ROADCHEM
RESİN BOYA VE MAKİNA

MATERIAL SAFETY DATA SHEET

Product Name: CRYSTAL

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

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING	
1.1. Identification of substance or preparation	
Name	ROADCHEM - CRYSTAL
Product Code	RDC-9016-25
Class	One Component Alkyd-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	
In accordance with SEA Regulation 11/12/2013 and Regulation EC 1272/2008 (CLP):	
Flam. Liq. 2 H225	Highly flammable liquid and vapour.
Asp. Tox. 1 H304	May be fatal if swallowed and enters airways.
Acute Tox. 4 H312	Harmful in contact with skin.
Skin Irrit. 2 H315	Causes skin irritation.
Eye irritation, 2 H319	Causes serious eye irritation.
STOT SE 3 H336	May cause drowsiness or dizziness.
Acute Tox. 4 H332	Harmful if inhaled.
Repr. 2 H361d	Suspected of damaging the unborn child.
Aquatic Chronic 3 H412	Harmful to aquatic life with long lasting effects.
STOT RE 2 * H373	May cause damage to organs through prolonged or repeated exposure if it is conclusively proven that no other routes of exposure cause the hazard.
Label Elements:	
In accordance with SEA Regulation 11/12/2013 and Regulation EC 1272/2008 (CLP):	
Hazard Pictograms	
Warning Word:	DANGER
Hazard Statements:	
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure if it is conclusively proven that no other routes of exposure cause the hazard.
H412	Harmful to aquatic life with long lasting effects.
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.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Hazardous substances present on their own:

Name	CAS	EC	Symbols	H* Phrases	%
Xylene	1330-20-7	215-535-7	Flam. Liq. 3 Acute Tox. 4 * Acute Tox. 4 * Skin Irrit. 2 Eye irritation, 2 Asp. Tox. 1 STOT RE 2 Aquatic Chronic 3	H226 H332 H312 H315 H319 H304 H373 H412	15 <= X % < 35
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

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

Use personal protection equipment as per Directive 89/686/EEC.

Technical measures:

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction.

Check the atmosphere periodically.

If this ventilation is insufficient to maintain the concentration of vapors below the exposure limits, wear breathing apparatus.

Exposure limit values per 2006 / 15 / EC, 2000 / 39 / CE and 98 / 24 / EC:

CAS	ppm	mg/ m³
1330-20-7	100	435
108-88-3	50	190

Respiratory protection:

Where workers encounter concentration higher than exposure limits, they must wear suitable, approved masks.

Hand protection:

Protective creams may be used for exposed skin, but they should not be applied after contact with the product.

Eye and face protection:

Use eye protectors designed to protect against liquid splashes.

Skin protection:

For further information, see section 11.

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 ºC
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)
Xylene	
Oral	LD50 > 3.523 mg/kg
Inhalation	LC50 > 27.12 mg/l
Toxic effects on human:	
May be irritating with eyes and skin contact.	

12. ECOLOGICAL INFORMATION

12.1. Toxicity	
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)
Xylene	
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)
12.2. Persistence and Degradability	
Toluene	
Biodegradability:	Aerobic - Exposure time 20 d Result: 86 % - Readily biodegradable. Remarks: (IUCLID)
Xylene	
Biodegradability:	Aerobic - Exposure time 20 d Result: ca.69 % - Readily biodegradable. Remarks: (ECHA)
12.3. Bioaccumulative Potential	
Toluene	
Bioaccumulation:	Leuciscus idus (Golden orfe) - 3 d - 0,05 mg/l(Toluene) Bioconcentration factor (BCF): 90
Xylene	
Bioaccumulation:	Oncorhynchus mykiss (rainbow trout) - 56 d at 10 °C - 1,3 mg/l(m-xylene)
Bioconcentration factor (BCF):	7,4 - 18,5 Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.
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	F1	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

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall ScienceLab.com be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if ScienceLab.com has been advised of the possibility of such damages.

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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 | Expiry Date: 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!