFETY DATA SHEET

According to Regulation (EC) No 2015/830

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Form No: SDS201908060431

Product Name: **BOYDUR® MARKER 564**

Exposure controls :

Engineering measures : The usual precautionary measures are to be adhered to when handling chemicals. Provide good ventilation. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Do not eat, drink or smoke while working. Avoid contact with the eyes and the skin. Provide eyewash stations or safety showers in working area. Remove all possible sources of ignition. Take precautionary measures against electrostatic discharges.

Personal Protection :

Eye Protection: Safety glasses or face shields.

Hands Protection : Protective PVC, rubber or neopren gloves.

Skin and Body Protection: Protective work clothing.

Respiratory Protection : Use NIOSH approved respiratory mask or device.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Viscous liquid.

Package Weight : 25 kg

Odour : Characteristic.

pH (20°C) : 5.5

Flash Point : 10°C.

Drying Time (20°C): 1 hour

Covering power: 99 %

Storage Stability : 8 points

Vomiting Resistance: 0.01 beta

Viscosity (25°C) : Not determined.

Relative density (25°C): 1.8 g/cm³.

Brightness Factor: 0.92 beta

Alkaline Resistance : No deterioration on film surface.

UV Aging: Suitable

Drying Time (20°C): 1 hour

Brightness Factor: Beta 0.61

Minimum application ambient temperature: -5°C

Humidity Sensitivity: Yes

Chromatic coordinates: x: 0.323, y: 0.340

Solubility : Not soluble in water.

10. STABILITY AND REACTIVITY DATA

Chemical Stability : Stable under prescribed storage and normal use conditions.

Extremely flammable liquid and vapor.

Reactivity : Closed systems can initiate strong exothermic polymerization. Avoid uncontrolled polymerization.

Possibility of hazardous reactions : No information required.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame), high heat and direct sunlight.

SAFETY DATA SHEET

According to Regulation (EC) No 2015/830

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Form No: SDS201908060431

Product Name: **BOYDUR® MARKER 564**

Incompatibility :

Materials to avoid : The product polymerizes upon contact with radical forming agents such as peroxide, azo compounds, heavy metal compounds and solutions. Keep away from strong acids, alkalis and oxidizing agents.

Hazardous Decomposition or By Products: Carbon and metal oxides, aldehydes, ketones, acetaldehyde, formaldehyde, acrolein and various hydrocarbons.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure : Exposure may occur via inhalation, ingestion, skin or eye contact.

Acute toxicity : No classification for toxicity.

Inhalation : Inhalation of high vapour concentrations may cause central nervous system depression resulting in dizziness, light-headedness, headache, coughing ,nausea , shortness of breath and loss of coordination.

Ingestion : Causes irritation of the mouth, gullet and gastrointestinal tract if swallowed. Symptoms include nausea, vomiting and diarrhea.

Eye contact : May cause severe eye irritation or damage. Symptoms include eye burns, redness, swelling and watering eyes.

Skin contact : Irritant, may be allergic for sensitive skins.

Sensitization : May cause an allergic skin reaction.

Chronic Toxicity : May effect central nervous system causing respiratory tract irritation and narcotic effects.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction) : None.

Specific target organ toxicity – single exposure :

STOT – Single exposure : May cause respiratory irritation.

Specific target organ toxicity – repeated exposure :

STOT – Repeated exposure : None.

Aspiration Toxicity: None.

LD₅₀ oral rat (Methyl methacrylate) : 7872 mg/kg

LD₅₀ dermal rabbit (Methyl methacrylate) : 9400 mg/kg

LC₅₀ inhalation rat (Methyl methacrylate) : 29.5 mg/l/4 h

ATE_{mix} oral : > 2000 mg/kg

ATE_{mix} dermal : > 2000 mg/kg

ATE_{mix} inhalation : > 20 mg/L/4 h

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12. ECOLOGICAL INFORMATION

Ecotoxicity : Not classified.

Air pollution causes a bad odor. Methyl methacrylate odor threshold: 0.5, up to 5 mg /m³
Avoid releasing into the environment.

LC₅₀ (Methyl methacrylate): 350 mg/L/48 h (Fish)

EC₅₀ (Methyl methacrylate): 100 mg/L/48 h (Pseudomonos putida)

Toxicity : No data available.

Persistence and degradability : Not easily degradable.

Methyl methacrylate degradation (28 days) = 33.7 %.

Bioaccumulative potential : No data available. Not expected.

Mobility in soil : No data available.

Results of PBT and vPvB assessment : This product does not contain any PBT or vPvB substances.

Other adverse effects : No information required.

13. DISPOSAL CONSIDERATIONS

General information : This product is hazardous waste.

Waste treatment methods : Dispose according to federal, state and local official regulations. Avoid releasing to the environment.

14. TRANSPORT INFORMATION

General Classification (IMDG, IATA/ICAO, ADR/RID/DOT):

UN No : 1247.

Proper Shipping Name : UN 1247 METHYL METHACRYLATE MONOMER, STABILIZED.

Class : 3

Packing Group: II

Transport label : 3.2

Tunnel Code : D/E

EmS Code: F-E,S-D

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable.

Environmental Hazards :

Environmentally hazardous substance/Marine pollutant : No.

15. REGULATORY INFORMATION

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

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EU Legislation :

Regulation (EC) No 2015/830 of the European Parliament and of the Council of 28 March 2015 on Classification, Labelling and Packaging of substances and mixtures (CLP) and amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Approved Code of Practice :

Safety Data Sheets for Substances and Preparations.
Classification and Labelling of Substances and Preparations Dangerous for Supply.

Chemical Safety Assessment :

No chemical safety assessment has not been carried out.

The regulatory information is not intended to be comprehensive. Other local regulations may apply to this material.

16. OTHER INFORMATION

This Safety Data Sheet (SDS) has been fully issued according to the CLP and REACH regulations based on the information received from the product owner.

Safety Data Sheet Issued By : Chemical Engineer Birgul Ankaralı (info@gbfhazirlama.com)

Date Issued : 06.08.2019

Contact Person : Sadun Boytorun : sadun@boytorun.com

Hazard(H) Statements in Article 3 :

H225 : Highly flammable liquid and vapour.

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.

H319 : Causes serious eye irritation.

H335 : May cause respiratory irritation.

The information in this MSDS was obtained from sources we believe are reliable. However, it is provided without any representation or warranty, expressed or implied, regarding accuracy or correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.
