

# SAFETY DATA SHEET

## 1. IDENTIFICATION

### A. Product name

- ACRYL THINNER-029K

### B. Recommended use and restriction on use

- General use : ACRYL THINNER
- Restriction on use : Do not use except for purpose

### C. Supplier information

- Company name : KCC Corporation
- Address : 764, Gwahak-ro, Bongdong-eup, Wanju\_Gun, Jeollabuk-do
- Emergency telephone number : 82-63-260-7000

## 2. HAZARD IDENTIFICATION

### A. GHS Classification

- Acute toxicity (oral) : Category5
- Acute toxicity (inhalation: vapor) : Category5
- Skin corrosion/irritation : Category2
- Serious eye damage/irritation : Category2A
- Germ cell mutagenicity : Category1B
- Carcinogenicity : Category1B
- Reproductive toxicity : Category1B
- Specific target organ toxicity(Single exposure) : Category1
- Specific target organ toxicity(Single exposure) : Category2
- Specific target organ toxicity(Single exposure) : Category3(Narcotic effects)
- Specific target organ toxicity(Single exposure) : Category3(Respiratory tract irritation)
- Specific target organ toxicity(Repeated exposure) : Category1
- Aspiration hazard : Category1
- Acute aquatic toxicity : Category2
- Chronic aquatic toxicity : Category2

### B. GHS label elements

#### ○ Hazard symbols



#### ○ Signal words

- Danger

#### ○ Hazard statements

- H303 May harmful if swallowed.
- H304 May be fatal if swallowed and enters airways
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H333 May be harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness and dizziness.
- H340 May cause genetic defects
- H350 May cause cancer
- H360 May damage fertility or the unborn child
- H370 Causes damage to organs(Refer Section SDS 11)
- H371 May cause damage to organs (Refer Section SDS 11)
- H372 Causes damage to organs through prolonged or repeated exposure (Refer Section SDS 11)

- H401 Toxic to aquatic organisms.
- H411 Toxic to aquatic life with long lasting effects

o **Precautionary statements**

**1) Prevention**

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe gas/mist/vapours/spray.
- P261 Avoid breathing gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P281 Use personal protective equipment as required.

**2) Response**

- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P304+P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P307+P311 If exposed: Call a POISON CENTER or doctor/physician.
- P308+P313 If exposed or concerned: Get medical advice/attention.
- P309+P311 If exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P314 Get medical advice/attention if you feel unwell.
- P321 Specific treatment
- P331 Do NOT induce vomiting.
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P362 Take off contaminated clothing and wash before reuse.
- P391 Collect spillage.

**3) Storage**

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.

**4) Disposal**

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation

**C. Other hazards which do not result in classification : (NFPA Classification)**

o **NFPA grade (0 ~ 4 level)**

- Health : 2, Flammability : 0, Reactivity : 0

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	Trade names and Synonyms	CAS No.	Content(%)
Xylene	Dimethylbenzene	1330-20-7	70 ~ 80
Toluene	Methylbenzene	108-88-3	10 ~ 20
Ethylbenzene	Benzene, ethyl-	100-41-4	10 ~ 20
Solvent naphtha (petroleum), light arom.	Naphtha	64742-95-6	1 ~ 10

**4. FIRST AID MEASURES**

**A. Eye contact**

- Do not rub your eyes.

- Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.
- Get medical attention immediately.
- Go to the hospital immediately if symptoms (flare, irritate) occur.
- Remove contact lenses if worn.

#### **B. Skin contact**

- Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Laundering enough contaminated clothing before reuse.
- Get medical attention immediately.
- Go to the hospital immediately if symptoms (flare, irritate) occur.
- Remove contaminated clothing, shoes and isolate.
- Wash thoroughly after handling.
- Wear gloves when washing the patient, and please avoid contact with contaminated clothing.

#### **C. Inhalation contact**

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.
- Get medical attention immediately.
- If breathing is stopped or irregular, give artificial respiration and supply oxygen.

#### **D. Ingestion contact**

- About whether I should induce vomiting Take the advice of a doctor.
- Rinse your mouth with water immediately.
- Get medical attention immediately.
- If swallowed, large amounts of water to drink and do not induce vomiting.

#### **E. Delayed and immediate effects and also chronic effects from short and long term exposure**

- Not available

#### **F. Notes to physician**

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.
- If exposed or concerned, get medical attention/advice.

### **5. FIREFIGHTING MEASURES**

#### **A. Suitable (Unsuitable) extinguishing media**

- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray
- Avoid use of water jet for extinguishing

#### **B. Specific hazards arising from the chemical**

- Not available

#### **C. Special protective actions for firefighters**

- Keep unauthorized personnel out.
- Notify your local fire station and inform the location of the fire and characteristics hazard.
- Using a unattended and water devices in case of large fire and leave alone to burn if you do not imperative.
- Avoid inhalation of materials or combustion by-products.
- Do not access if the tank on fire.
- Keep containers cool with water spray.
- Vapor or gas is burned at distant ignition sources can be spread quickly.

## 6. ACCIDENTAL RELEASE MEASURES

### A. Personal precautions, protective equipment and emergency procedures

- Wear proper personal protective apparatus as indicated in Section 8 and avoid skin contact and inhalation.
- Ventilate closed spaces before entering.
- Must work against the wind, let the upwind people to evacuate.
- Handling the damaged containers or spilled material after wearing protective equipment.
- Do not direct water at spill or source of leak.
- Avoid skin contact and inhalation.
- Cleanup and disposal under expert supervision is advised.
- Keep unauthorized people away, isolate hazard area and deny entry.

### B. Environmental precautions

- Prevent runoff and contact with waterways, drains or sewers.
- If large amounts have been spilled, inform the relevant authorities.

### C. Methods and materials for containment and cleaning up

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notification to central government, local government. When emissions at least of the standard amount
- Dispose of waste in accordance with local regulation.
- Appropriate container for disposal of spilled material collected.
- Small leak: sand or other non-combustible material, please let use absorption.
- Wipe off the solvent.
- Dike for later disposal.
- Prevent the influx to waterways, sewers, basements or confined spaces.
- Spilled material should be treated as a potential risk of waste collected.

## 7. HANDLING AND STORAGE

### A. Precautions for safe handling

- Wash thoroughly after handling.
- Avoid direct physical contact.
- Avoid contact with incompatible materials.
- Operators should wear antistatic footwear and clothing.
- Do not inhale the steam prolonged or repeated.
- Contaminated work clothing should not be allowed out of the workplace.

### B. Conditions for safe storage, including any incompatibilities

- Do not use damaged containers.
- Save applicable laws and regulations.
- Avoid direct sunlight.
- Keep in the original container.
- Prevent static electricity and keep away from combustible materials or heat sources.
- By specifying a storage area for carcinogenic substances.
- Collected them in sealed containers.
- Store away from water and sewer.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### A. Exposure limits

- o ACGIH TLV
  - [Xylene] : TWA 100 ppm (434 mg/m<sup>3</sup>), STEL, 150 ppm (651 mg/m<sup>3</sup>)

- [Toluene] : TWA 20 ppm (75 mg/m<sup>3</sup>)
- [Ethylbenzene] : TWA, 20 ppm (87 mg/m<sup>3</sup>)
- **OSHA PEL**
  - [Ethylbenzene]:100ppm 435mg/m<sup>3</sup>
  - [Toluene]: 200 ppm, C 300 ppm
  - [Xylene]:100ppm 435mg/m<sup>3</sup>

## B. Engineering controls

- A system of local and/or general exhaust is recommended to keep employee exposures above the Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. The use of local exhaust ventilation is recommended to control emissions near the source.

## C. Individual protection measures, such as personal protective equipment

### ○ Respiratory protection

- Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.
- Respiratory protection is ranked in order from minimum to maximum.
- Consider warning properties before use.
- Any chemical cartridge respirator with organic vapor cartridge(s).
- Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s).
- Any air-purifying respirator with a full facepiece and an organic vapor canister.
- For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

### ○ Eye protection

- Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
- Provide an emergency eye wash station and quick drench shower in the immediate work area.

### ○ Hand protection

- Wear appropriate glove.

### ○ Skin protection

- Wear appropriate clothing.

### ○ Others

- Not available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

A. Appearance	
- Appearance	Liquid
- Color	Not available
B. Odor	Solvent odor
C. Odor threshold	Not available
D. pH	Not available
E. Melting point/Freezing point	Not available
F. Initial Boiling Point/Boiling Ranges	Not available
G. Flash point	Not available
H. Evaporation rate	Not available
I. Flammability(solid, gas)	Not available
J. Upper/Lower Flammability or explosive limits	Not available
K. Vapour pressure	Not available
L. Solubility	Not available

M. Vapour density	>1
N. Specific gravity(Relative density)	Not available
O. Partition coefficient of n-octanol/water	Not available
P. Autoignition temperature	480
Q. Decomposition temperature	Not available
R. Viscosity	Not available
S. Molecular weight	Not available

## 10. STABILITY AND REACTIVITY

### A. Chemical Stability

- This material is stable under recommended storage and handling conditions.

### B. Possibility of hazardous reactions

- Hazardous Polymerization will not occur.

### C. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces

### D. Incompatible materials

- Not available

### E. Hazardous decomposition products

- May emit flammable vapour if involved in fire.

## 11. TOXICOLOGICAL INFORMATION

### A. Information on the likely routes of exposure

- (Respiratory tracts)
  - May be fatal if swallowed and enters airways
  - May cause respiratory irritation.
- (Oral)
  - May harmful if swallowed.
- (Eye·Skin)
  - Causes serious eye irritation
  - Causes skin irritation

### B. Delayed and immediate effects and also chronic effects from short and long term exposure

- Acute toxicity
  - \* Oral
    - [Xylene] : LD50=3550 mg/kg rat
    - [Toluene] : rat LD50=2600 mg/kg
    - [Ethylbenzene] : LD50 = 3500 mg/kg Rat (NITE)
    - [Solvent naphtha (petroleum), light arom.] : LD50 = 8400 mg/kg Rat (RTECS)
  - \* Dermal
    - [Xylene] : LD50 4350 mg/kg Rabbit
    - [Toluene] : rabbit LD50=12,000 mg/kg
    - [Ethylbenzene] : LD50 = 15400 mg/kg Rabbit (NITE)
    - [Solvent naphtha (petroleum), light arom.] : LD50 > 2000 mg/kg Rabbit (IUCLID)
  - \* Inhalation
    - [Xylene] : Steam LC50 6700 ppm 4 hr Rat (Equivalent : 29.09 mg/L)
    - [Toluene] : rat LC50=28.1 mg/L/4hr
    - [Ethylbenzene] : LC50 = 17.4 mg/L/4 hr Rat (4000 ppm/4hr)(EHC, ASTDR)
    - [Solvent naphtha (petroleum), light arom.] : LC50 > 5.2 mg/L 4 hr Rat, LC50=3400 ppm 4hr (IUCLID)
- Skin corrosion/irritation
  - Causes skin irritation

- **Serious eye damage/irritation**
  - Causes serious eye irritation
- **Respiratory sensitization**
  - Not available
- **Skin sensitization**
  - Not available
- **Carcinogenicity**
  - \* **IARC**
    - [Ethylbenzene] : Group 2B
    - [Toluene] : Group 3
  - \* **OSHA**
    - Not available
  - \* **ACGIH**
    - [Ethylbenzene] : A3
    - [Toluene] : A4
    - [Xylene] : A4
  - \* **NTP**
    - Not available
  - \* **EU CLP**
    - [Solvent naphtha (petroleum), light arom.] : Carc.1B
- **Germ cell mutagenicity**
  - May cause genetic defects
- **Reproductive toxicity**
  - May damage fertility or the unborn child
- **STOT-single exposure**
  - Causes damage to organs(Refer Section SDS 11)
  - May cause damage to organs (Refer Section SDS 11)
  - May cause drowsiness and dizziness.
  - May cause respiratory irritation.
- **STOT-repeated exposure**
  - Causes damage to organs through prolonged or repeated exposure (Refer Section SDS 11)
- **Aspiration hazard**
  - May be fatal if swallowed and enters airways

## 12. ECOLOGICAL INFORMATION

### A. Ecotoxicity

- **Fish**
  - [Xylene] : LC50=3.3mg/L 96 hr (NITE)
  - [Toluene] : LC50 5.5 mg/ℓ 96 hr (ECHA)
  - [Ethylbenzene] : LC50 = 9.09 mg/ℓ 96 hr
  - [Solvent naphtha (petroleum), light arom.] : LC50 = 9.22 mg/ℓ 96 hr Oncorhynchus mykiss (IUCLID)
- **Crustaceans**
  - [Toluene] : EC50 3.78 mg/ℓ 48hr (ECHA)
  - [Ethylbenzene] : LC50 = 0.4 mg/ℓ 96 hr (CERI-NITE)
  - [Solvent naphtha (petroleum), light arom.] : EC50 = 6.14 mg/ℓ 48 hr Daphnia magna (IUCLID)
- **Algae**
  - [Solvent naphtha (petroleum), light arom.] : EC50 = 19 mg/ℓ 72 hr Selenastrum capricornutum (IUCLID)

### B. Persistence and degradability

- **Persistence**
  - [Xylene] : log Kow=3.16 (NITE)
  - [Toluene] : log Kow 2.73 (HSDB)
  - [Solvent naphtha (petroleum), light arom.] : log Kow = 2.1 ~ 6 (IUCLID)

- **Degradability**
  - [Solvent naphtha (petroleum), light arom.] : BOD5/COD = 0.43

### C. Bioaccumulative potential

- **Bioaccumulative potential**
  - Not available
- **Biodegradation**
  - [Xylene] : 39 (%) (NITE)
  - [Toluene] : Readily biodegradable (ECHA)

### D. Mobility in soil

- [Xylene] : log Kow = 3.12 (measured) (ortho), 3.2 (measured) (meta), 3.15 (measurements) (p) (5)
- [Ethylbenzene] : log Kow = 3.15 (11)

### E. Other adverse effects

- Not available

## 13. DISPOSAL CONSIDERATIONS

### A. Disposal methods

- Since more than two kinds of designaed waste is mixed, it is difficult to treat seperatly, then can be reduction or stabilization by incineration or similar process.
- If water separation is possible, pre-process with Water separation process.
- Dispose by incineration.

### B. Special precautions for disposal

- The user of this product must disposal by oneself or entrust to waste disposer or person who other's waste recycle and dispose, person who establish and operate waste disposal facilities.
- Dispose of waste in accordance with all applicable laws and regulations.

## 14. TRANSPORT INFORMATION

### A. UN No. (IMDG)

- 1263

### B. Proper shipping name

- PAINT INCLUDING PAINT, LACQUER, ENAMEL, STAIN, SHELLAC SOLUTIONS, VARNISH, POLISH, LIQUID FILLER, AND LIQUID LACQUER BASE

### C. Hazard Class

- 3

### D. IMDG Packing group

- II

### E. Marine pollutant

- [Ethylbenzene] : Applicable
- [Solvent naphtha (petroleum), light arom.] : Applicable

### F. Special precautions for user related to transport or transportation measures

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.



- Air transport(IATA): This product is NOT classified as dangerous for IATA Transport.
- EmS FIRE SCHEDULE : F-E (Non-water-reactive flammable liquids)
- EmS SPILLAGE SCHEDULE : S-E (Flammable liquids, floating on water)

## 15. REGULATORY INFORMATION

### A. National and/or international regulatory information

- **POPs Management Law**
  - Not applicable
- **Information of EU Classification**
  - \* **Classification**
    - [Xylene] : R10 Xn; R20/21 Xi; R38
    - [Toluene] : F; R11 Repr.Cat.3; R63 Xn; R48/20-65 Xi; R38 R67
    - [Ethylbenzene] : F; R11Xn; R20
  
    - [Solvent naphtha (petroleum), light arom.] : Carc. Cat. 2; R45/Muta. Cat. 2; R46, Xn; R65
  - \* **Risk Phrases**
    - [Xylene] : R10, R20/21, R38
    - [Toluene] : R11, R38, R48/20, R63, R65, R67
    - [Ethylbenzene] : R11, R20
    - [Solvent naphtha (petroleum), light arom.] : R45, R65, R46
  - \* **Safety Phrase**
    - [Xylene] : S2, S25
    - [Toluene] : S2, S36/37, S46, S62
    - [Ethylbenzene] : S2, S16, S24/25, S29
    - [Solvent naphtha (petroleum), light arom.] : S53, S45
- **U.S. Federal regulations**
  - \* **OSHA PROCESS SAFETY (29CFR1910.119)**
    - Not applicable
  - \* **CERCLA Section 103 (40CFR302.4)**
    - [Xylene] : 45.3599 kg 100 lb
    - [Toluene] : 453.599 kg 1000 lb
    - [Ethylbenzene] : 453.599 kg 1000 lb
  - \* **EPCRA Section 302 (40CFR355.30)**
    - Not applicable
  - \* **EPCRA Section 304 (40CFR355.40)**
    - Not applicable
  - \* **EPCRA Section 313 (40CFR372.65)**
    - [Xylene] : Applicable
    - [Toluene] : Applicable
    - [Ethylbenzene] : Applicable
- **Rotterdam Convention listed ingredients**
  - Not applicable
- **Stockholm Convention listed ingredients**
  - Not applicable
- **Montreal Protocol listed ingredients**
  - Not applicable

## 16. OTHER INFORMATION

### A. Reference

- The information contained herein is believed to be accurate. It is provided independently of any sale of the product for purpose of hazard communication. It is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability or fitness for a particular purpose is made with respect to the product or the information contained herein.



- This Safety Data Sheet was compiled with data and information from the following sources: KOSHA, NITE, ESIS, NLM, SIDS, IPCS

**B. Issue date**

- 2017-04-25

**C. Revision number and Last date revised**

- Not applicable

**D. Other**

- This SDS is prepared according to the Globally Harmonized System (GHS).