Safety Data Sheet

1. Identification

Product Information: 00771900

Family: 509

Product Name: KLASS UNIVERSAL HARDENER ULTRA

Recommended Use: Catalyst

Supplied by/Manufacturer:
SUR QUIMICA S.A.
Calle 38, contiguo al Cementerio La Uruca.
San José, Costa Rica, Centroamérica
Tel Información: (506) 2211-3700,
Fax: (506) 2256-0690

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CHEMTREC: 1-800-424-9300
INTERNATIONAL: (506) 2211-3911

Safety Data Sheet Coordinator: sds@gruposur.com

2. Hazards Identification

GHS Classification
Acute Tox. 3 Inhalation, Aquatic Chronic 3, Flam. Liq. 3, Resp. Sens. 1, Skin Irrit. 2, Skin Sens. 1, STOT SE 3 NE, STOT SE 3 RTI

Symbol(s) of Product

Signal Word
Danger

GHS HAZARD STATEMENTS

Flammable Liquid, category 3	H226	Flammable liquid and vapour.
Acute Toxicity, Oral, category 4	H302	Harmful if swallowed.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 3	H331	Toxic if inhaled.
Respiratory Sensitizer, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
STOT, single exposure, category 3, NE	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

GHS LABEL PRECAUTIONARY STATEMENTS

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	In case of inadequate ventilation wear respiratory protection.
P301+P312	IF SWALLOWED: Call a POISON CENTRE/doctor/… if you feel unwell.

P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P321	Specific treatment (see FIRST AIDS on this sheet).
P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use materials indicated in Section 5 to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Remove the contents / container according to the General Regulation for the Classification and Management of Hazardous Waste No. 41527-S-MINAE (Applies to Costa Rica).Dispose of contents/container in accordance with local/regional/national/ international regulations.

GHS SDS PRECAUTIONARY STATEMENTS

P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/...] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P270	Do not eat, drink or smoke when using this product.

3. Composition/Information on Ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
homopolímeros de 1,6-diisocianato de hexametileno	28182-81-2	30-40	GHS06	H302-317-331-335
n-Butyl Acetate	123-86-4	20-30	GHS02-GHS07	H225-315-320-332-336-402
1-methyl-2-methoxiethyl acetate	108-65-6	20-30	GHS02	H226-313
Metyl Ehyl Ketone	78-93-3	2.5-10	GHS02-GHS07	H225-303-315-320-335-336
Aromatic Petroleum Hidrocarbon	64742-95-6	1.0-2.5	GHS02-GHS07 -GHS08-GHS09	H226-303-304-317-335-336-411
4-Toluenosulfonil-isocianato	4083-64-1	1.0-2.5	GHS07-GHS08	H303-315-319-334-335
1,2,4-trimethyl benzene	95-63-6	1.0-2.5	GHS02-GHS07 -GHS08-GHS09	H226-304-315-319-335-411

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

4. First-aid Measures

FIRST AID - INHALATION: Artificial respiration and/or oxygen may be necessary. Keep the victim calm. Ensure that medical personnel are aware of the materials involved and take precautions to protect themselves. Oxygen or artificial respiration if needed. If inhaled, remove to fresh air. Give oxygen if necessary. Consult a physician if symptoms persist or exposure is severe.

FIRST AID - SKIN CONTACT: In case of skin contact, wash immediately with plenty of water for at least 20 minutes. Persistent skin irritation may be treated with topical applications of anaesthetic ointments. Wash off immediately with plenty of water for at least 15 minutes. In case of burns, immediately wash skin with cold water. Seek medical advice. Do not remove clothes stick to the skin. Seek medical advice.

FIRST AID - EYE CONTACT: Flush eye(s) immediately with plenty of water. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

FIRST AID - INGESTION: If ingested, do not induce vomiting. If conscious, drink 8-10 oz. of water promptly. Call a physician immediately.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: Heating may cause an explosion. Flammable liquid. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). When heated, emits highly irritating and noxious vapors.

SPECIAL FIREFIGHTING PROCEDURES: Do not use a solid water stream as it may scatter and spread fire. Move containers from

fire area if you can do it without risk. All these products have a very low flash point: Use of water spray when fighting fire may be inefficient. Use a self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode. Flammable. Cool fire-exposed containers using water spray. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog

6. Accidental Release Measures

ENVIRONMENTAL MEASURES: Do not allow to enter drains, sewers, or sewers.
Inform the authorities in the event of a leak in natural water courses or in the sewage system.

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contains isocyanates. In order to neutralize the isocyanate, the area of ??the spill can be decontaminated with the following recommended solution: Mix of 90% water, 8% concentrated ammonia and 2% detergent. Add in a ratio of 10 to 1. Allow to stand at least 48 hours to allow carbon dioxide to escape.
For the treatment of waste, clean the area of ??the spill with decontaminating solution, let the solution rest for at least 10 minutes

7. Handling and Storage

HANDLING: Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Ignition and/or flash back may occur. Never use air pressure for transferring product. Use only in well-ventilated areasHandle in accordance with good industrial hygiene and safety practice. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children. Take precautionary measures against static discharges. Hazardous residue may remain in emptied container. Do not reuse empty containers without commercial cleaning or reconditioning.

STORAGE: It contains isocyanates. Possibility of CO2 overpressure formation. Keep the container tightly closed and in a well-ventilated place. Storage temperature: 0 to 38 ° C.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
homopolímeros de 1,6-diisocianato de hexametileno	N.E.	N.E.	N.E.	N.E.
n-Butyl Acetate	150 ppm	N.E.	N.E.	N.E.
1-methyl-2-methoxiethyl acetate	50 mg/L	100 mg/L	N.E.	N.E.
Metyl Ehyl Ketone	N.E.	N.E.	200 ppm	N.E.
Aromatic Petroleum Hidrocarbon	25	N.E.	N.E.	N.E.
4-Toluenosulfonil-isocianato	N.D.	N.E.	N.D.	N.E.
1,2,4-trimethyl benzene	N.D.	N.E.	N.E.	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection

RESPIRATORY PROTECTION: In case of insufficient ventilation, wear suitable respiratory equipment.

SKIN PROTECTION: Cover the maximum amount of exposed skin to avoid any skin contact. Wear nitrile or neoprene gloves. Gloves should be inspectet before use. Use the correct technique to remove the gloves (without touching the exterior surface) to prevent skin contact with the product.

EYE PROTECTION: Safety glasses with side-shields to prevent possible splashing of the product. Wear chemical goggles and faceshield (if not wearing a full facepiece respirator). Wear approved eye protection according to applicable governmental regulations.

OTHER PROTECTIVE EQUIPMENT: When required, according to the concentration of the product, wear chemical protective clothing with limited thermal protection.

HYGIENIC PRACTICES: No Information

9. Physical and Chemical Properties

Appearance:	Liquid	**Physical State:**	Liquid
Odor:	Characteristic	**Odor Threshold, ppb:**	Not Established
Density, g/ml:	0.990	**pH:**	N.A.
Freeze Point, °C:	No Information	**Viscosity, cP:**	14- 15 seg. Z2
Solubility in Water:	No	**Partition Coefficient, n-octanol/ water:**	No Information
Decomposition temperature, °C	No Information		
Boiling Range, °C:	0 - 0	**Explosive Limits, %:**	0.0 - 10.8
Combustibility:	Sin Información	**Flash Point, °C:**	30
Evaporation Rate:	No Information	**Auto-Ignition Temperature, °C**	No Information
Vapor Density:	No Information	**Vapor Pressure, mmHg:**	No Information

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

STABILITY: Contains Isocyanate. Reacts with water to form carbon dioxide. Explosion risk Reactions with alcohols. Reactions with acids. Reactions with alkalis (bases). Reactions with amines. Danger of exothermic reaction. Polymerization hazard. Stable under recommended storage conditions.

CONDITIONS TO AVOID: Avoid atmospheric humidityKeep away from sources of ignition: heat, flame and sparks.

INCOMPATIBILITY: Incompatible with acids, amines, alcohols, water, Alkaline, strong bases, Substances and / or products that react with isocyanates. Isocyanate reacts with water to form carbon dioxide. Explosion risk Reactions with alcohols. Reactions with acids. Reactions with alkalis (bases). Reactions with amines. Oxidizing agents, strong acids and strong bases. Keep away from strong oxidizing agents, heat and open flames.

HAZARDOUS DECOMPOSITION PRODUCTS: It can produce carbon monoxide, carbon dioxide, nitrogen oxide, hydrogen cyanide, nitrogen oxides, aromatic isocyanates, gases / vapors.

11. Toxicological Information

Practical Experiences

INFORMATION ON TOXICOLOGICAL EFFECTS

Acute Toxicity: No Information

Skin corrosion/irritation: No Information

Serious eye damage/eye irritation: May cause moderate eye irritation. May cause moderate corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness. Vapor may cause lacrimation (tears).

Respiratory or skin sensitisation: It contains isocyanates. overexposure isoacyanates cause respiratory and skin sensitization. In case of sensitization by breathing, allergic symptoms (similar to asthma) in the lower respiratory tract can not be ruled out, including sneezing, shortness of breath and respiratory distress, which may appear later. In case of repeated inhalation of high concentrations, you can not rule out lesions in the lungs, as well as a reduction in lung function that may be permanent. In the case of substances that irritate the lower respiratory tract, asthma-type reactions can not be ruled out due to the exposure of the product.

Germ cell mutagenicity: No Information

Carcinogenicity: No Information

Reproductive toxicity: No Information

Specific target organ toxicity - single exposure: It contains isocyanate. Inhalation of vapors may cause respiratory irritation, shortness of breath, chest discomfort, and reduced lung function. Overexposure well above permissible exposure levels may cause bronchitis, bronchial spasms, and pulmonary edema.

Specific target organ toxicity - repeated exposure: It contains isocyanates. It has been shown that long-term exposure to isocyanates causes damage to the lungs, including a reduction in lung function that may be permanent. Acute or chronic overexposure to isocyanates can cause sensitization in some people, causing allergic respiratory reactions, including wheezing, shortness of breath and shortness of breath, animal tests indicate that after contact with the skin can cause respiratory sensitization.

Aspiration hazard: No Information

Acute Toxicity Values
The acute effects of this product have not been tested. Data on individual components are tabulated below

CAS-No.	Chemical Name	Oral LD50	Dermal LD50 (mg/kg)	Vapor LC50
28182-81-2	homopolímeros de 1,6-diisocianato de hexametileno	749	>5000	3
123-86-4	n-Butyl Acetate	10760	>14000	>20
108-65-6	1-methyl-2-methoxiethyl acetate	8532	>2000	>20
78-93-3	Metyl Ehyl Ketone	2737	6780	>20
64742-95-6	Aromatic Petroleum Hidrocarbon	>3492	>5000	>20
4083-64-1	4-Toluenosulfonil-isocianato	2600	>5000	>20
95-63-6	1,2,4-trimethyl benzene	6000	>5000	>20

N.I. = No Information

Toxicidad Dermal del producto: 8,810.58 mg/kg

12. Ecological Information

Toxicity: No Information

Persistence and Degradability: No Information

Bioaccumulative potential: No Information

Mobility in the soil: No Information

Other adverse effects: No Information

13. Disposal Information

DISPOSAL METHOD: Prevent entry into waterways, sewers, basements or confined areas.

14. Transport Information

SPECIAL TRANSPORT PRECAUTIONS: No Information

Sea Transport

UN Number: 1992
IMDG/GGVSee Class: 3
Packing Group: III
Shipping Name: Flammable Liquid, toxic, n.e.p.
Marine Pollutant: No
Shipping Hazard(Marine Pollutant): No Information

Air Transport

UN Number: 1992
ICAO/IATA Class: 3
Packing Group: III
Shipping Name: Flammable Liquid, toxic, n.e.p.

15. Regulatory Information

No information available

16. Other Information

Revision Date: 16/7/2025 **Supersedes Date:** New MSDS

Reason for revision: No Information

Datasheet produced by: SUR Química S.A.

Hazardous Material Information System: HMIS

Health	2	**Flammability**	3	**Reactivity**	0	**Personal Protection**	G	**Chronic Hazard**	Sí	**Target Organ**	PULMONES

National Fire Protection Association: NFPA

Flammability	3	**Health**	2	**Reactivity**	0	**Special Hazards**	N/A

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H320	Causes eye irritation
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H402	Harmful to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS02

GHS06

GHS07

GHS08

GHS09

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained in this safety sheet has been prepared for SUR QUIMICA S.A. based on the data provided by suppliers and manufacturers of the raw materials involved. This document is intended to be a guide for safe use according to use. The user receiving this information must be properly trained and be able to use his independent judgment to determine its applicability in particular uses. This safety data sheet (SDS) does not in any way exempt the user from knowing and complying with the good practices and rules of use applicable to their activity. The user must assume full responsibility to know and take precautions related to the use of the product. The exposure scenario is subject to revision and changes. The user must ensure that they have the latest version of the FDS. The updated versions are available on the website www.gruposur.com