



SAFETY DATA SHEET

U.S. Department of Labor
Occupational Safety & Health Administration

RoofdX SL - Part A

SECTION 1 - IDENTIFICATION

MANUFACTURER: Andek Corporation
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In an emergency, contact CHEMTREC 1-800- 424-9300;
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PRODUCT IDENTIFIER: RoofdX SL - Part A
RECOMMENDED USE: Industrial Protective and Maintenance Coating

SECTION 2 – HAZARD IDENTIFICATION

HAZARD CLASSIFICATION:

Skin: Irritant

Eyes: Reversible

Inhalation: Low to moderate sensitivity. May cause sensitization.

Ingestion: Do Not ingest.

SIGNAL WORD: Danger

HAZARD STATEMENTS:

- Contains monomeric isophorone diisocyanate.
- Causes skin irritation.
- May cause allergic skin reaction
- May cause allergic respiratory reaction.
- May cause eye irritation.
- May be harmful if aerosol or mist is inhaled.
- Closed containers may explode under extreme heat or when contaminated with water.
- Use cold water spray to cool fire-exposed containers to minimize the risk of rupture. Toxic gases / fumes are given off during burning or thermal decomposition.
- **Do Not** seal containers that have been contaminated with water.
- Flammable liquid and vapor.

PICTOGRAMS:



PRECAUTIONARY STATEMENTS:

Prevention:

- **Do Not** handle until all safety precautions have been read and understood.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Protect from moisture.
- **Do Not** spray on an open flame or other ignition source.
- Use explosion-proof electrical/ventilating/light/equipment.
- Take precautionary measures against static discharge.

- Avoid breathing spray.
- **Do Not** get in eyes, on skin, or on clothing
- Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- Wash contaminated clothing before reuse.
- Rinse skin with water/shower.
- In case of fire use water fog, carbon dioxide, foam or dry chemical to extinguish.
- Rinse mouth. **Do Not** induce vomiting.
- If in eyes; rinse cautiously with water for 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- If inhaled; remove person to fresh air and keep comfortable for breathing.

Storage:

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

Disposal:

- Waste disposal should be in accordance with existing federal, state and local environmental control laws.
- Incineration is the preferred method.

SECTION 3 – COMPOSITION

<u>CHEMICAL NAME</u>	<u>CAS #</u>	<u>APPROX %</u>
Isophorone Diisocyanate Homopolymer	53880-05-0	65.0
Naphtha Light Aromatic Solvent	64742-95-6	20.0
Methyl Amyl Ketone	110-43-0	14.0
Isophorone Diisocyanate	4098-71-9	<1.0
1,2,4 - Trimethylbenzene	95-63-6	<1.0
Dipropylene Glycol	25265-71-8	<1.0

SECTION 4 – FIRST AID MEASURES

Skin:

- For skin contact, wipe away excess material with dry towel. Then wash affected areas with plenty of water, and soap if available, for several minutes.
- Get medical attention if irritation occurs.
- Remove contaminated clothing and launder before reuse.
- Remove contaminated shoes and discard.

Eyes:

- In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.

Inhalation:

- If inhaled, remove to fresh air.
- If not breathing give artificial respiration, preferably mouth-to-mouth.
- If breathing is difficult oxygen should be administered by qualified personnel.
- Call a physician or transport to a medical facility.

Ingestion:

- If swallowed, give 1-2 glasses of water, but **Do Not** induce vomiting.
- **Do Not** give anything by mouth to an unconscious or convulsing person.
- Get medical attention.

SECTION 5 – FIRE-FIGHTING MEASURES

Flash point (METHOD USED): 105°F. Closed Cup (ASTM D50).

Flammable limits: Lel 0.9; Uel 6.0.

Extinguishing media: Carbon dioxide, dry chemical, foam

Special fire fighting procedures: If excessive fumes or smoke is encountered, wear self-contained breathing apparatus and full protective equipment.

Unusual fire & explosion hazards:

- Sealed containers may build up pressure if exposed to heat (fire).
- Water can be used to cool the exterior of the containers.

Decomposition products: Oxides of carbon and nitrogen, possible HCN and polyurethane combustion compounds.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:

- Wear appropriate protective equipment (See Section 8).

Environmental Precautions:

- Prevent from entering sewers, waterways or low areas.
- Prevent contamination of soil.

Spill Procedures:

- Remove all sources of ignition and ventilate the area.
- Vapors are much heavier than air and as such will accumulate in low-lying areas, presenting a hazard to anyone entering such places. Low-lying areas should be ventilated and checked before permitting access.
- Soak up residue with an absorbent such as clay or sand. Place in a non-leaking container for proper disposal according to federal, state and local regulations.
- Clean up spill area with a decontamination solution made up of 50% isopropyl alcohol, 45% water, and 5% concentrated ammonia solution. Solution should cover the area for at least an hour.
- Allow for ventilation of containers with spill cleanup as CO² generation will occur with clean up solution.

SECTION 7 – HANDLING & STORAGE

Precautions for safe handling:

- Wear appropriate protective equipment. See Section 8 for normal handling recommendations.
- Avoid contact with eyes, skin, and clothing.
- Use in well ventilated area.
- Ground and bond containers before transferring liquid.

Recommendations on the conditions for safe storage:

- Flammable Storage.
- Keep containers tightly closed.
- Store in a cool dry place.
- Ground equipment to prevent static build-up.
- Ground containers when pouring or transferring.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

CHEMICAL NAME	PEL	TLV (8 Hours)
Isophorone Diisocyanate	N/A	0.005 ppm
1,2,4 - Trimethylbenzene	N/A	25 ppm
Methyl Amyl Ketone	100 ppm	50 ppm
Cumene	N/A	50 ppm

Engineering controls:

- Use local exhaust ventilation to assure that isophorone diisocyanate levels in the air are below established exposure limits.

Individual protection measures:

- Use Viton or 4H gloves.
- Long sleeved clothing and apron.

Inhalation protection:

- In operations where the exposure limits can be exceeded, wear a NIOSH approved respirator selected by a technically qualified person.
- If a respirator is worn, OSHA requires compliance with its respiratory protection program (29 CFR 1910.134).

Eye protection:

- Safety glasses (with side shields)

Other hygienic practices and protective equipment:

- Use proper ventilation.
- Follow good industrial chemical hygiene practices.
- Safety showers and eyewash stations should be available.
- Educate and train employees in safe use of product.
- Remove clothing or shoes that have become wet with this product. Launder clothing before reuse.
- Decontaminate or discard shoes.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**Appearance:** Clear Liquid**Physical state:** Liquid**Color:** Transparent to slightly amber**Odor:** Pungent, sweet**Odor threshold:** 0.07 ppm**pH:** N/A**Melting point/freezing point:** -60°F**Initial boiling point and boiling range:** 190°F**Flash point:** 105°F**Evaporation rate:** 0.2 (Butyl Acetate = 1)**Flammability (solid, gas)** Flammable**Upper/lower flammability or explosive limits:** 6.0 / 0.9**Vapor pressure:** 0.8 kPa (6 mmHg) at 68°F**Vapor density:** 4 (Air = 1)**Relative density:** 0.96 g / cm³ at 60°F**Solubility:** Insoluble; will react with water to form CO²**Partition coefficient: n-octanol/water:** N/A**Auto-ignition temperature:** 470°F**Decomposition temperature:** N/A**Viscosity:** 1,600 centipoises at 20°C**SECTION 10 – STABILITY AND REACTIVITY****Chemical Stability:**

- Stable under normal conditions of handling, use and transportation.

Hazardous Polymerization:

- Will not occur under normal conditions.
- Avoid contact with water or moisture.
- Polymerization will occur releasing CO².
- Pressure buildup in closed container may occur.

Conditions to Avoid:

- Avoid contact with heat, sparks, open flame, and static discharge.

Materials to Avoid:

- Avoid contact with Moisture and water as polymerization will occur to release CO² which may pressurize non-vented containers.
- Avoid contact with alcohols, amines, acids, strong oxidizing agents and strong bases.

Hazardous Decomposition Products:

- Combustion of the dried polymer may release; carbon dioxide, carbon monoxide, oxides of nitrogen and traces of HCN.

Additional Guidelines: Not Applicable.**SECTION 11 – TOXICOLOGICAL INFORMATION****Acute Health Effects have not been determined.** The following information is available on major components:

CHEMICAL NAME	Oral LD50	Dermal LD50	Inhalation LC50
IPDI	Rat 4825 mg/kg	Rabbit >7000 mg/kg	Rat 0.04 mg / L / 4 hours (literature value for aerosols)
MAK	Rat 1600 mg/kg	Rabbit 12.6 ml/kg	Rat 2000 ppm / 4 hrs

Aromatic 100 - No additional test data found for this product.

Chronic Health Effects have not been determined. The following information is available on major components:

CHEMICAL NAME	Oral LOEL	Oral NOEL	Inhalation NOEL
IPDI	N/A	N/A	N/A
MAK - Based on animal data and structure-activity relationships, this product is not expected to cause nervous system damage.	13 weeks, rat: 100 mg/kg (minor target organ effects: Kidney) (increase in weight: liver)	13 weeks, rat: 20 mg/kg/day. 12 weeks, rat: 0.5% in drinking water (highest concentration tested).	9 months, rat: 1025 ppm (highest concentration tested) 9 months, monkey: 1025 ppm (highest concentration tested)

Aromatic 100 - No additional test data found for this product.

Aggravated Conditions: Not determined.

Carcinogenicity:

Carcinogenic effects of this product have not been determined. The following information is available on major components:

- IPDI - Not Classified as a Carcinogen.
- MAK - No additional test data found for this product.
- Aromatic 100 - No additional test data found for this product.

Reproductive/Developmental Toxicity:

Reproductive / Developmental health effects of this product have not been determined. The following information is available on major components:

- IPDI - No additional test data found for this product.
- MAK - No additional test data found for this product.
- Aromatic 100 - No additional test data found for this product.

Mutagenicity:

Mutagenicity of this product has not been determined. The following information is available on major components:

- IPDI - No additional test data found for this product.
- MAK - No additional test data found for this product.
- Aromatic 100 - No additional test data found for this product.

Other: Aspiration Hazard

The mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

SECTION 12 – ECOLOGICAL INFORMATION

Data from toxicity test:

CHEMICAL NAME	Algae/Aquatic Plants EC50	Fish LC50	Crustacea (Aquatic Invertebrates) EC50
Isophorone Diisocyanate	118.7 mg/l (Scenedesmus subspicatus) 72 h	1.8 mg/l (Leuciscus idus) 48 h	83.7 mg/l (Daphnia magna) 24 h
Methyl Amyl Ketone	N/A	131.0 mg/l (Pimephales promelas) 96 h	N/A
Aromatic 100	N/A	9.22 mg/l (Oncorhynchus mykiss) 96 h	6.14 mg/l (Daphnia magna) 48 h
1,2,4 - Trimethylbenzene	N/A	7.72 mg/l (Pimephales promelas) 96 h	6.14 mg/l (Daphnia magna) 48 h

Biodegradation: Not readily biodegradable (by OECA criteria). Moderately / partial biodegradable.

Bioaccumulation potential: Accumulation in organisms is not to be expected.

Mobility in soil: Absorption into solid soil phase is expected.

Other adverse effects:

- **Do Not** allow to enter soil, waterways or waste water channels.
- Inhibition of degradation activity in activated sludge is not to be anticipated during introduction at low concentrations.

SECTION 13 – DISPOSAL CONSIDERATIONS

Other Disposal Considerations:

Do Not dump into any sewers, on the ground or into any body of water.

Contaminated Packaging:

- Empty drums may contain harmful vapors and residue.
- If empty container retains product residues, all label precautions must be observed.
- Transport with all closures in place.

- Dispose according to national or local regulations.
- Empty containers may contain explosive vapors. Keep from spark, flame, and heat sources.
- **Do Not** cut or weld.

RCRA Status: (Classification applies to the product as sold.)

D001 (Ignitable) D003 (Reactive)

SECTION 14 – TRANSPORT INFORMATION

UN #	1263
UN proper shipping name	Paint
Hazard class	3
Packing group	III
Environmental hazards	Not a marine pollutant
Guidance on transport in bulk	N/A

Transport labels required: Flammable liquid. (In the U.S., this material may be re-classified as a combustible liquid and is not regulated in containers less than 119 gallons via surface transportation.)

SECTION 15 – REGULATORY INFORMATION

US Federal Regulation:

CHEMICAL NAME	CERCLA Reportable Quantity	CERCLA/SARA 302 Ext. Haz. Substances	TSCA - Sect. 12(b) Export Notification	SARA 313 Chemicals
Methyl Amyl Ketone	N/A	N/A	Not Listed	
Isophorone Diisocyanate Homopolymer	N/A	N/A	Not Listed	
Aromatic 100	N/A	N/A	Not Listed	
Isophorone Diisocyanate	N/A	500 lbs. TPQ	Not Listed	1.0 % de minimis concentration
1,2,4 - Trimethylbenzene	N/A	N/A	Not Listed	1.0 % de minimis concentration

US State Right to Know Regulations:

CHEMICAL NAME	RI Hazardous Substance List	MN	NJ	MA	PA
Methyl Amyl Ketone 110-43-0 (10 to 15)	Toxic	Present	Present	Present	Present
Isophorone Diisocyanate Homopolymer 53880-05-0 (10 to 15)	Not Present	Not Present	Not Present	Not Present	Not Present
Aromatic 100 64742-95-6 (5 to 10)	Not Present	Not Present	Not Present	Not Present	Not Present
Isophorone Diisocyanate 4098-71-9 (1 to 5)	Toxic	Skin	sn 1068	Extraordinarily hazardous	Environmental hazard
1,2,4 - Trimethylbenzene 95-63-6 (1 to 5)	Not Present	Present	Sn 2716	Present	Environmental hazard

CA Prop 65

CHEMICAL NAME	CAS #	APPROX %
Cumene	98-82-8	< 0.01

Canada

CHEMICAL NAME	Canadian Domestic Substances List	Canadian Ingredient Disclosure List
Methyl Amyl Ketone 110-43-0 (10 to 15)	Listed	B3 COMBUSTIBLE LIQUIDS; D1A VERY TOXIC MATERIALS D2A VERY TOXIC MATERIALS; D2B TOXIC MATERIALS
Isophorone Diisocyanate Homopolymer 53880-05-0 (10 to 15)	Listed	B3 COMBUSTIBLE LIQUIDS; D1A VERY TOXIC MATERIALS D2A VERY TOXIC MATERIALS; D2B TOXIC MATERIALS
Aromatic 100 64742-95-6 (5 to 10)	Listed	B3 COMBUSTIBLE LIQUIDS; D1A VERY TOXIC MATERIALS D2A VERY TOXIC MATERIALS; D2B TOXIC MATERIALS
Isophorone Diisocyanate 4098-71-9 (1 to 5)	Listed	B3 COMBUSTIBLE LIQUIDS; D1A VERY TOXIC MATERIALS D2A VERY TOXIC MATERIALS; D2B TOXIC MATERIALS
1,2,4 - Trimethylbenzene 95-63-6 (1 to 5)	Listed	B3 COMBUSTIBLE LIQUIDS; D1A VERY TOXIC MATERIALS D2A VERY TOXIC MATERIALS; D2B TOXIC MATERIALS

SECTION 16 – OTHER INFORMATION (HMIS RATING)

Health	3
Flammability	2
Physical Hazard	1
Personal Protection	H

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