



MATERIAL SAFETY DATA SHEET

Artdeco Crystal Clear Epoxy Resin 1000ml

Preparation date: 29.03.2019

Version: 1

Upgrade date: -

GBF No: GBF- LISANS-0074

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

1.1 Information about item

Commercial name:

Artdeco Crystal Clear Epoxy Resin 1000ml

Artdeco Kristal ŞeffafEpoksi Reçine 1000 ml

Item no:

LV-Y-054M-01

1.3 Company/Manufacturer

Manufacturer: Lisans Kırtasiye Ofis Gereçleri San. Ve Tic. A.Ş.
Adress: Şerifali Mah. Emin Sk. No:26 34775 Y.Dudullu/ Ümraniye/ İstanbul
Telephone: +90 216 415 45 65
Faks: +90 216 420 78 05
Web Site: www.lisanskirtasiye.com

1.4 Informer of MSDS

Okan SIVAS osivas@lisanskirtasiye.com.tr

1.5 Emergency consultancy

Company emergency call: +90 216 415 45 65

Emergency call:112

National poison center:114

Fire brigade:110

2. COMPOSITION / INFORMATION ON INGREDIENTS

This product is a substance.

CAS No : 25068-38-6

Reaction Product : Bisphenol A-(epichlorhydrin)

Additional information! : >80 %

Symbol : Xi

R.Numner : R36/38 R43 N; R51/53

CAS No : Trade Secret Reaction

Product : Diluents mixture

Additional information! : <20 %

3. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

GHS09

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

GHS07

Skin Irrit. !! 2 ! H315 Causes skin irritation.

Eye Irrit. !! 2 ! H319 Causes serious eye irritation.

Skin Sens. !! 1 ! H317 May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant R36/38: Irritating to eyes and skin.

Xi; Sensitising R43: May cause sensitisation by skin contact.

N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information concerning particular hazards for human and environment:

Not applicable.

Labelling according to Regulation (EC) No 1272/2008

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



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Hazard pictograms

GHS07 GHS09

Signal word Warning

Hazard-determining components of labelling:

Reaction product: Bisphenol-A-(epichlorohydrin) epoxy resin(number average molecular weight _ 700)

Hazard statements

Causes skin irritation.

Causes serious eye irritation. May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

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

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

Store in a well-ventilated place. Keep container tightly closed.

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

Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

4. FIRST AID MEASURES

Description of first aid measures

General advice

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation

Move person to fresh air; if effects occur, consult a physician

Skin Contact Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands. Suitable emergency safety shower facility should be available in work area.

Eye Contact Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area.

Ingestion No emergency medical treatment necessary

Most important symptoms and effects, both acute and delayed Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information

Indication of immediate medical attention and special treatment needed No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing agents

CO₂, powder or water spray. Fight larger fires with water spray.

For safety reasons unsuitable extinguishing agents



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Water with full jet
Special hazards arising from the substance or mixture
Formation of toxic gases is possible during heating or in case of fire.
Advice for firefighters
Protective equipment:
Wear self-contained respiratory protective device.

6. ACCIDENTAL RELEASE MEASURES

Leak And Spill Procedure

Remove sources of ignition immediately. Ventilate area. Contain large spill. Using suitable protective equipment and non sparking tools scoop up material or absorb in suitable inert material such as sand or vermiculate. Dispose as a hazardous waste in suitable containers. Notify the appropriate authorities immediately.

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away

Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.
Prevent seepage into sewage system, workpits and cellars.
Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Clean the affected area carefully; suitable cleaners are:
Warm water
Dispose of the material collected according to regulations.

7. HANDLING AND STORAGE

Handling Procedures

Keep out of reach of children. For industrial use only. Avoid ingestion, inhalation of vapours and contact with skin, eyes and clothing. Clean soiled clothing before reuse. Reduce exposure with suitable protective equipment. Precautions apply also to empty containers

Storage

Store in upright, tightly sealed, suitable containers in a cool, dry area away from all ignition sources.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

None established

Personal Protection

Eye/Face Protection

Use safety glasses (with side shields).

Skin Protection

Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Hand protection

Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Ethyl vinyl alcohol laminate ("EVAL"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Neoprene. Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Respiratory Protection

Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.



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Ingestion

Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls

Ventilation

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Form (Atmosphere temperature)	Liquid
Color	Ligt Yellow
Odour	Mild

9.2 Important Health, Safety and Environment Information

pH(20°C)	Not available
Meting point	Undetermined
Boiling point	>260°C
Flash point	252°C
Flammability (solid, gas)	Not available
Ignition temperature	Not available
Auto ignition temperature	Not available
Decomposition temperature	Not available
Below explosion limit	Not available
Danger of explosion	Product does not present an explosion hazard.
Vapour pressure at 77°C	0,03 hPa
Density (at 20°C)	1,16 g/cm ³
Solubility in water	Insoluble
Dispersion multiplier n-oktanol/ water	Not available
Dynamic Viscosity	Not available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under recommended storage conditions. See Storage, Section 7.

10.3 Possibility of hazardous reactions

Polymerization will not occur by itself. Masses of more than one pound (0.5 kg) of product plus an aliphatic amine will cause irreversible polymerization with considerable heat build-up

10.4 Conditions to Avoid

Avoid short term exposures to temperatures above 300 °C (572 °F). Avoid prolonged exposure to temperatures above 250 °C (482 °F). Potentially violent decomposition can occur above 350 °C (662 °F). Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid

10.5 In compatible materials



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Avoid contact with oxidizing materials. Avoid contact with: Acids. Bases. Avoid unintended contact with amines.

10.6 Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition. Uncontrolled exothermic reaction of epoxy resins release phenolics, carbon monoxide, and water.

11. TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity

LD/LC50 values relevant for classification: 25068-38-6 Reaction product: Bisphenol-A-(epichlorohydrin)
Oral LD50 >5000 mg/kg (rat) Dermal LD50 20000 mg/kg (rabbit)

11.2 Irritation

Skin contact : Irritant to skin and mucous membranes
Eye contact: Irritating effect.

11.3 Sensitivity

May cause sensitisation by skin contact

12. ECOLOGICAL INFORMATION

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Fish Acute & Prolonged Toxicity LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 h: 2 mg/l

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Aquatic Invertebrate Acute Toxicity

EC50, Daphnia magna (Water flea), static test, 48 h, immobilization: 1.8 mg/l

Aquatic Plant Toxicity

ErC50, Scenedesmus capricornutum (fresh water algae), static test, Growth rate inhibition, 72 h: 11 mg/l

Toxicity to Micro-organisms

IC50; Bacteria, 18 h: > 42.6 mg/l

Aquatic Invertebrates Chronic Toxicity Value

Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, NOEC: 0.3 mg/l

Persistence and Degradability

Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

Theoretical Oxygen Demand: 2.35 mg/mg

Bioaccumulative potential

Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 - 3000 or Log Pow between 3 and 5).

Partition coefficient, n-octanol/water (log Pow): 3.242 Estimated.

Mobility in soil

Mobility in soil: Potential for mobility in soil is low (Koc between 500 and 2000)., Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

Partition coefficient, soil organic carbon/water (Koc): 1,800 - 4,400 Estimated.

Henry's Law Constant (H): 4.93E-05 Pa*m³/mole.; 25 °C



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13. DISPOSAL INFORMATION

13.1 Product disposal Suggestion

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. TRANSPORTATION INFORMATION

UN-Number

ADR, IMDG, IATA : 3082

UN proper shipping name

ADR : 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)

IMDG, IATA

: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)

Transport hazard class(es)

ADR, IMDG, IATA

Class

: 9 Miscellaneous dangerous substances and articles.

Label

: 9

Packing group

ADR, IMDG, IATA

: III

Environmental hazards

Marine pollutant!

: Yes

Special precautions for user

: Warning: Miscellaneous dangerous substances and articles.

Danger code (Kemler)

: 90

EMS Number

: F-A,S-F

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

: Not applicable.

Transport/Additional information

ADR

Tunnel restriction code

: E

15. REGULATORY INFORMATION

Chemical safety assessment! : A Chemical Safety Assessment has not been carried out



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16. OTHER INFORMATION

It is the user's responsibility to verify the accuracy and suitability of the above information for all possible uses, foreseen and unforeseen.

RID : Reglement internationale concernent 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 Organization
ICAO-TI : Technical Instructions by the "International Civil Aviation Organization" (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
DOT : US Department of Transportation
IATA : International Air Transport Association
EINECS!! : European Inventory of Existing Commercial Chemical Substances
CAS : Chemical Abstracts Service (division of the American Chemical Society)
FPA : National Fire Protection Association (USA)
HMIS : Hazardous Materials Identification System (USA) LC50! ! : Lethal concentration, 50 percent
D50 : Lethal dose, 50 percent

16.2.1 Contact info

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