

**SPECTRAL WAVE 2.0
SA-H2O ACTIVATOR**

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

**1.1. Product identifier
SPECTRAL WAVE 2.0: SA-H2O ACTIVATOR**

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

For professional use in car refinish.

1.3. Data of the supplier Safety Data Sheet

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1.4. Emergency telephone number +48 61 810-99-09 (from 7.00 to 15.00)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The mixture was classified as dangerous pursuant to current regulations - see Section 15.

Classification 1272/2008/EC:

Acute toxicity (inhalation), hazard category 4 (Acute Tox. 4); Harmful if inhaled.
Skin sensitization, hazard category 1 (Skin Sens. 1). May cause skin sensitization.
Specific target organ toxicity – single exposure, hazard category 3 (STOT SE Cat. 3).
Hazardous to the aquatic environment — Chronic Hazard, Category 3 (Aquatic Chronic 3). Harmful to aquatic life with long lasting effects.

2.2. Label elements:

Contains:

Isocyanates. May cause an allergic reaction.

Pictograms:



Signal word:

Caution

H317
H332
H335
H412

May cause skin sensitization.
Harmful if inhaled.
May cause respiratory irritation.
Harmful to aquatic life with long lasting effects.

P261
P271
P280
P312

Avoid breathing vapours/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Call a doctor if you feel unwell.

2.3. Other hazards

Reacts exothermically with amines and alcohols; slowly releases CO₂ in contact with water; increases pressure in sealed containers; container rupture hazard.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

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Substance name	Identification numbers	Classification and marking	Concentration [wt%]
HDI Polyisocyanate	EC: -- CAS: 160994-68-3 Index no.: --- Registration no.: ---	Skin Sens. 1, H317 Acute Tox. 4; H332 STOT SE 3; H335 Aquatic Chronic 3; H412	60-70
Hexamethylene diisocyanate	EC: 212-485-8 CAS: 822-06-0 Index no.: 615-011-00-1 Registration no.: 01-2119457571-37-XXXX	Acute Tox. 3, H331 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317	<0.1

The full text of the hazard statements (H) is provided in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information:

See section 11 of the Safety Data Sheet.

Inhalation:

Take the victim outside into fresh air, ensure quiet surrounding; in case of no breath, apply artificial respiration. Call a doctor.

Skin:

Take off contaminated clothing. Rinse contaminated skin with plenty of lukewarm water for about 15 minutes. If irritation persists, consult a doctor.

Eyes:

Rinse immediately with plenty of lukewarm water for about 15 minutes, avoid strong water jet-risk of cornea damage, consult a doctor.

Alimentary tract:

Do not provoke vomiting (choking risk). Call a doctor.

Person giving first aid should wear medical gloves.

4.2. Most important symptoms and effects, both acute and delayed

May cause sensitization by skin contact. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

4.3. Indications of any immediate medical attention and special treatment needed

Special measures allowing for specialist and immediate aid should be available in the place of work.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Powder, foam resistant to alcohols, carbon dioxide, water mist.

5.2. Special hazards arising from the substance or mixture

Fire may cause generation of carbon dioxide and other toxic gases.

5.3. Advice for firefighters

Fire-fighting teams should wear self-contained breathing apparatus and light protective clothing. Cool adjacent tanks by spraying water at a safe distance.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For persons not being the members of aid giving staff:

Eliminate sources of ignition. Ensure sufficient ventilation of the room. Avoid direct contact with the released substance. Avoid contact with skin and eyes. Personal protection measures - section 8 of the Safety Data Sheet.

For persons giving aid:

Persons giving aid should wear protective clothing made of coated, impregnated fabric, protective gloves (viton), tight protective glasses and breathing apparatus: gas mask with A type absorber.

6.2. Environmental precautions

Prevent leakage to the sewage system, surface waters, underground waters and soil.

6.3. Methods and materials for containment and cleaning up

Stop the leakage (close the liquid inflow, seal), place damaged container in an emergency container, remove the liquid mechanically and place it in an emergency container. In case of large leakage, embank the area. In case of small amounts, collect with the use of a binding agent (e.g. mica, diatomaceous earth, sand). After approx. 1 hour put into a waste container. Do not close the container (CO₂ is being released). Leave for several days in a secure place outdoor.

6.4. Reference to other sections

Personal protection measures - see section 8 of the Safety Data Sheet.

Disposal considerations - see section 13 of the Safety Data Sheet.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat and fire sources. Prevent leakage to the sewage system, surface waters, underground waters and soil. Use in well ventilated rooms. Do not smoke. Do not inhale fumes. Avoid contact with skin and eyes. Take precaution measures against electrostatic discharge. Use personal protection measures - section 8 of the Safety Data Sheet.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly sealed, original containers. Do not store near large amounts of organic peroxides and other strong oxidants. Take precaution measures against electrostatic discharge. Store in cool, well ventilated rooms. Protect from low temperatures, the influence of sunrays and heat sources. Avoid temperatures below +5 °C above +50°C. Protect from moisture.

7.3. Special end use(s)

For professional use in car refinish taking into consideration the information included in subsections 7.1 and 7.2.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

8.1. Control parameters

Hexamethylene diisocyanate CAS 822-06-0 according to:

- TRGS 900: MAK: 0.005ppm, 0.035mg/m³, 1;=2;(I),DFG, 12

8.2. Exposure control

Respiratory tract protection:

Gas mask with A2-P2 type absorber (EN 141).

Hand protection:

Protective gloves PN-EN 374-3 (viton, 0.7 mm thick, penetration time > 480 min, natural rubber, thickness >0,35 mm in the short-time exposure)

Eye protection:

Tight protective glasses.

Skin protection:

Proper protective clothing (coated impregnated fabrics).

Workplace:

Fixed fume extraction and general ventilation.

Environmental exposure control:

Prevent leakage to the sewage system, surface waters, underground waters and soil.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	strong, powerful
Odour threshold	no data
pH	not applicable
Melting/freezing point	not applicable
Boiling point	Approx..170°C
Flash point	>62°C
Autoignition point	about 410°C
Breakdown point	not specified
Evaporation rate	not specified
Flammability (solid, gas)	not applicable
Explosion limits	% lower: 0.8 vol% upper: 4.7 vol%
Vapour pressure	not specified
Vapour density (with regard to air)	not specified
Density	about 1.1 g/cm ³ (20°C)
Solubility (in water)	insoluble
N-octanol/water division ratio	not specified
Viscosity	25 ÷ 60 s
Explosive properties	not applicable
Oxidizing properties	not applicable

9.2 Other informations

No available data.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is not reactive under normal conditions.

10.2. Chemical stability

The product remains stable under normal conditions.

10.3. Possibility of hazardous reactions

Carbon monoxide and other toxic gases are generated as a result of thermal decomposition. Exothermic reaction with amines and alcohols, slow release of CO₂ in case of contact with water; pressure build-up in closed containers, danger of bursting of the containers.

10.4. Conditions to be avoided

Flammable product. Avoid contact with strongly oxidizing agents, peroxides, strong acids and bases. Avoid generation and accumulation of static electricity. Protect from the influence of sunrays and heat sources.

10.5. Incompatible materials

Avoid contact with large amounts of organic peroxides, strong acids and bases as well as other strong oxidants.

10.6. Hazardous decomposition products

Carbon monoxide nitric oxides, isocyanate fumes, trace amounts of hydrogen cyanide and other toxic gases are generated as a result of thermal decomposition.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No experimental data available on the preparation. Evaluation was performed based on the data on dangerous ingredients included in the preparation.

a) Acute toxicity

HDI Polyisocyanate	LD ₅₀ (rat, ingestion)	> 2.000 mg/kg
	LC ₅₀ (rat, inhalation)	0,39 mg/l, 4 h

b) Skin corrosion/irritation

No available data confirming the hazard class.

c) serious eye damage/irritation

No available data confirming the hazard class.

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

d) respiratory or skin sensitisation

May cause skin sensitization.

e) germ cell mutagenicity

The mixture has not been classified as mutagenic. No available data confirming the hazard class.

f) carcinogenicity

The mixture has not been classified as cancerogenic. No available data confirming the hazard class.

g) reproductive toxicity

The mixture has not been classified as having any harmful effect on reproduction. No available data confirming the hazard class.

h) STOT-single exposure

May cause respiratory irritation.

i) STOT- repeated exposure

No available data confirming the hazard class.

j) aspiration hazard

No available data confirming the hazard class.

Exposure methods:

Inhalation: May cause skin sensitization.

Skin: May cause skin sensitization.

Eyes: May cause irritating effect.

If swallowed, the substance may cause irritation of the alimentary tract, nausea, vomiting and diarrhoea.

Poisoning symptoms:

Headache and vertigo, fatigue, decreased muscle power, drowsiness and, in exceptional instances, loss of consciousness.

Fumes might cause drowsiness and vertigo. Repeated exposure may cause skin dryness or cracking.

SECTION 12: ECOLOGICAL INFORMATION

No experimental data available on the preparation. Evaluation was performed based on the data on dangerous ingredients included in the preparation.

12.1. Toxicity

HDI Polyisocyanate

Daphnia magna /EC50 (48h) >100 mg/l

12.2. Persistence and degradability

No available data.

12.3. Bioaccumulative potential

No available data.

12.4. Mobility in soil

Product very poorly soluble in water. The product in the contact with water changes in solid, insoluble substance (polycarbamide). CO₂ is released at the same time.

12.5. Results of PBT and vPvB assessment

No available data.

12.6. Other adverse effects

Harmful to aquatic life with long lasting effects.

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

The product must be disposed of in compliance with proper local and statutory regulations with regard to waste - see point 15. The product should be disposed with entities which are authorised to conduct activity in the area of collecting, recycling or utilization of waste.

Product remains:

Do not dispose the product into the sewage system. Do not store with communal waste. Remove the remains of the mixture carefully and leave to dry only in good ventilated rooms. The dried product is not harmful waste.

CAUTION: The remains should be dried in small portions. Keep them away from flammable products. High amounts of heat are released during chemical reaction!

Contaminated container:

A container containing unhardened remains of the product is harmful waste. Do not store with communal waste. The contaminated container should be disposed with entities which are authorized to collection, recover or disposal.

SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMO/IMGD	IATA-DGR
		Product is not dangerous goods.
		Product is not dangerous goods. Avoid temperatures below +5 °C above +50°C. Protect from moisture.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Directive 67/548/EWG(2006/121/WE)

Directive 91/155/EWG (2001/58/WE)

Directive 1999/45/EC (2006/8/WE)

REACH - Regulation 2006/1907/WE

CLP - Regulation 1272/2008/WE

15.2. Chemical safety assessment

Not performed

SECTION 16: OTHER INFORMATION

Relevant hazard statements listed in Sections 2 to 15:

Skin Sens. 1 Skin sensitization

H317 May cause an allergic skin reaction

Acute Tox. 4 Acute toxicity. Category 4

H332 Harmful if inhaled

STOT SE 3 Specific target organ toxicity – single exposure, Category 3

H335 May cause respiratory irritation

Eye Irrit. 2 Eye irritation. Category 2

H319 Causes serious eye irritation

Skin Irrit. 2 Corrosive/irritating effect on skin. Category 2

H315 Causes skin irritation, Category 2

Resp. Sens. 1 Respiratory sensitization

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Acute Tox. 4 Acute toxicity. Category 4

H331 Toxic if inhaled.

Hazardous to the aquatic environment — Chronic Hazard, Category 3

H412 Harmful to aquatic life with long lasting effects.

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SECTION 16: OTHER INFORMATION

Explanation of the abbreviations and acronyms used in the Safety Data Sheet

CAS no – numerical symbol ascribed to a chemical substance by the American organization, Chemical Abstracts Service (CAS).

EC no. – a number ascribed to a chemical substance in the European List of Notified Chemical Substances (ELINCS) or a number in the European Inventory of Existing Chemical Substances mention in "No-longer polymers" publication (EINECS)

MPC – maximum permissible concentration of health hazardous substances in the work place

MPIC – maximum permissible instantaneous concentration

MPCC - maximum permissible ceiling concentration

PCB - permissible concentration in biological material

UN number - four-digit identification number of a substance, preparation or product pursuant to UN model regulations

ADR – European agreement on international road transport of hazardous materials

IMO – International Marine Organization

RID – Regulations for international rail transport of hazardous materials

IMDG-Code – International marine code for hazardous materials

ICAO /IATA – Technical Instructions for Safe Air Transport of Hazardous Materials

The information is based on our current knowledge. This document shall not constitute warranty for product characteristics. Classification was made by calculation method according to the classification rules contained in Regulation 1272/2008/WE.

Other sources of information

ECHA European Chemicals Agency

TOXNET Toxicology Data Network

IUCLID International Uniform Chemical Information Database

Changes: General update

Trainings:

With regard to handling, health and safety while working with hazardous substances and mixtures.

With regard to transport of hazardous goods pursuant to the requirements of ADR regulations.

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