

1. Identification of the Substance or Preparation and the Company:

- **Product Name:** CRAY GLUE 81-10
- **Product Description / Use:** one component Synthetic Rubber based Adhesive:
- **Company Identification:**

FOCUS AIR CONDITIONING LLC
AL QUOZ, DUBAI
United Arab Emirates
Tel : 0434035516 / Fax 043405540
- **Emergency Telephone Number:**

2. Composition / Data on Ingredients:

COMPONENTS	CAS No.	EINECS	PERCENT	PHRASES
Toluene	108-88-3	203-625-9	40-60	R11-38-48/20-63-65-67 S2-36/37-62
Synthetic Rubber	9003-55-8		20-30	S3-9-20
Petroleum Resin	64742-16-1		10-30	S3-15-16
Dichloromethane	75-09-2	200-838-9	20-30	R22-38-41-45 S1-3-7-9-15-16-23-24/25
Xylene	108-38-3	203-576-3	2-10	R10-20/21-38 S2-25

3. Hazards Identification:

- **Information pertaining to particular dangers for man and environment:**
Extremely Flammable.
Can cause eye irritation.
Can cause skin irritation.
Moderate Respiratory tract irritant.
Harmful if swallowed.
Inhalation of vapors may cause loss of feeling and weakness in the hands and feet and loss of manual dexterity. Inhalation of high concentrations may results in central nervous system effects such as dizziness, weakness, fatigue, nausea, headache, and lack of coordination.

4. First Aid Measures:

- **Inhalation:**
Move to fresh air. Restore breathing, if necessary. Call a physician if symptoms persist.
- **Skin contact:**
Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

- **Eye contact:**
Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.
- **Swallowing:**
Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Do not give anything by mouth to an unconscious person. Induce vomiting as a last measure. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis that may be fatal.

5. Fire Fighting Measures:

- **Media suitable for extinguishing:**
Use water spray, foam, dry chemical or carbon dioxide.
- **Special exposure hazards arising from the substance or preparation itself, its combustion product, or released gases:**
In the event of fire the following can be released: Carbon Monoxide (CO) and Carbon Dioxide (CO₂).
- **Special protective equipment for firefighters:**
Wear self-contained breathing apparatus and protective suit.
- **Further information:**
In the event of fire, vapor are heavier than air and can travel to a source of ignition and flash back. Vapor may form explosive mixture with air.

6. Accidental Release Measures:

- **Personal precautions:**
Wear personal protective equipment; Ensure adequate ventilation.
- **Environment precautions:**
Do not discharge into drains / surface water / groundwater.
- **Methods for cleaning up:**
Soak up with inert absorbent material (e.g. sand, sawdust). Collect spilled materials in suitable containers and dispose of according to Section 13.

7. Handling and Storage:

- **Handling:**
Mildly irritating material. Avoid unnecessary exposure. Keep away from heat, sparks and flame. Wash thoroughly after handling. Keep container closed.
Emptied container retains vapor and product residue. Observe precautions until container is cleaned.
Drum of this material should be grounded when pouring.
Do not cut or weld on or near this container.
- **Safe handling advise:**
Avoid contact with skin and eyes.

- **Storage:**

Store in a cool, dry, ventilated location. Keep away from heat, sparks, flame and other sources of ignition. Keep container closed.

8. Controls / Personal Protection:

- **Occupational exposure controls:**

Avoid contact with skin and eyes. Do not breathe vapors. Avoid repeated exposure. Wear suitable protective equipment. Hold eye wash fountain available. Hold emergency shower available. Remove soiled or soaked clothing immediately. Clean skin thoroughly after work.

At work do not eat, drink, smoke or take drugs. Keep away from food, drink and animal feeding stuffs. Keep and wash working clothes separately.

- **Hand protection:** Latex gloves.

- **Eye protection:** Safety goggles.

- **Skin and body protection:** Clothing as usual in the chemical industry.

9. Physical and Chemical Properties:

- **General information:**

Appearance : liquid
 Color : Green/Yellowish/Amber Red
 Odor : solvent

- **Important health safety and environmental information:**

Flash Point : <10°C
 Auto Ignition Temperature : not establish
 Vapor Pressure : not establish
 Vapor Density : not establish
 Specific Gravity : 0.88 – 0.94
 Viscosity : 3000 - 4500 Cps (Brookfield RVT-DVII: Spindle 3/20 rpm/25°C)
 Solid (%) : 24-28
 Boiling Point (°C) : not establish
 Freezing/Melting Point (°C) : not establish
 Evaporation Rate : not establish

10. Stability and Reactivity:

- **Condition to avoid :** stable under normal condition

- **Material to avoid :** keep away from heat sources

- **Hazardous decomposition products:** upon combustion Carbon Monoxide and Carbon Dioxide are formed

11. Toxicological Information:
CHEMICAL NAME LD50/LC50

Toluene, (rat) Acute oral toxicity (LD50) : 5000 mg/kg

Acute toxicity of the gas (LC50) : 5320 mg/li (4hr)

Dichloromethane, (rat) LD50 : 1600 mg/kg
LC50 : 52000 mg/li (1hr)
Xylene, (rat) LD50 : 5000 mg/kg

12. Ecological Information:

- **Eco-toxicity:** No data available.
- **Mobility:** No data available
- **Persistence / Degradability:** No data available.
- **Bio-accumulative potential:** No data available.
- **Other adverse effects:** No data available.

13. Disposal Considerations:

- **Product (Recommendation):**
This product meets the definition of hazardous waste. It is ignitable waste class D001.
Disposal via incineration is recommended. Dispose of in manner consistent with federal and local regulations.
Land Disposal restrictions : Toluene
- **Used packaging (Recommendation):**
Wash empty packaging. They can be reuse after thorough and proper cleaning.
- **Cleaning agent (Recommendation):**
Solvent

14. Transport Information:

- **Dangerous Goods Class** : 3
- **Proper Shipping Name** : Adhesive, containing flammable liquid
- **Packing Group** : III
- **Hazchem Code** : 3 [Y]
- **EPG No** : 3C1
- **UN No.** : 1133

15. Other Information:

- **Disclaimer of expressed and implied warranties:**
The information in this MSDS is believed to be correct as of the date issued. Star Adhesives makes No warranties, expressed or implied, including, but not limited to, any implied warranty of merchantability of fitness for a particular purpose or course of performance or usage of trade. User is responsible for determining whether the Star Adhesive product is fit for a particular purpose and suitable for user's method of use or application.