SAFETY DATA SHEET



1/11

According to Work Health and Safety (WHS) Australia

Urethane 90 SF Hardener

Section 1. Identification

Product identifier	: Urethane 90 SF Hardener
Product code	: 105192

Relevant identified uses of the substance or mixture and uses advised against

Cyanate and isocyanate.-Hardener for resins. Polyurethane liquid.

Supplier's details	: WEICON GmbH & Co. KG Königsberger Str. 25, 48157 Münster, Germany phone:+49 251 93220, email: info@weicon.de, URL: www.weicon.de
e-mail address of person responsible for this SDS	: msds@weicon.de

National contact

WEICON Australia Pty. Ltd 1/55-65 Christensen Road, Stapylton QLD 4207 Phone: +61 493473383 E-Mail: info@weicon.com.au website: www.weicon.com.au

Emergency telephone: National Poison Information Center: Tel: 131126numberTRANSPORT / EMERGENCY CONTACT (24h): Tel: +61 2 8014 4558 (English)TRANSPORT / EMERGENCY CONTACT (24h): Tel.: 1800 074 234 (English)

Section 2. Hazard(s) identification

Classification of the substance or mixture	: ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1
	SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2
	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
GHS label elements Hazard pictograms	

Signal word	: DANGER
Hazard statements	: H315 - Causes skin irritation.
	H317 - May cause an allergic skin reaction.
	H319 - Causes serious eye irritation.
	H330 - Fatal if inhaled.
	H334 - May cause allergy or asthma symptoms or breathing difficulties if
	inhaled.
	H335 - May cause respiratory irritation.
	H351 - Suspected of causing cancer.
	H372 - Causes damage to organs through prolonged or repeated exposure.
Precautionary statements	

Section 2. Hazard(s) identification

Prevention	: P 201 - Obtain special instructions before use.
	P260 - Do not breathe vapor.
	P264 - Wash thoroughly after handling.
	P270 - Do not eat, drink or smoke when using this product.
	P271 - Use only outdoors or in a well-ventilated area.
	P284 - Wear respiratory protection.
	P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.
Response	: P308 + P313 - IF exposed or concerned: Get medical advice or attention.
	P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep
	comfortable for breathing. Immediately call a POISON CENTER or doctor.
	P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
	P362 + P364 - Take off contaminated clothing and wash it before reuse.
	P302 + P352 - IF ON SKIN: Wash with plenty of water.
	P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. 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 + P313 - If eye irritation persists: Get medical advice or attention.
Storage	 P405 - Store locked up. P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	: P501 - Dispose of waste according to applicable legislation.
Supplemental label elements	: Not applicable.

Other hazards which do not : None known. result in classification

Section 3. Composition and ingredient information

Substance/mixture

: Mixture

Ingredient name	% (w/w)	CAS number	Classification
Isocyanic acid, polymethylenepolyphenylene ester	≥75 - ≤90	9016-87-9	ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health e	effects	
Eye contact	: Causes serious eye irritation.	
Inhalation	 Fatal if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. 	
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.	
Ingestion	: No known significant effects or critical hazards.	
<u>Over-exposure signs/s</u>	<u>ymptoms</u>	
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness	
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing wheezing and breathing difficulties asthma	
Skin contact	: Adverse symptoms may include the following: irritation redness	
Ingestion	: No specific data.	
Indication of immediate medical attention and special treatment needed, if necessary		
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.	
Specific treatments	: No specific treatment.	

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Section 4. First aid measures

Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing
	thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides Hydrogen cyanide (HCN).
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures		
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
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).
Methods and materials for containment and cleaning up		

Small spill Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits		
Isocyanic acid, polymethylenepolyphenylene ester	Safe Work Australia (Australia, 10/2022). [Isocyanates, all (as -NCO)] Skin sensitizer. Inhalation sensitizer. STEL: 0.07 mg/m ³ , (as -NCO) 15 minutes. TWA: 0.02 mg/m ³ , (as -NCO) 8 hours.		

Appropriate engineering controls	:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

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 work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	

Section 8. Exposure controls and personal protection

Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Recommended : ; Viton®, Butyl rubber gloves.
Body protection	 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.
Other skin protection	 Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended : inorganic gases/vapors filter (Type B)

Section 9. Physical and chemical properties

Appearance	
Physical state	: Liquid.
Color	: Brown.
Odor	: Strong. Disagreeable and choking.
Odor threshold	: Not available.
рН	: 5 to 7
Melting point	: 41°C (105.8°F)
Boiling point, initial boiling point, and boiling range	: >300°C (>572°F)
Flash point	: Closed cup: >200°C (>392°F)
Fire point	: >500°C (>932°F)
Evaporation rate	: Not available.
Flammability	: Not available.
Lower and upper explosion limit/flammability limit	: Not available.
Vapor pressure	: Not available.
Relative vapor density	: Not available.
Relative density	: Not available.
Density	: 1.24 g/cm³ [20°C (68°F)]
Solubility(ies) Not available.	:
Solubility in water	: Not available.
Miscible with water	: No.
Partition coefficient: n- octanol/water	: Not applicable.
Auto-ignition temperature	: Not applicable.
Decomposition temperature	: Not available.
Viscosity	: Dynamic: 31100 mPa·s (31100 cP)
Flow time (ISO 2431)	: Not available.
Particle characteristics	
Median particle size	: Not applicable.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Isocyanic acid, polymethylenepolyphenylene ester	LC50 Inhalation Dusts and mists	Rat	0.31 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	490 mg/m³	4 hours
	LD50 Dermal	Rabbit	>9400 mg/kg	-
	LD50 Oral	Rat	49 g/kg	-

Acute toxicity estimates

Route	ATE value
Inhalation (vapors)	0.67 mg/l
Inhalation (dusts and mists)	0.41 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Isocyanic acid, polymethylenepolyphenylene ester	Eyes - Mild irritant	Rabbit	-	100 mg	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

Name		Category	Route of exposure	Target organs	
Isocyanic acid, polymethyle	Category 3	-	Respiratory tract irritation		
Specific target organ toxic	city (repeated exposure)		L	L	
Name		Category	Route of exposure	Target organs	
Isocyanic acid, polymethyle	enepolyphenylene ester	Category 1	-	-	
Aspiration hazard Not available.					
nformation on the likely outes of exposure	: Not available.				
Potential acute health effect	<u>ets</u>				
Eye contact	: Causes serious eye in	ritation.			
Inhalation	: Fatal if inhaled. May of symptoms or breathing			e allergy or asthma	
Skin contact	: Causes skin irritation.	May cause an aller	rgic skin reaction.		
Ingestion	: No known significant e	: No known significant effects or critical hazards.			
Symptoms related to the pl	hysical, chemical and toxic	cological character	<u>ristics</u>		
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness				
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing wheezing and breathing difficulties asthma				
Skin contact	: Adverse symptoms may include the following: irritation redness				
Ingestion	: No specific data.				
Delayed and immediate effo	ects and also chronic effe	<u>cts from short a</u> nd	<u>long term expos</u>	ure	
Short term exposure					
Potential immediate effects	: Not available.				
Potential delayed effects	: Not available.				
<u>Long term exposure</u>					
Potential immediate effects	: Not available.				
Potential delayed effects	t s : Not available.				
Potential chronic health e Not available.	ffects				
General	: Causes damage to org sensitized, a severe a low levels.				
Carcinogenicity	 Suspected of causing cancer. Risk of cancer depends on duration and level of exposure 				

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exposure.

Section 11. Toxicological information

Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Urethane 90 SF Hardener	N/A	N/A	N/A	0.67	0.41
Isocyanic acid, polymethylenepolyphenylene ester	49000	N/A	N/A	0.5	0.31

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	ADG	ADR/RID	IMDG	ΙΑΤΑ
UN number	Not available.	Not available.	Not available.	Not available.
UN proper shipping name	Not available.	Not available.	Not available.	Not available.
Transport hazard class(es)	Not available.	Not available.	Not available.	Not available.
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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Transport in bulk according : Not available. to IMO instruments

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list					
Australia	: All comp	onents are listed or exempted	ed.		
Canada	: All comp	onents are listed or exempted	ed.		
China	: All comp	onents are listed or exempted	ed.		
Eurasian Economic Union	: Russian	Federation inventory: Not	determined.		
Japan		iventory (CSCL): All compo iventory (ISHL): All compor			
New Zealand	: All comp	onents are listed or exempte	ed.		
Philippines	: All comp	onents are listed or exempted	ed.		
Republic of Korea	: All comp	onents are listed or exempted	ed.		
Taiwan	: Not dete	rmined.			
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Section 15. Regulatory information

Thailand	: All components are listed or exempted.
Turkey	: Not determined.
United States	: All components are active or exempted.
Viet Nam	: All components are listed or exempted.

Section 16. Any other relevant information

<u>History</u>	
Date of printing	: 2/20/2025
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Key to abbreviations	 ADG = Australian Dangerous Goods ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group SUSMP = Standard Uniform Schedule of Medicine and Poisons UN = United Nations

Procedure used to derive the classification

Justification
Calculation method
Calculation method
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References

: Not available.

✓ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.