



SAFETY DATA SHEET

Revision date 12-May-2015

Version 2

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

Product identifier

Product Code RSP RH4201

Product Name Urethane Activator/Hardener

Other means of identification

No information available

Recommended use of the chemical and restrictions on use

Hardener, Coatings

Details of the supplier of the safety data sheet

See section 16 for more information

Ellis Paint Company / Restoration Shop
3150 E. Pico Blvd.
Los Angeles , CA 90023-3683

CUSTOMER SERVICE (800) 672-4900

CHEMTREC (800) 424-9300

Section 2: HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation	Category 2
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Flammable liquids	Category 2

Label elements



Signal word

DANGER

HAZARD STATEMENTS

Highly flammable liquid and vapor
Causes serious eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May cause cancer
May cause drowsiness or dizziness

PREVENTION

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

RESPONSE

IF exposed or concerned: Get medical advice/attention.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin

If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Inhalation

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Ingestion

Do NOT induce vomiting. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Fire

In case of fire: Use CO₂, dry chemical, or foam for extinction.

STORAGE

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

DISPOSAL

Dispose of contents/containers in accordance with local regulations.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC)

Not applicable.

OTHER HAZARDS

Causes mild skin irritation. Harmful to aquatic life with long lasting effects.

UNKNOWN ACUTE TOXICITY

0% of the mixture consists of ingredient(s) of unknown toxicity.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	weight-%
Hexamethylene diisocyanate homopolymer	28182-81-2	50 - 70
Methyl ethyl ketone	78-93-3	25 - 50

Product Code RSP-RH4201

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AGHS - USA OSHA SDS

Aliphatic isocyanate polymer	Proprietary	5 - 10
n-Butyl acetate	123-86-4	3 - 5
Solvent naphtha, petroleum, light aromatic	64742-95-6	3 - 5
Benzene, 1,2,4-trimethyl-	95-63-6	1 - 3
Isophorone diisocyanate	4098-71-9	0.1 - 0.3
Cumene	98-82-8	0.1 - 0.3
Hexamethylene diisocyanate	822-06-0	0.1 - 0.3

*The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: FIRST AID MEASURES

First Aid Measures

General advice

IF exposed or concerned: Get medical advice/attention.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact

If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Inhalation

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Ingestion

Do NOT induce vomiting. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, CO₂, water spray or alcohol-resistant foam.

Not to be used for safety reasons: Strong water jet

Specific hazards arising from the chemical

Burning produces heavy smoke. Fire may produce irritating and/or toxic gases. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation. May cause sensitization by skin contact.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit. Cool containers with flooding quantities of water until well after fire is out. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid breathing vapors or mists. Remove all sources of ignition. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Take precautionary measures against static discharges.

For emergency responders
Use personal protection recommended in Section 8.

Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
Dispose of waste product or used containers according to local regulations. Clean with detergents. Avoid solvent cleaners. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Take up mechanically, placing in appropriate containers for disposal.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

General advice
Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this product is used. Examination of lung function should be carried out on a regular basis on persons spraying this product.

Advice on safe handling
Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limits. Operators should wear anti-static footwear and clothing and floors should be of the conducting type. Use personal protection recommended in Section 8. Never use pressure to empty container. Comply with the health and safety at work laws. Prevent product from entering drains. Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Use only with adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. Use only in well-ventilated areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.

General Hygiene Considerations
When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep/store only in original container. Store in accordance with local regulations. Keep unauthorized personnel away. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed in a dry and well-ventilated place. Keep tightly closed in a dry and cool place.

Incompatible materials
Strong bases. Strong oxidizing agents. Copper. Amines.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits
If S* appears in the OEL table, it indicates this chemical contains a skin notation.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl ethyl ketone 78-93-3	STEL: 300 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 590 mg/m ³	IDLH: 3000 ppm TWA: 200 ppm TWA: 590 mg/m ³ STEL: 300 ppm STEL: 885 mg/m ³

n-Butyl acetate 123-86-4	STEL: 200 ppm TWA: 150 ppm	TWA: 150 ppm TWA: 710 mg/m ³	IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 950 mg/m ³
Benzene, 1,2,4-trimethyl- 95-63-6	TWA: 25 ppm		TWA: 25 ppm TWA: 125 mg/m ³
Isophorone diisocyanate 4098-71-9	TWA: 0.005 ppm		TWA: 0.005 ppm TWA: 0.045 mg/m ³ STEL: 0.02 ppm STEL: 0.180 mg/m ³
Cumene 98-82-8	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m ³ S*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m ³
Hexamethylene diisocyanate 822-06-0	TWA: 0.005 ppm		Ceiling: 0.020 ppm 10 min Ceiling: 0.140 mg/m ³ 10 min TWA: 0.005 ppm TWA: 0.035 mg/m ³

Appropriate engineering controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas. Provide local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Skin and body protection

Wear anti-static clothing made of natural fiber or of high temperature resistant synthetic fiber. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear suitable protective clothing.

Hand Protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical / chemical damage and poor maintenance. Wear protective gloves.

Respiratory protection

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal Protection

No information available

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid
Appearance	No information available
Odor	Solvent
Color	No information available
Odor Threshold	No information available
pH value	No information available
Melting point/freezing point	No information available
Boiling point / boiling range	79.6 °C / 175 °F
flash point	-7 °C / 19 °F
evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	

Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor Pressure	No information available
vapor density	No information available
Density (lbs per US gallon)	8.32
specific gravity	1
Solubility(ies)	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available

Other information _____

Section 10: STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous polymerization	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong bases. Strong oxidizing agents. Copper. Amines.
Hazardous Decomposition Products	Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx).

Section 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure _____

Eye contact
Causes serious eye irritation
Skin Contact
May cause an allergic skin reaction
Ingestion
Not applicable
Inhalation
May cause drowsiness or dizziness

Numerical measures of toxicity - Component Information _____

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hexamethylene diisocyanate homopolymer 28182-81-2	-	-	= 18500 mg/m ³ (Rat) 1 h
Methyl ethyl ketone 78-93-3	= 2483 mg/kg (Rat)	= 5000 mg/kg (Rabbit)	= 11700 ppm (Rat) 4 h
Aliphatic isocyanate polymer	-	-	-
n-Butyl acetate 123-86-4	= 14.13 mg/kg (Rat)	> 17600 mg/kg (Rabbit)	= 390 ppm (Rat) 4 h
Solvent naphtha, petroleum, light aromatic 64742-95-6	-	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
Benzene, 1,2,4-trimethyl- 95-63-6	= 3280 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 18 g/m ³ (Rat) 4 h
Isophorone diisocyanate 4098-71-9	= 1097 mg/kg (Rat)	1060 - 4780 mg/kg (Rabbit)	= 0.135 mg/L (Rat) 4 h
Cumene 98-82-8	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	> 3577 ppm (Rat) 6 h

Hexamethylene diisocyanate 822-06-0	= 738 mg/kg (Rat)	= 593 mg/kg (Rabbit)	= 0.06 mg/L (Rat) 4 h
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Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (inhalation-dust/mist) 51.1 mg/l
ATEmix (inhalation-vapor) 355 mg/l

UNKNOWN ACUTE TOXICITY 0% of the mixture consists of ingredient(s) of unknown toxicity.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chemical Name	ACGIH	IARC	NTP	OSHA
Cumene 98-82-8		Group 2B		X

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans.

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present.

Skin corrosion/irritation	Not applicable
Serious eye damage/eye irritation	Causes serious eye irritation
Skin sensitization	May cause an allergic skin reaction
Respiratory sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled
Germ cell mutagenicity	Not applicable
Carcinogenicity	May cause cancer
Reproductive Toxicity	Not applicable
Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure)	Not applicable
Aspiration hazard	Not applicable

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Environmental precautions Prevent product from entering drains.

Persistence and degradability

No information available

Bioaccumulation

No information available

Mobility

No information available

Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Improper disposal or reuse of this container may be dangerous and illegal. Empty containers must be scrapped or reconditioned.

Section 14: TRANSPORT INFORMATION

14.1 UN/ID no	<u>DOT</u> UN1993	<u>IMDG</u> UN1993	<u>IATA</u> UN1993
14.2 Proper shipping name	Flammable liquid, n.o.s. Methyl ethyl ketone n-Butyl acetate	Flammable liquid, n.o.s. Methyl ethyl ketone n-Butyl acetate	Flammable liquid, n.o.s. Methyl ethyl ketone n-Butyl acetate
14.3 Hazard Class	3	3	3
14.4 Packing Group	II	II	II
14.5 Environmental hazard	Not applicable		
14.6 Special Provisions	IB2, T7, TP1, TP8, TP28 Emergency Response Guide Number 128	274 EmS-No F-E, S-E	A3
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code			No information available

Section 15: REGULATORY INFORMATION

International Inventories

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

All components are listed or exempt from listing

DSL - Canadian Domestic Substances List

All components are listed or exempt from listing

US Federal Regulations

Chemical Name	SARA 313 - Threshold Values %	Hazardous air pollutants (HAPs) content
Benzene, 1,2,4-trimethyl- 95-63-6 1 - 3	1	
Cumene 98-82-8 0.1 - 0.3	1	Present
Hexamethylene diisocyanate 822-06-0 0.1 - 0.3	1	Present

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
n-Butyl acetate 123-86-4	5000 lb			X

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methyl ethyl ketone 78-93-3	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
n-Butyl acetate 123-86-4	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Isophorone diisocyanate 4098-71-9		500 lb	
Cumene 98-82-8	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
Hexamethylene diisocyanate 822-06-0	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

US State Regulations

Rule 66 status of product

Photochemically reactive.

California Proposition 65

WARNING! This product contains a chemical known in the State of California to cause cancer.

U.S. EPA Label information

EPA Pesticide registration number Not applicable

U.S. State Right-to-Know Regulations

Chemical Name
Hexamethylene diisocyanate homopolymer 28182-81-2
Methyl ethyl ketone 78-93-3
Aliphatic isocyanate polymer
n-Butyl acetate 123-86-4
Solvent naphtha, petroleum, light aromatic 64742-95-6
Benzene, 1,2,4-trimethyl- 95-63-6
Cumene 98-82-8

Section 16: OTHER INFORMATION

HMIS

Health hazards 2*

* = Chronic Health Hazard

Flammability 3

Physical hazards 0

Personal Protection X

Supplier Address

Ellis Paint Company / Restoration Shop
3150 E. Pico Blvd.
Los Angeles, CA 90023-3683

Prepared By Product Stewardship

Revision date 12-May-2015

Revision Note No information available

Disclaimer

The information on this Safety Data Sheet (SDS) is based on the present state of our knowledge, current national legislation and guidelines. As the specific conditions of use of the product are outside the supplier's knowledge and control the user is responsible for ensuring that the requirements of relevant legislation are complied with. This SDS should not be construed as any guarantee of the technical performance or suitability for particular applications. UNLESS SUPPLIER AGREES OTHERWISE IN WRITING, SUPPLIER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. SUPPLIER WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

End of Safety Data Sheet