



Safety Data Sheet

1. Product and company identification

Product Name	RJW Sealant 700 – Part B	
Internal Code(s)	276061	
Product Type	Aliphatic Polyisocyanate	
Product Use	Two-Component Elastomeric Sealant	
Manufacturer/Supplier	RJ Watson, Inc. 11035 Walden Ave. Alden, NY 14004 U.S.A.	www.rjwatson.com sales@rjwatson.com
Revision Date	23-NOV-2020	
Telephone	For 24-Hour Emergency Response Information Call ChemTel: (800) 255-3924 (U.S./Canada) +1-813-248-0585 (International)	
	For Other Product or Technical Information Call RJ Watson, Inc.: (716) 901-7020	

2. Hazards identification

Product Form	Liquid
OSHA/HCS status	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazard Category Classification:	Acute Toxicity	3	Acute Toxicity (Inhalation – dust / mist)
	Skin Corrosion / Irritation	2	Corrosive to Skin.
	Serious Eye Damage / Irritation	2A	Serious eye damage / Irreversible effects on the eye.
	Respiratory Sensitization	1	Respiratory Sensitizer
	Skin Sensitization	1	Skin Sensitizer
	Specific Target Organ Toxicity – Single Exposure	3	Transient Target Organ Effect (Respiratory System)

GHS Pictogram(s):



Signal Word: **DANGER**

Hazard Statement:	H331	Toxic if inhaled.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	H317	May cause an allergic skin reaction.
	H335	May cause respiratory irritation.

Precautionary Statements:

Prevention:	P261	Avoid breathing dust / gas / mist / vapors / spray.
	P271	Use only outdoors or in a well-ventilated area.
	P264	Wash hands and exposed skin thoroughly after handling.
	P280	Wear protective gloves / eye protection / face protection.
	P284	In case of inadequate ventilation wear respiratory protection.
	P272	Contaminated work clothing should not be allowed out of the workplace.
Response:	P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P316	Get emergency medical help immediately.
	P342 + P316	If experiencing respiratory symptoms: Get emergency medical help immediately.
	P319	Get medical help if you feel unwell.
	P302 + P352	IF ON SKIN: Wash with plenty of water and soap.
	P333 + P317	If skin irritation or rash occurs: Get medical help.
	P362 + P364	Take off contaminated clothing and wash it before reuse.
	P305 + P351 +P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337 + P317	If eye irritation persists: Get medical help.
Storage:	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
	P405	Store locked up.
Disposal:	P501	Dispose of contents / container to a waste disposal facility in accordance with all local / national / international regulations.

3. Composition/Information on ingredients

<u>Ingredient name</u>	<u>CAS number</u>	<u>WT %</u>
Isophorone Diisocyanate (IPDI)	4098-71-9	3.0 – 5.0%
Aliphatic Polyisocyanate	Trade Secret	90.0 – 97.0%

4. First aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Use lukewarm water if possible. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Then remove contact lenses, if easily removable, and continue eye irrigation for not less than 15 minutes. Get medical attention.
Skin contact	If direct skin contact with isocyanates occurs, immediately remove contaminated clothing and shoes. Wipe off the isocyanate product from the skin using dry towels or other similar absorbent fabric. If readily available, apply a polyglycol-based cleanser (e.g. Colorimetric Laboratories, Inc. (CLI) D-TAM™ Skin Cleanser) or corn oil. Wash with soap and warm water and pat dry. If a polyglycol-based cleanser is not available, wash with soap and warm water for 15 minutes. If available, use a wipe test pad to verify decontamination is complete (e.g. CLI SWYPE™). Get medical attention if irritation develops. Discard or wash contaminated clothing before reuse.
Inhalation	Move to an area free from further exposure. Extreme asthmatic reactions that may occur in sensitized persons can be life threatening. Get medical attention immediately. Administer oxygen or artificial respiration as needed. Asthmatic symptoms may develop and may be immediate or delayed up to several hours.
Ingestion	Do NOT induce vomiting. Wash mouth out with water. Do not give anything by mouth to an unconscious person. Get medical attention.
Other Hazards	Symptoms affecting the respiratory tract can also occur several hours after overexposure. Isocyanate respiratory sensitization may result in allergic (asthma-like) signs in the lower respiratory tract including wheezing, shortness

of breath and difficulty breathing, the onset of which may be delayed. Repeated inhalation of high concentrations may cause lung damage, including reduced lung function, which may be permanent. Substances eliciting lower respiratory tract irritation may worsen the asthma-like reactions that may be produced by product exposures.

Notes to physician

Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema impairing vision. Skin: This compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. Ingestion: Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of the compound. Inhalation: Treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate.

5. Fire-fighting measures

Flammability properties of the product

Flash Point: > 146°C (> 295°F)
Flash Point Method Used: ASTM D-93 Pensky-Martens Closed Cup.
Flammable Limits in Air (Lower - % by volume): Not Determined
Flammable Limits in Air (Upper - % by volume): Not Determined

Extinguishing media

Suitable

Dry chemical extinguishing media, carbon dioxide, foam, water fog or fine spray (for large fires)

Not suitable

High-pressure water jet (may spread flames).

Special exposure hazards

Avoid contact with product. Decontaminate equipment and protective clothing prior to reuse. During a fire, isocyanate vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Exposure to heated diisocyanate can be extremely dangerous.

Hazardous combustion products

Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke., Hydrogen cyanide, Isocyanate, Isocyanic Acid, Other undetermined compounds.

Unusual Fire and Explosion Hazards

Isocyanates react with water to release carbon dioxide gas. Closed container may forcibly rupture under extreme heat or when contents are contaminated with water (CO₂ formed). Use cold-water spray to cool fire-exposed containers to minimize the risk of rupture. Large fires can be extinguished with large volumes of water applied from a safe distance, since reaction between water and hot diisocyanate can be vigorous.

Special protective equipment for firefighters

Firefighters should wear NFPA compliant structural firefighting protective equipment, including self-contained breathing apparatus and NFPA compliant helmet, hood, boots and gloves.

6. Accidental release measures

Personal precautions

No action shall be taken involving any personal risk or without suitable training. Clear area. Ensure adequate ventilation. Put on appropriate personal protective equipment (see section 8).

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Spill Response

Dike spillage.

For small amounts: Absorb isocyanate with suitable absorbent material (see § 40 CFR, sections 260, 264 and 265 for further information). Shovel into open container. Do not make container pressure tight. Move container to a well-ventilated area (outside). Spill area can be decontaminated Isocyanate Decontamination Solution (Available from Colorimetric Laboratories, Inc. (CLI):

1-847-803-3737). Add at a 10 to 1 ratio. Allow to stand for at least 48 hours to allow escape of evolved carbon dioxide.

For large amounts: If temporary control of isocyanate vapor is required, a blanket of protein foam or other suitable foam (available from most fire departments) may be placed over the spill. Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal.

For residues: The following measures should be taken for final cleanup: Wash down spill area with decontamination solution. Allow solution to stand for at least 10 minutes.

7. Handling and storage

Handling

Put on appropriate personal protective equipment when handling (Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not breathe vapor, mist or spray. Avoid contact with eyes, skin, and clothing. Avoid tasting or swallowing. Keep container closed when not in use. Use with adequate ventilation. Wash thoroughly after handling. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must not be exposed to vapor or spray mist.

If bulging of drum occurs, transfer to well-ventilated area. Wearing suitable Personal Protection Equipment (PPE), puncture to relieve pressure, open vent and let stand for 48 hours before resealing.

Storage

Store in accordance with all local and government regulations. Keep in the original container or an approved alternative made from a compatible material, kept tightly sealed when not in use. Formation of CO₂ and buildup of pressure possible if moisture is introduced. Keep container tightly closed and in a well-ventilated place. Outage of containers should be filled with dry inert gas at atmospheric pressure to avoid reaction with moisture. Recommended storage temperature: 32 - 86°F (0 - 30°C).

8. Exposure controls/personal protection

CAS Number	Chemical Identity	Exposure Limits					
		ACGIH		OSHA		NIOSH REL	
		TWA	STEL	PEL	STEL	TWA	STEL
4098-71-9	Isophorone Diisocyanate (IPDI)	0.005 ppm	N.E.	N.E.	N.E.	0.005 ppm	0.02 ppm
Trade Secret	Aliphatic Polyisocyanate	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated equipment or clothing should be cleaned after each use or disposed of. Ensure that eyewash stations and safety showers are located in the work area.

Respiratory

Use a properly fitted, air-purifying or air-supplied respirator that is suitable for use with isocyanates and which complies with an approved standard.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Eyes	Chemical splash goggles are recommended. Wear face shield if splashing hazard exists.
Skin	Chemical resistant protective gloves are required. Suitable materials include: Nitrile rubber gloves, Butyl rubber gloves, Neoprene gloves. Depending on the conditions of use, cover as much of the exposed skin area as possible with appropriate clothing to prevent skin contact. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

9. Physical and chemical properties

Physical State	Liquid
Color	Light Yellow
Flash point	> 146°C (> 295°F) – ASTM D93 Pinsky-Martens Closed Cup
Lower explosion limit (LEL)	Not determined
Upper explosion limit (UEL)	Not determined
Auto-ignition temperature	Not determined
Decomposition temperature	Not determined
Odor	Characteristic
Odor threshold	Moderate to pungent
Vapor density	Not determined
Vapor pressure	0.00048 mmHg @ 20 °C (68 °F) for IPDI
pH	Not applicable
Specific gravity	1.00
Freezing point	Not determined
Boiling point	Not determined
Solubility in water	Insoluble; Reacts slowly w/ water to release Carbon Dioxide (CO ₂) gas.
Evaporation rate	Not determined
Partition coefficient: n-octanol/water	logPow: ca. 4.75 @ 20°C (68°F) (value calculated for IPDI)
Viscosity	4500 cPs

10. Stability and reactivity

Stability	The product is stable when properly stored and handled.
Conditions to avoid	Contact with moisture, other materials that react with isocyanates, or temperatures above 350°F (177°C), may cause polymerization.
Materials to avoid	Reactive or incompatible with the following materials: water, alcohols, strong bases, amines, substances/products that react with isocyanates, copper alloys.
Other hazards	Avoid contact with water or alcohols in sealed containers. Risk of bursting.
Hazardous decomposition products	Thermal decomposition products may include the following: Carbon dioxide (CO ₂), carbon monoxide (CO), oxides of nitrogen (NO _x), dense black smoke., Hydrogen cyanide, Isocyanate, Isocyanic Acid, Other undetermined compounds

11. Toxicological information

Routes of Exposure Inhalation, Skin Contact, Eye Contact

Potential acute health effects

Inhalation Isocyanate vapors or mist at concentrations above the exposure limits or guidelines can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) with symptoms of runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing difficulty). Persons with a preexisting, nonspecific bronchial hyper

reactivity can respond to concentrations below the exposure limits or guidelines with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the exposure limits or guidelines may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g. fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.

- Ingestion** May cause irritation of the digestive tract; Symptoms may include abdominal pain, nausea, vomiting, and diarrhea.
- Skin** May cause skin irritation with symptoms of reddening, itching, and swelling. Can cause sensitization. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Cured material is difficult to remove.
- Eyes** Causes serious eye irritation. Contact with vapor or mist may cause irritation with symptoms of burning and tearing.

Potential chronic health effects

As a result of previous repeated overexposures or a single large dose, certain individuals may develop sensitization to isocyanates (asthma or asthma-like symptoms) that may cause them to react to a later exposure to isocyanates at levels well below the exposure limits or guidelines. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthmatic attack, could be immediate or delayed up to several hours after exposure. Extreme asthmatic reactions can be life threatening. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air, or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several years. Sensitization can be permanent.

Prolonged contact with skin can cause reddening, swelling, rash, and, in some cases, skin sensitization. Animal tests and other research indicate that skin contact with isocyanates can play a role in causing isocyanate sensitization and respiratory reaction. This data reinforces the need to prevent direct skin contact with isocyanates.

Prolonged vapor contact with the eyes may cause conjunctivitis.

Delayed health effects

Symptoms affecting the respiratory tract can also occur several hours after overexposure.

Acute toxicity

LD50 Oral	Rat	5365 mg/kg ATE
LD50 Inhalation	Rat	0.636 mg/L 4-Hour dust/mist ATE
LD50 Dermal	Rabbit	6264 mg/kg ATE

Skin Irritation

Rabbit, OECD Test Guideline 404, Slight Irritant (Toxicological studies of a comparable product).

Eye Irritation

Rabbit, OECD Test Guideline 405, Slight Irritant (Toxicological studies of a comparable product).

Sensitization

Skin sensitization (local lymph node assay (LLNA)): positive (Mouse, OECD Test Guideline 429); Toxicological studies of a comparable product.

Respiratory sensitization: sensitizer

Mutagenicity

Genetic Toxicity in vitro: Salmonella/microsome (Ames) test: No indication of mutagenic effects.

Chromosome Aberration in vitro: Negative (Studies of a comparable product).

Point mutation in mammalian cells (HPRT test): Negative (Studies of a comparable product).

Carcinogenicity Classification

IARC	Not listed
NTP	Not listed
OSHA	Not regulated as a carcinogen
EU	Not classified

Developmental effects The substance produced negative results in tests for Mutagenicity (in Vitro and in Vivo), Fetotoxicity, Neurological Effects, and Teratogenic effects.

Fertility effects Fertility and developmental toxicity tests did not reveal any effect on reproduction.

Target organs Lungs, Respiratory Tract, Skin.

12. Ecological information

Aquatic Toxicity:

- Fish**
LC50: > 100 mg/l (Danio rerio (zebra fish), 96 h)
- Aquatic invertebrates**
EC50: > 100 mg/l (Daphnia magna (Water flea), 48 h)
- Aquatic plants**
ErC50: > 100 mg/l, (Desmodesmus subspicatus (Green algae), 72 h)
- Microorganisms**
EC50: > 1000 mg/l, (activated sludge, 3 h)

Note: Data is based on a similar product, including residual monomer.

Biodegradation:

- 1 %, Exposure time: 28 d, i.e. not readily degradable
Studies of a comparable product.
- 5 %, Exposure time: 28 d, i.e. not inherently degradable
Studies of a comparable product.

Bioaccumulation: An accumulation in aquatic organisms is not to be expected.

13. Disposal considerations

Waste disposal The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

NOTE: The data provided in this section is regarding this product, RJW Sealant 700, as packaged in

2 x 0.75L plural-component cartridges containing 0.75L of Part A and 0.75L of Part B (1.50L combined volume per cartridge).

International transport regulations

Regulatory information	UN/NA number	Proper shipping name	Classes/*PG	Reportable Quantity (RQ)
CFR	UN2922	Corrosive liquid, toxic, n.o.s. (Polyoxypropylenediamine, Isophorone Diisocyanate); LIMITED QUANTITY	8 (6.1); PGII	N/A.
TDG	UN2922	Corrosive liquid, toxic, n.o.s. (Polyoxypropylenediamine, Isophorone Diisocyanate); LIMITED QUANTITY	8 (6.1); PGII	N/A.
IMO/IMDG	UN2922	Corrosive liquid, toxic, n.o.s. (Polyoxypropylenediamine, Isophorone Diisocyanate); LIMITED QUANTITY	8 (6.1); PGII	N/A.
IATA	UN2922	Corrosive liquid, toxic, n.o.s. (Polyoxypropylenediamine, Isophorone Diisocyanate)	8 (6.1); PGII	N/A.

*PG : Packing group

15. Regulatory information

US regulations

HCS Classification When used for its intended purpose, this material is classified as hazardous in accordance with OSHA 29CFR 1910.1200.

U.S. Federal regulations

SARA Title III, Section 311/312 Classification
Immediate (Acute) health hazard

SARA Title III, Section 313 - Supplier Notification

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

Isophorone Diisocyanate (CAS # 4098-71-9); Diisocyanates Category N120

CERCLA RQ: None

SARA Section 302 Extremely Hazardous Substances

None required.

State regulations

Massachusetts RTK Substances

Isophorone Diisocyanate (CAS # 4098-71-9)

New Jersey RTK Hazardous Substances

Isophorone Diisocyanate (CAS # 4098-71-9)

Pennsylvania RTK Hazardous Substances

Isophorone Diisocyanate (CAS # 4098-71-9)

California Prop. 65: WARNING: This product contains the following chemical(s) known to the State of California to cause cancer:

None

California Prop. 65: WARNING: This product contains the following chemical(s) known to the State of California to be a reproductive toxin:

None

International regulations

Chemical inventories

United States inventory (TSCA 8b) - All components are listed or exempted.

16. Other information

Hazardous Material Information System III (U.S.A.)	Health: 3 Flammability: 1 Physical hazards: 1 Personal Protection: X
---	---

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. HMIS® ratings are to be used with a fully implemented HMIS® program.

Date of issue	November 23, 2020
Date of printing	November 23, 2020

Notice to reader

The information provided herein was believed to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied are subject to current terms and conditions of sale. NO WARRANTY, EXPRESSED OR IMPLIED, IS PROVIDED CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION, except that the product shall conform to specifications. Nothing contained herein constitutes an offer for the sale of any product.