

SAFETY DATA SHEET

1. IDENTIFICATION

A. Product name

- SPORTHANE NON-EXPOSURE WATERPROOFING COAT PTA [AU3111ONE163]

B. Recommended use and restriction on use

- General use : Architecture Urethane Waterproofing Coat
 - 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

- Carcinogenicity : Category1B
 - Reproductive toxicity : Category1B
 - Chronic aquatic toxicity : Category3

B. GHS label elements

o Hazard symbols



o Signal words

- Danger

o Hazard statements

- H350 May cause cancer
 - H360 May damage fertility or the unborn child
 - H412 Harmful 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.
 - P273 Avoid release to the environment.
 - P281 Use personal protective equipment as required.

2) Response

- P308+P313 If exposed or concerned: Get medical advice/attention.

3) Storage

- 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 : 1, Flammability : 1, Reactivity : 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Trade names and Synonyms	CAS No.	Content(%)
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Limestone	Calcium carbonate	1317-65-3	60 ~ 65.8
α -Hydro- ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)]	Polypropylene glycol	25322-69-4	10 ~ 20
α,α',α'' -1,2,3-Propanetriyltris[ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)]]	Polyoxypropylene glycerol triether	25791-96-2	1 ~ 10
Hydrogenated hydrocarbons (C=6-20) polymers	-	69430-35-9	1 ~ 10
Xylene	Dimethylbenzene	1330-20-7	1 ~ 1.7
4,4'-Methylene bis[2-chloroaniline]	Bis(4-amino-3-chlorophenyl)methane	101-14-4	0.1 ~ 1.7
Ethylbenzene	Benzene, ethyl-	100-41-4	0.1 ~ 0.3
Secret	Secret	자료없음	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.

B. Skin contact

- Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Wash contaminated clothing thoroughly before re-using.
- Get medical attention immediately.
- Remove contaminated clothing, shoes and isolate.
- 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

- Please be advised by doctor whether induction of vomit is demanded or not.
- Rinse your mouth with water immediately.
- Get medical attention immediately.

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

- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- In case of conflagration, use automatic fire sprinkler. Major fire may require withdrawal, allowing the object itself to burn.
- Avoid inhalation of materials or combustion by-products.
- Do not access if the tank on fire.
- Use appropriate extinguishing measure suitable for surrounding 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

- Ventilate closed spaces before entering.
- Do not touch spilled material. Stop leak if you can do it without risk.
- Handle the damaged containers or spilled material after wearing appropriate protective equipment
- Do not direct water at spill or source of leak.
- 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.
- Since emptied containers retain product residue(vapor, liquid, solid) follow all MSDS and label warnings even after container is emptied.
- Comply with all applicable laws and regulations for handling
- 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

- Store according to current laws and regulations
- Do not apply any physical shock to container.
- Avoid direct sunlight.
- Keep in the original container.
- Please pay attention to incompatibilities materials and conditions to avoid.
- 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

- **ACGIH TLV**
 - [Xylene] : TWA 100 ppm (434 mg/m³), STEL, 150 ppm (651 mg/m³)
 - [4,4'-Methylene bis[2-chloroaniline]] : TWA, 0.01 ppm (0.11 mg/m³) Skin
 - [Secret] : TWA 5 mg/m³
 - [Secret] : TWA 25 ppm, STEL 50 ppm (10 mg/m³)
 - [Ethylbenzene] : TWA, 20 ppm (87 mg/m³)
 - [Secret] : TWA, 25 ppm (145 mg/m³)
 - [Secret] : TWA 20 ppm (75 mg/m³)
 - [Secret] : TWA, 3 mg/m³, Inhalable particulate matter
 - [Secret] : TWA, 20 ppm (61 mg/m³)
 - [Secret] : TWA, 20 ppm (97 mg/m³)
- **OSHA PEL**
 - [Secret]:50ppm 290mg/m³
 - [Ethylbenzene]:100ppm 435mg/m³
 - [Limestone]: 15 mg/m³ (Total dust), 5 mg/m³ (Respirable fraction)
 - [Secret]: 200 ppm, C 300 ppm
 - [Xylene]:100ppm 435mg/m³
 - [Secret]:50ppm 240mg/m³
 - [Secret]:100ppm 300mg/m³
 - [Secret]: 3.5mg/m³

B. Engineering controls

- Business owner is recommended to maintain below recommended exposure limits for the working place with general exhaust of gas/vapour/mist/fume.

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 vaporcartridge(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	138 °C
G. Flash point	130 °C
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)	1.5 ~ 1.7
O. Partition coefficient of n-octanol/water	Not available
P. Autoignition temperature	464
Q. Decomposition temperature	Not available
R. Viscosity	12,000-18,000 cps
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)
 - Not available
- (Oral)
 - Not available
- (Eye-Skin)
 - Not available

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

- Acute toxicity
 - * Oral
 - Product (ATEmix) : 300mg/kg < ATEmix <= 2000mg/kg
 - [α -Hydro- ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)]] : LD50 > 2000 mg/kg Rat
 - [Xylene] : LD50=3523 mg/kg rat (EU Method B1)

- [4,4'-Methylene bis[2-chloroaniline]] : LD50 1140 mg/kg Rat
- [Secret] : LD50 > 5000 mg/kg Rat
- [Secret] : LD50 >5000 mg/kg Rat (ECHA)
- [Secret] : LD50 = 4200~11300 mg/kg Rat (NTP TR 518, 2004)
- [Secret] : LD50 7712 mg/kg Rat (ECHA)
- [Ethylbenzene] : LD50 = 3500 mg/kg Rat (NITE)
- [Secret] : LD50 > 5000 mg/kg Rat (NITE)
- [Secret] : LD50 5580 mg/kg Rat (EU Method B.1)
- [Secret] : LD50 = 1300 mg/kg Rat
- [Secret] : LD50 = 15400 mg/kg Rat (NITE(2006))
- [Secret] : LD50 > 5000 mg/kg Rat (ECHA)
- [Secret] : LD50 > 15000 mg/kg Rat (IUCLID)
- [Secret] : LD50 = 3430 mg/kg rabbit (GLP, ECHA)
- [Secret] : LD50 22,000 mg/kg Rat (ECHA)
- [Secret] : LD50 > 3200 mg/kg Rat
- [Secret] : LD50 > 8000 mg/kg Rat (TOMES;RTECS)
- [Secret] : LD50 = 1746 mg/kg Rat (SIDS (1997))

*** Dermal**

- Product (ATEmix) : >5000mg/kg
- [Xylene] : LD50 >4350 mg/kg Rabbit (IUCLID) LD50 12126 mg/kg Rabbit (isomer: m-xylene)
- [4,4'-Methylene bis[2-chloroaniline]] : LD50 > 5000 mg/kg Rabbit
- [Secret] : LD50 > 2000 mg/kg Rat
- [Secret] : LD50 > 20ml/kg Guinea pig (ECHA)
- [Secret] : LD50 >2,000 mg/kg Rabbit (NTP TR 518, 2004)
- [Secret] : LD50 >3500 mg/kg Mouse (ECHA)
- [Ethylbenzene] : LD50 = 15400 mg/kg Rabbit (NITE)
- [Secret] : LD50 > 2000 mg/kg Rat (SIDS)
- [Secret] : rabbit LD50=12,124 mg/kg (HSDB)
- [Secret] : LD50 > 1250 mg/kg Rabbit
- [Secret] : LD50 > 3000 mg/kg rabbit (NITE)
- [Secret] : LD50 > 2000 mg/kg rabbit (ECHA)
- [Secret] : LD50 > 3160 mg/kg Rabbit (IUCLID)
- [Secret] : LD50 = 3400 mg/kg rabbit (HSDB)
- [Secret] : LD50 20,800 mg/kg Rabbit (HSDB, IUCLID)
- [Secret] : LD50 = 99 mg/kg Rabbit (SIDS (1997))

*** Inhalation**

- Product (ATEmix) : 20.0mg/L < ATEmix <= 50.0mg/L
- [Xylene] : LC50 5922 ppm 4 hr Rat (25.713 mg/L EPA OPP 81-3, GLP)
- [Secret] : Mist LC50 > 1.82 mg/l Rat (Rat LC50> 1.82 mg/L (GLP) (RAR) (mg/kg conversion))
- [Secret] : LC50 >2.5 mg/l 6 hr Rat
- [Ethylbenzene] : LC50 = 17.4 mg/L/4 hr Rat (4000 ppm/4hr)(EHC, ASTDR)
- [Secret] : gas (Not applicable: Solid)
- [Secret] : LC50 >20 mg/l Rat (OECD TG 403) (ECHA)
- [Secret] : LC50 >4.96 mg/L/4hr (ECHA)
- [Secret] : Steam LC50 = 24.25 mg/L/4 hr Rat (HSDB)
- [Secret] : LC50 = 2.2 mg/l 4 hr Rat (SIDS (1997))

○ **Skin corrosion/irritation**

- Not available

○ **Serious eye damage/irritation**

- Not available

○ **Respiratory sensitization**

- Not available

○ **Skin sensitization**

- Not available

- **Carcinogenicity**
 - * **IARC**
 - [Secret] : Group 3
 - [Secret] : Group 2B
 - [Ethylbenzene] : Group 2B
 - [4,4'-Methylene bis[2-chloroaniline]] : Group 1
 - * **OSHA**
 - Not available
 - * **ACGIH**
 - [Secret] : A3
 - [Secret] : A4
 - [Ethylbenzene] : A3
 - [4,4'-Methylene bis[2-chloroaniline]] : A2
 - [Xylene] : A4
 - * **NTP**
 - [4,4'-Methylene bis[2-chloroaniline]] : R
 - * **EU CLP**
 - [Secret] : Carc.1B
 - [4,4'-Methylene bis[2-chloroaniline]] : Carc.1B
- **Germ cell mutagenicity**
 - Not available
- **Reproductive toxicity**
 - May damage fertility or the unborn child
- **STOT-single exposure**
 - Not available
- **STOT-repeated exposure**
 - Not available
- **Aspiration hazard**
 - Not available

12. ECOLOGICAL INFORMATION

A. Ecotoxicity

- **Fish**
 - [α -Hydro- ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)]] : LC50 1700 mg/l 96 hr *Lepomis macrochirus* (ECOTOX)
 - [α,α',α'' -1,2,3-Propanetriyltris[ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)]]] : LC50 218000 mg/l 96 hr (Estimate)
 - [Xylene] : LC50=3.3mg/L 96 hr (NITE)
 - [Secret] : LC50 = 11800 mg/l 96 hr
 - [Secret] : LC50 = 8050 mg/l 96 hr *Pimephales promelas* (ECOTOX)
 - [Ethylbenzene] : LC50 5.1 mg/l 96 hr (ECHA)
 - [Secret] : LC50 = 140 mg/l 96 hr (SIDS)
 - [Secret] : LC50 5.5 mg/l 96 hr (ECHA)
 - [Secret] : LC50 = 1.07 mg/l 96 hr (NITE)
 - [Secret] : LC50 = 2200 mg/l 96 hr *Pimephales promelas* (IUCLID)
 - [Secret] : LC50 1376 mg/l 96 hr *Pimephales promelas*(OECD TG 203, GLP)
 - [Secret] : LC50 = 710 mg/l 96 hr *Oncorhynchus mykiss* (ECOTOX)
 - [Secret] : LC50 \geq 1000 mg/l 96 hr (semistatic)
 - [Secret] : LC50 > 1116 mg/l 96 hr (NITE)
- **Crustaceans**
 - [α,α',α'' -1,2,3-Propanetriyltris[ω -hydroxypoly[oxy(methyl-1,2-ethanediyl)]]] : LC50 193000 mg/l 48 hr (Estimate)
 - [4,4'-Methylene bis[2-chloroaniline]] : EC50 0.25 mg/l 48 hr (NITE)
 - [Secret] : EC50 0.009 ~ 0.08 mg/l 48 hr *Daphnia magna* (RAR, EPA, GLP)
 - [Secret] : EC50 = 609.98 mg/l 48 hr

- [Secret] : ECHA LC50 >100 mg/ℓ 48 hr Daphnia magna(OECD Guideline 202, GLP)
- [Ethylbenzene] : LC50 2.4 mg/ℓ ~ 1.8 mg/ℓ 48 hr Mysidopsis bahia(EC50 48hr >5.2mg/L, EPA 1985, GLP)
- [Secret] : LC50 = 65 mg/ℓ 24 hr
- [Secret] : EC50 3.78 mg/ℓ 48hr (ECHA)
- [Secret] : EC50 > 5600 mg/ℓ 24 hr (NITE)
- [Secret] : LC50 = 2.6 mg/ℓ 96 hr (Species: Chaetogammarus marinus) (IUCLID)
- [Secret] : EC50 = 1983 mg/ℓ 48 hr Daphnia magna (ECOTOX)
- [Secret] : EC50 = 1000 mg/ℓ 48 hr Daphnia magna (ECOTOX)
- [Secret] : EC50 ≥ 1000 mg/ℓ 48 hr Daphnia magna
- [Secret] : LC50 >130 mg/ℓ 96 hr

○ **Algae**

- [α,α',α'' -1,2,3-Propanetriyltris[ω -hydroxypoly[oxy(methyl-1,2-ethanediy)]]] : EC50 103000 mg/ℓ 96 hr (Estimate)
- [Secret] : EC50 = 169 mg/ℓ 96 hr (NITE)
- [Secret] : EC50 = 6500 ~ 13000 mg/ℓ 96 hr Selenastrum capricornutum (IUCLID)
- [Ethylbenzene] : EC50 3.6 mg/ℓ 96 hr (EPA 1985, GLP)
- [Secret] : EC50 225 mg/ℓ 96 hr Selenastrum capricornutum(OECD TG 201, GLP)
- [Secret] : EC50 = 1000 mg/ℓ 72 hr Selenastrum capricornutum (NITE)
- [Secret] : EC50 ≥ 1000 mg/ℓ 72 hr Selenastrum capricornutum

B. Persistence and degradability

○ **Persistence**

- [Xylene] : log Kow=3.16 (NITE)
- [4,4'-Methylene bis[2-chloroaniline]] : log Kow 3.91
- [Secret] : log Kow 7.5 ~ 9.12 (IUCLID)
- [Secret] : log Kow = 8.390 (est, NLM: HSDB)
- [Secret] : log Kow = -1.93 (ICSC)
- [Ethylbenzene] : log Kow 3.6 (ECHA)
- [Secret] : log Kow 2.56 (SRC)
- [Secret] : log Kow = 4.47 (Estimate)
- [Secret] : log Kow 2.73 (HSDB)
- [Secret] : log Kow 1.48 (NITE)
- [Secret] : log Kow = 2.1 ~ 6 (Estimate)
- [Secret] : log Kow 1 (OECD TG 117)
- [Secret] : log Kow = -1.4 (IUCLID)
- [Secret] : log Kow = 4.89 (4.89-5.98 at 25 °C) (IUCLID)
- [Secret] : log Kow = 0.83 (PHYSPROP Database)

○ **Degradability**

- [Secret] : BOD = 0.78 COD = 1.19 BOD/COD= 0.66 (IUCLID)

C. Bioaccumulative potential

○ **Bioaccumulative potential**

- [α,α',α'' -1,2,3-Propanetriyltris[ω -hydroxypoly[oxy(methyl-1,2-ethanediy)]]] : BCF 3.162 (Estimate)
- [4,4'-Methylene bis[2-chloroaniline]] : BCF 398 (NITE)
- [Secret] : BCF 2270 (Estimate)
- [Secret] : BCF = 0.4 ~ 42 ((25 °C), Cyprinus carpio(Fish, fresh water), 2.5mg/l)
- [Secret] : BCF = 200 (IUCLID)
- [Ethylbenzene] : BCF 1
- [Secret] : BCF = 17.43 (Estimate)
- [Secret] : BCF < 1 (SIDS)
- [Secret] : BCF = 10 (Estimate)

○ **Biodegradation**

- [Xylene] : 39 (%) (NITE)
- [4,4'-Methylene bis[2-chloroaniline]] : BOD: 0% (NITE)

- [Secret] : 64.1 (%) 28 day (RAR)
- [Secret] : Biodegradability = 91 (%) 28 day (Aerobic, Activated Sludge, Decomposes very well)
- [Secret] : Biodegradability = 89 (%) 20 day (IUCLID)
- [Ethylbenzene] : 70-80% 28 day (ISO 14593 CO₂, GLP)
- [Secret] : Readily biodegradable (ECHA)
- [Secret] : BOD: 66 (%) (NITE)
- [Secret] : Biodegradability = 10 (%) 28 day (Aerobic, Activated Sludge, Domestic wastewater, Does not decompose easily)
- [Secret] : 92% 20 days (ECHA)
- [Secret] : Biodegradability > 60 (%) 10 day (SIDS)
- [Secret] : Biodegradability = 74 (%) 28 day (IUCLID)
- [Secret] : Biodegradability = 96 (%) (NITE: existing chemical safety inspections data)

D. Mobility in soil

- [Xylene] : log Kow = 3.12 (measured) (ortho), 3.2 (measured) (meta), 3.15 (measurements) (p) (5)
- [Secret] : Koc 2391000
- [Secret] : Koc = 870,000
- [Secret] : ECHA 1 Koc (Epiwin calculation)
- [Secret] : Koc = 869 (Low potential for soil adsorption, Estimates)
- [Secret] : 85460000 (Estimate)

E. Other adverse effects

- Not available

13. DISPOSAL CONSIDERATIONS

A. Disposal methods

- Since more than two kinds of designated waste is mixed, it is difficult to treat separately, 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 dispose by oneself or entrust it to a waste disposer, a person who recycles other's waste or establishes and operates 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

- Not 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**
 - [Secret] : H225,H361d,H304,H373,H315,H336
 - [Xylene] : H226,H332,H312,H315
 - [Ethylbenzene] : H225,H332
 - [Secret] : H226,H302,H335,H315,H318,H336
 - [Secret] : H332,H312,H302,H319,H315
 - [Secret] : H302
 - [Secret] : H226,H335
 - [4,4'-Methylene bis[2-chloroaniline]] : H350,H302,H410
 - [Secret] : H350,H340,H304
- **U.S. Federal regulations**
 - * **OSHA PROCESS SAFETY (29CFR1910.119)**
 - Not applicable
 - * **CERCLA Section 103 (40CFR302.4)**
 - [Xylene] : 45.3599 kg 100 lb
 - [4,4'-Methylene bis[2-chloroaniline]] : 4.53599 kg 10 lb
 - [Secret] : 2267.995 kg 5000 lb
 - [Ethylbenzene] : 453.599 kg 1000 lb
 - [Secret] : 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
 - [4,4'-Methylene bis[2-chloroaniline]] : Applicable
 - [Secret] : 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

- 2013-07-10

C. Revision number and Last date revised

- 10 times, 2019-04-29

D. Other

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