ROADCHEM
RESİN BOYA VE MAKİNA

MATERIAL SAFETY DATA SHEET

Product Name: DIAMOND

Revision Date: 20.08.2024
Revision No: MSDS-DIAMOND-01

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING	
1.1. Identification of substance or preparation	
Name	ROADCHEM - DIAMOND
Product Code	RDC–9116–25
Class	One Component Acrylic Based Cold Road Marking Paint
1.2. Company / undertaking identification	
Registered company name	ROADCHEM RESİN BOYA VE MAKİNA LTD. ŞTİ.
Address	Ata Mahallesi Tralles Bulvarı No:6Aj Efeler-AYDIN / TURKIYE
Telephone	+90 256 502 55 09
Emergency phone number	+90 533 133 07 01

2. HAZARDS IDENTIFICATION	
2.1. Classification of material or mixture	
Flam. Liq. 2 H225	Highly flammable liquid and vapour.
Asp. Tox. 1 H304	May be fatal if swallowed and enters airways.
Skin Irrit. 2 H315	Causes skin irritation.
Eye Dam. 1 H318	Causes serious eye damage
STOT SE 3 H335	May cause respiratory irritation
STOT SE 3 H336	May cause drowsiness or dizziness.
Repr. 2 H361d	Suspected of damaging the unborn child.
STOT SE 2 H373	May cause damage to organs through prolonged or repeated exposure through prolonged or repeated exposure
Aquatic Chronic 3 H412	Harmful to aquatic life with long lasting effects.
Labeling:	
Warning Word:	**DANGEROUS**
Hazard Statements:	
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory 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 through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
Precautionary Statements:	

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/…
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P403	Store in a well-ventilated place.
P501	Dispose of contents/container to[… in accordance with local/regional/national/international regulation
Dangerous goods	Methyl Methacrylate, Toluene, Ethyl acetate

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Hazardous substances present on their own:

Name	CAS	EC	Symbols	H* Phrases	%
Methyl Methacrylate	80-62-6	201-297-1	Flam. Liq. 2 Skin Irrit. 2 STOT SE 2 STOT SE 3	H225 H315 H317 H335	15 <= X % < 30
Toluene	108-88-3	203-625-9	Flam. Liq. 2 Repr. 2 Asp. Tox. 1 STOT RE 2 * Skin Irrit. 2 STOT SE 3 Aquatic Chronic 3	H225 H361d H304 H373 ** H315 H336 H412	10 <= X % < 25
Ethyl acetate	141-78-6	205-500-4	Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336 EUH066	2,5 <= X % < 10

4. FIRST AID MEASURES

As a general rule, in case of doubt or symptoms persist, always call a doctor.

Never induce swallowing in an unconscious person.

In the event of exposure by inhalation:

If a large quantity is inhaled, move patient into the fresh air and keep him/her warm and still.

If the person is unconscious, place in the recovery position and call an ambulance.

In the event of splashes or contact with eyes:

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

Refer the patient to an ophthalmologist, in particular if there is any redness, pain or visual impairment.

In the event of splashes or contact with skin:

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognized cleaner.

DO NOT use solvent or thinners.

In the event of swallowing:

In the event of swallowing, if the amount is small (no more than one mouthful)rinse the mouth with water and consult a doctor.

Keep still. DO NOT induce vomiting.

If swallowed accidentally, call a doctor to assess the need for monitoring and subsequent treatment in hospital. Show him the label.

5. FIRE – FIGHTING MEASURES

Chemical powders, carbondioxide and other extinguishing gas are suitable for small firs.

Suitable extinguishing media:

Special foams for polar liquid (known as alcohol resistant), powders, carbon dioxide

In the event of fire, use specifically suitable extinguishing agent.

Extinguishing media which must not be used for safety reasons:

Water is not generally recommended since it can be ineffective; however, it can be used successfully to cool containers exposed to fire and to disperse fumes.

A fire often produces a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

Prevent an effluent of fire – fighting measures from entering drains or waterways.

Special protective equipment for fire fighters:

Fire-fighting personal are to be equipped with autonomous insulating breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions:

On account of the organic solvents contained in the preparation eliminate the sources of ignition and ventilate premises.

Avoid inhaling the vapors.

Consult the safety measures listed under headings 7 and 8.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

6.2. Environmental precautions:

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material entering drains or waterways.

Use drums to dispose of waste recovered in accordance with applicable regulations (see heading 13).

If the product contaminates waterways, rivers or drains alert the relevant authorities in accordance with statutory procedures.

6.3. Methods for cleaning up:

Clean preferably with a detergent, do not use solvents.

7. HANDLING AND STORAGE

The regulations relating to storage premises apply to workshops where the product is handled.
Avoid exposure to pregnant women and warn women of child-bearing age of possible risks.

Handling:

Handle in well-ventilated areas.

The vapors are denser than air. They can spread along the ground and form explosive mixture with air.
Prevent the formation of flammable or explosive concentrations higher than the occupational exposure limits.
Fire prevention:

Prevent the accumulation of electrostatic charges with connections to earth.
The preparation may become electrostatically charged; always place on the ground during transfer. Wear antistatic shoes, clothes and make floors of conductive materials.
Use the product in premises where there are no naked flames or other sources of ignition, and there is protected electrical equipment.
Keep packages tightly and away from sources of heat, sparks and naked flames.
Do not use tools which may produce sparks. Do not smoke.
Prevent access by unauthorized personnel.
Recommended equipment and procedure:
For personal safety see section 8.
Observe precautions stated on label and also industrial safety regulations.
Avoid inhaling solvent vapors and spray-gun aerosols.
Avoid exposure – obtain special instructions before use.
Packages which have been opened must be reclosed carefully and stored in an upright position.
Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.
In all cases, recover emissions at source.
Provide vapor extraction at the emission source and also general ventilation of the premises.
Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.
Where the personnel must carry out work in a booth, whether for spraying or otherwise, the ventilation may be inadequate to control particles and solvent vapors in every case.
It is therefore recommended that personnel wear masks with a compressed air supply during spraying operations until the concentration of particles and solvent vapors has fallen below the exposure limits.
Prohibited equipment and procedure:
Smoking, eating and drinking are prohibited in premises where the preparation is used.
Never open the packages under pressure.
Storage:
Keep the container tightly closed in a dry, well-ventilated place.
Keep away from all sources of ignition, heat and direct sunlight – do not smoke.
The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Related to the workplace limit values that require monitoring components;

Toluene	
PEL (USA)	Short time: C 300; 500* ppm Long time: 200 ppm *10-min peak per 8-hr shift
REL (USA)	Short time: 560 mg/m³, 150 ppm Long time: 375 mg/m³, 100 ppm

TLV (USA)	75 mg/m³, 20 ppm NIC-BEI
Ethyl Acetate	
PEL (USA)	The legal allowable exposure limit by air, Average of 400 ppm in an 8 hour shift.

Methyl Methacrylate	
AU OEL	TWA 50 ppm
AU OEL	STEL 100 ppm
Engineering controls:	
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.	
Personel Protective Equipment:	
Eyes	Goggles with side pieces
Hand	Appropriate protective gloves
Skin	Appropriate protective clothes
Masks	A respiratory protection program must be followed whenever workplace conditions warrant respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General Information	
Physical state	Viscous Liquid
9.2. Important Health, Safety and Environmental Information	
PH of the substance or preparation	Not Relevant
When a PH measure is possible, it has a value of	Not Relevant
Boiling point / boiling range	Not Specified
Flash point interval	-4 °C (theoritical)
Vapor pressure	Below 110 kPa (1.1bar)
Density	> 1
Water solubility	Insoluble
9.3. Other Information	
Melting point / melting range	Not Specified
Self-ignition temperature	Not Specified
Decomposition point / decomposition range	Not Specified

10. STABILITY AND REACTIVITY

When exposed to the high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and nitrogen oxide.

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arc, furnaces etc.) must not be allowed on the premises.

11. TOXICOLOGICAL INFORMATION	
Akut Toxicity:	
Toluene	
Oral	LD50 - 5000 mg/kg (rat)
Dermal	LD50 - 12124 mg/kg (rabbit)
Inhalation	LC50/4h - 5320 mg/l (mouse)

Ethyl Acetate	
Oral	LD50 – 4100 mg/kg (rat)
Dermal	LD 50 – 20 ml/kg (rat)
Inhalation	LC50 - 200 mg/m^3 (rat)
Methyl Methacrylate	
Oral	LD50 – 7.872 mg/kg (rat)
Dermal	LD 50 > 5.000 mg/kg (rabbit)
Inhalation	LC50/4h – 78.000 mg/l; (rat)

12. ECOLOGICAL INFORMATION	
12.1. Toxicity	
Ethyl Acetate	
Toxicity to fish:	Flow-through test LC50 - Pimephales promelas (fathead minnow) - 230 mg/l - 96 h (US-EPA)
Toxicity to algae:	Static test NOEC - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria:	Remarks: (IUCLID) (ethyl acetate)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):	Semi-static test NOEC - Daphnia magna (Water flea) - 2,4 mg/l – 21 d (OECD Test Guideline 211)
Toluene	
Toxicity to fish:	Flow-through test LC50 - Oncorhynchus kisutch (coho salmon) - 5,5 mg/l - 96 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates:	EC50 - Ceriodaphnia dubia (water flea) - 3,78 mg/l - 48 h (US-EPA)
Toxicity to bacteria:	Static test EC50 - Bacteria - 84 mg/l - 24 h Remarks: (ECHA)
Toxicity to fish (Chronic toxicity):	Flow-through test NOEC - Oncorhynchus kisutch (coho salmon) - 1,39 mg/l - 40 d Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):	NOEC - Ceriodaphnia dubia (water flea) - 0,74 mg/l - 7 d (US-EPA)
Methyl Methacrylate	

Toxicity to fish:	Flow-through test LC50 - Lepomis macrochirus (Bluegill sunfish) - 191 mg/l - 96 h Remarks: (ECHA) Static test LC50 - Lepomis macrochirus (Bluegill sunfish) - 283 mg/l - 96 h Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates:	Flow-through test NOEC Daphnia magna (Water flea) - 48 mg/l - 48 h Remarks: (ECHA) Flow-through test EC50 - Daphnia magna (Water flea) - 69 mg/l – 48 h Remarks: (ECHA)
Toxicity to algae:	Static test EC50 - Pseudokirchneriella subcapitata - > 110 mg/l – 72h

	(OECD Test Guideline 201) Static test NOEC - Pseudokirchneriella subcapitata - > 110 mg/l – 72 h (OECD Test Guideline 201)
Toxicity to fish (Chronic toxicity):	NOEC - Danio rerio (zebra fish) - 9,4 mg/l - 35 d (OECD Test Guideline 210)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):	NOEC - Daphnia magna (Water flea) - 37 mg/l - 21 d (OECD Test Guideline 211)
12.2. Persistence and degradability	
Methyl Methacrylate	
Biodegradability:	Aerobic - Exposure time 14 d Result: 94 % - Readily biodegradable. (OECD Test Guideline 301C)
Biochemical Oxygen Demand (BOD):	140 mg/g
Toluene	
Biodegradability:	Aerobic - Exposure time 20 d Result: 86 % - Readily biodegradable. Remarks: (IUCLID)
Ethyl Acetate	
Biodegradability:	Aerobic - Exposure time 20 d Result: ca.69 % - Readily biodegradable. Remarks: (ECHA)
Theoretical oxygen demand:	1.820 mg/g Remarks: (Lit.)
12.3. Bioaccumulative potential	
No data available	
12.4. Mobility in soil	
No data available	
12.5. Results of PBT and vPvB assessment	
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.	
12.6. Endocrine disrupting properties Product:	
Assessment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.	

13. DISPOSAL CONSIDERATIONS

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. TRANSPORT INFORMATION

UN:	1263 - PAINT						
ADR/RID	Class Code	Pack.Gr.	Label	Ident.	LQ	Provis.	
	3	II	3	33	LQ7	163 640 650H	
IMDG	Class Code	Pack.Gr.	LQ	EMS	Provis.		
	3	II	5L	F-E, S-E	163 223		

					944 955		
IATA	Class Code	Pack.Gr.	Pass.	Pass.	Cargo	Cargo	Not
	3	II	309	60 L	310	220 L	A3 A72
	3	II	Y309	10 L	-		

15. REGULATORY INFORMATION

The substance or mixture Safety, health and environmental legislation ;

This Safety Data Sheet is prepared for according to Dangerous Substances and Mixtures Safety Data Sheets regulation.

Labelling according to "Regulation on Classification, Packaging and Labelling of Substances and Mixtures (RG: 26.12.2008, 27092 Mük.) or/and Labelling according to "Regulation on Classification, Packaging and Labelling of Substances and Mixtures (RG: 11.12.2013, 28848 Mük.)

16. OTHER INFORMATION

Ensure all national / local regulations are observed.

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory 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 through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Prepared by person(s) who is certified according to the regulation.

contact e-posta: nezihsaglik@gmail.com

Certification number: TÜV/11.174.06

Effective date: 05.12.2022

Expirydate : 05.12.2027

This Safety Data Sheet has been established in accordance with the applicable European Directives and applies to all countries that have translated the Directives in their national laws.

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application. Changes compared to the previous version are marked before the section number!