In compliance with OSHA HCS 29 CFR 1910.1200

SAFETY DATA SHEET

Product: 30 Catalyst, 60 Catalyst

Revision: 00	Date: 06/19/2024	Pages: 1/9

1 - IDENTIFICATION

GHS Product identifier:	30 Catalyst, 60 Catalyst
Other means of identification:	472101, 472102
Recommended use of the chemical:	Used as an additive to the Vipafix, it is recommended in 1 flask per can (1 liter) proportion to improve the adhesion and cohesion resistance. **Restrictions on use**: This product should not be used for applications other than those recommended in this section. Remove all ignition sources. Keep away from heat, open flames, hot surfaces, sparks and do not smoke. For more information, consult the product's technical data sheet.
Manufacturer's name:	Vipal Rubber Corporation
Address:	2601 NW 89, FL 33172 - Miami - FL - United States.
Telephone number:	+1 305 640 0330
Emergency telephone number:	+1 305 640 0330

2 - HAZARD IDENTIFICATION

Classification of the chemical:	Flammable Liquids - Category 3; Acute Toxicity - Inhalation - Category 4; Skin Corrosion/Irritation - Category 2; Serious eye damage/eye irritation - Category 2A; Respiratory Sensitization - Category 1; Skin Sensitization - Category 1; Specific Target Organ Toxicity – Single Exposure - Category 3 - Narcotic and Category 3 - Respiratory; Specific Target Organ Toxicity – Repeated Exposure - Category 2.
Classification system adopted:	OSHA HCS 29 CFR 1910.1200 Globally Harmonized System of Classification and Labeling of Chemicals (GHS), United Nations.
Pictograms:	
Signal word:	DANGER
Hazard statement(s):	Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to the lungs and to the upper respiratory tract through prolonged or repeated exposure.
Precautionary statement(s):	**PREVENTION:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools.

	Take action to prevent static discharges. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, protective clothing, eye protection, face protection and hearing protection. In case of inadequate ventilation, wear respiratory protection. **RESPONSE TO EMERGENCY:** IF ON SKIN: Wash with plenty of water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or a doctor, if you feel unwell. Get medical advice/attention if you feel unwell. Specific treatment. If skin irritation occurs: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. If experiencing respiratory symptoms: Call a POISON CENTER or a doctor. Take off contaminated clothing. And wash it before reuse. In case of fire: Use carbon dioxide (CO_2), foam, water mist and powder to extinguish. **STORAGE:** Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. **DISPOSITION:** Dispose of contents and container in accordance with local regulations.
Other hazards which do not result in classification:	The product has no other hazards.

3 - COMPOSITION/INFORMATION ON INGREDIENTS

MIXTURE	
Components contributing to the hazard:	Xylene (CAS 1330-20-7): 36.00 - 54.00%; Polymethylene polyphenyl isocyanate (CAS 9016-87-9): 36.00 - 54.00%; 4,4'-diphenylmethane diisocyanate (CAS 101-68-8): 20.00 - 30.00% [1]. [1] The hazards arising from the inhalation of this ingredient are not parameters for the classification of the mixture, since, both the physico-chemical characteristics and the adequate understanding of specialists, when a solid ingredient in the form of powder is diluted in a liquid mixture, it's not biologically available to cause its harms.

4 - FIRST-AID MEASURES

Exposure routes	
Inhalation:	Remove victim to fresh air and keep in a position that does not obstruct breathing. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Bring this document.
Skin contact:	Wash exposed skin with sufficient amount of water to remove the product. Remove and isolate

	contaminated clothing and shoes. In case of skin irritation: Consult a doctor. Bring this document.
Eye contact:	Rinse carefully with water for several minutes. If wearing contact lenses, remove them if it is easy and keep rinsing. If eye irritation persists: consult a doctor. Bring this document.
Ingestion:	Wash the victim's mouth with plenty of water. Never give anything by mouth to an unconscious person If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Bring this document.
Most important symptoms and effects, acute and delayed:	May cause an allergic skin reaction with pruritus and dermatitis. Causes skin irritation with redness, pain and dryness. Causes serious eye irritation with redness and pain. May cause allergy or asthma symptoms or breathing difficulties if inhaled with shortness of breath and tiredness. Harmful if inhaled. May cause drowsiness or dizziness, may cause dizziness and nausea. May cause respiratory irritation, may cause cough and sneezing. May cause damage to the lungs and upper respiratory tract through prolonged or repeated exposure.
Indication of immediate medical attention and special treatment needed, if necessary:	Avoid contact with the product when helping the victim. If necessary, symptomatic treatment should include, above all, supportive measures such as correction of hydro electrolytic and metabolic disorders and respiratory assistance. In case of skin contact, do not rub the affected area.

5 - FIRE-FIGHTING MEASURES

Extinguishing media:	Appropriate: carbon dioxide (CO_2), foam, water mist and powder. Inappropriate: water directly onto the burning material.
Specific hazards arising from the chemical:	Combustion of the material or its packaging can form irritating and toxic gases such as carbon monoxide and dioxide. Very dangerous when exposed to excessive heat or other sources of ignition such as: sparks, open flames or flames from matches and cigarettes, welding operations, pilot lights and electric motors. May build up static charge by flow or agitation. Vapors from heated product can ignite by static discharge. Vapors are denser than air and tend to accumulate in low-lying or confined areas such as storm drains and basements. It can travel great distances causing the flame to retreat or new fires in both open and confined environments. Containers may explode if heated.
Special protective actions for fire-fighters:	If the load is involved in fire, isolate and evacuate the area to a minimum radius of 800 meters. Wear positive pressure self-contained breathing apparatus (SCBA) and full protective clothing. Containers and tanks involved in the fire must be cooled with water mist.

6 - ACCIDENTAL RELEASE MEASURES

Personal precautions:	Isolate the leakage from sources of ignition. Keep unauthorized persons out of the area and away from windows. Stop the leakage if it can be done without risk. Prevent sparks or flames. Do not smoke. Do not touch damaged containers or spilled product without proper clothing. Avoid exposure to the product. Stay in a safe place, with the wind at your back. Use personal protective equipment as described in section 8.
Protective equipment:	Wear complete PPE with safety glasses, safety gloves, suitable protective clothing and closed shoes. In case of leakage, where exposure is high, it is recommended to use a suitable respiratory protection mask.
Emergency procedures:	Avoid that the spilled product reaches waterways or sewage system.
Methods and materials for containment and cleaning up:	Use water mist to reduce the dispersion of vapors. Use natural or spill containment barriers. Collect spilled products and place them in appropriate containers. Adsorb the remaining product with dry sand, earth, vermiculite, or any inert product. Place the adsorbed product in proper containers and remove it to a safe place. Use non-sparking tools to pick up the product. All equipment used must not be electrically grounded. For final disposal, proceed according to Section 13 of this document. Large spill: confine the liquid into a dike away from the spills for later and proper disposition. Water mist can be used to reduce of vapors, but it wont prevent ignition in closed environments.

7 - HANDLING AND STORAGE

Precautions for safe handling:	Handle in a well ventilated area or with general system of ventilation/local exhaust. Avoidvapors and mists formation. Handling the product can result in electrostatic charge buildup. All ignition sources

	must be extinguished from areas during use. Use proper grounding procedures. Use personal protective equipment as described in section 8. Avoid contact with incompatible materials. Wash hands and face thoroughly after handling and before eating, drinking, smoking, or using the toilet. Contaminated clothing should be changed and washed before reuse. Remove contaminated clothing and protective equipment before entering eating areas. Keep away from heat, sparks, open flame, and hot surfaces. Do not smoke. Keep the container tightly closed. Ground the container vessel and product receiver during transfers. Only use non-sparking tools. Avoid the accumulation of electrostatic charges. Use explosion-proof electrical, ventilation, and lighting equipment.
Conditions for safe storage, including any incompatibilities:	Store in a dry, well-ventilated place away from sunlight. Keep the container closed. It is not necessary addition of stabilizers and antioxidants to ensure the durability. Packaging compatibilities: Similar to the original packaging. Keep away from incompatible materials.

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limit:	The values below apply to workplaces. - Xylene: Cal/OSHA - PEL - TWA: 100 ppm (435 mg/m³) (Section 5198) (CCR); Cal/OSHA - PEL - STEL: 150 (655 mg/m³) (Section 5198) (CCR); Cal/OSHA - PEL - Ceiling: 300 ppm (Section 5198) (CCR); OSHA - PEL - TWA: 100 ppm (435 mg/m³) (29 CFR 1910.1000 Table Z-1) (CFR); NIOSH - REL - TWA: 100 ppm (435 mg/m³); NIOSH - REL - STEL: 150 ppm (655 mg/m³); ACGIH - TLV - TWA: 20 ppm. - 4,4'-diphenylmethane diisocyanate: Cal/OSHA - PEL - TWA: 0.005 ppm (0.051 mg/m³); OSHA - PEL - Ceiling: 0.02 ppm (0.2 mg/m³) (29 CFR 1910.1000 Table Z-1) (CFR); NIOSH - REL - TWA: 0.005 ppm (0.05 mg/m³); NIOSH - REL - Ceiling: 0.02 ppm (0.2 mg/m³) [10-min]; ACGIH - TLV - TWA: 0.005 ppm. CFR: See mentioned item in OSHA CFR; CCR: See the item mentioned in Cal/OSHA.
Biological limit:	- Xylene: ACGIH - BEI: Determinant: Methylhippuric adids in urine. Sampling Time: End of shift. Index: 1.5 g/g creatinine.
Other limits and values:	Not established.
Appropriate engineering controls:	A risk assessment is recommended to define the engineering control measures necessary to eliminate or minimize the risk. These measures help to reduce exposure to the product. Maintain atmospheric concentrations of the constituents of the material below occupational exposure limits indicated.

Individual protection measures, such as personal protective equipment (PPE)

Hand protection:	Nitrile gloves.
Eye protection:	Fully enclosed protective goggles.
Skin protection:	Impervious clothing or protective clothing chemically resistant to the product.
Respiratory protection:	Half face mask with filter against organic vapors.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical	Brown liquid.

state, color, etc.):	
Odor:	Characteristic.
Odor threshold:	Not available.
Melting point/freezing point:	Not available.
Initial boiling point and boiling range:	130 to 150 °C (266 to 302 °F) at 101.3 kPa.
Flammability (solid, gas):	Flammable.
Upper/ lower flammability or explosive limits:	Not available.
Flash point:	34 °C (93.2 °F) - Closed cup.
Evaporation rate:	Not available.
Auto-ignition temperature:	- Xylene: 465 to 488 °C (869 to 910.4 °F) - Polymethylene polyphenyl isocyanate: > 600 °C (1112 °F).
Decomposition temperature:	- Polymethylene polyphenyl isocyanate: 354 °C (669.2 °F).
pH:	Not available.
Viscosity:	Not available.
Solubility(ies):	Immiscible in water.
Partition coeficient n-octanol/water (log value):	- Xylene: log K_{ow}: 3.09 - Polymethylene polyphenyl isocyanate: log K_{ow}: 4.51.
Vapor pressure:	1.3 kPa at 30 °C (86 °F).
Vapor density:	Not available.
Relative density:	Not available.
Other information:	Absolute density: 1070 kg/m³ at 20 °C (68 °F).

10 - STABILITY AND REACTIVITY

Reactivity:	Reactivity is not to be expected under normal conditions of temperature and pressure.
Chemical stability:	Stable under normal temperature and pressure conditions.
Possibility of hazardous reactions:	- Xylene: Risk of explosion when in contact with nitric acid and uranium hexafluoride. May react dangerously with oxidizing agents, acids and sulfuric acid.
Conditions to avoid:	High temperatures. Ignition sources. Contact with incompatible materials. Moisture.
Incompatible material:	Acids, alcohol, alcohols, amines, ammonia, base, nitric acid, oxidizing agents, oxygen, sodium hypochlorite, sulphuric acid, uranium hexafluoride and water.
Hazardous decomposition products:	No dangerous decomposition products are known.

11 - TOXICOLOGICAL INFORMATION

Symptoms related to the physical, chemical and toxicological characteristics:	May cause an allergic skin reaction with pruritus and dermatitis. Causes skin irritation with redness, pain and dryness. Causes serious eye irritation with redness and pain. May cause allergy or asthma symptoms or breathing difficulties if inhaled with shortness of breath and tiredness. Harmful if inhaled. May cause drowsiness or dizziness, may cause dizziness and nausea. May cause respiratory irritation, may cause cough and sneezing. May cause damage to the lungs and upper respiratory tract through prolonged or repeated exposure.
Delayed and immediate effects and also chronic effects from short and long-term exposure	
Acute toxicity:	Product not classified as acute toxic by oral and dermal. Harmful if inhaled. ATEmix Vapours (4h): > 20 mg/L. ATEmix Dusts and mists (4h): 1,252 mg/L. ATEmix Oral: 4764,501 mg/kg. ATEmix Dermal: 2811,111 mg/kg. Information regarding to: - Xylene: LC_{50} Vapours (rats, 4h): 10 - 20 mg/L - Polymethylene polyphenyl isocyanate: LC_{50} Dusts and mists (rats, 4h): 0.49 mg/L - 4,4'-diphenylmethane diisocyanate: LC_{50} Dusts and mists (rats, 4h): 0.41549 mg/L.
Skin corrosion/irritation:	Causes skin irritation with redness, pain and dryness.
Eye damage/irritation:	Causes serious eye irritation with redness and pain.
Sensitization - respiratory or skin:	May cause an allergic skin reaction with pruritus and dermatitis. May cause allergy or asthma symptoms or breathing difficulties if inhaled with shortness of breath and tiredness. The ingredients 4,4'-diphenylmethane diisocyanate and Polymethylene polyphenyl isocyanate are classified as skin sensitizers and contribute to this product classification. The ingredient Polymethylene polyphenyl isocyanate is classified as a respiratory sensitizer and contributes to this product classification.
Germ cell mutagenicity:	It is not expected to show mutagenicity in germ cells.
Carcinogenicity:	It is not expected to be carcinogenic.
Toxic to reproduction:	It is not expected to be reproductively toxic.
Specific target organ toxicity (single exposure):	May cause drowsiness or dizziness, may cause dizziness and nausea. May cause respiratory irritation, may cause cough and sneezing.
Specific target organ toxicity (repeated exposure):	May cause damage to the lungs and upper respiratory tract through prolonged or repeated exposure.
Aspiration hazard:	It is not expected to present an aspiration hazard.

12 - ECOLOGICAL INFORMATION

Ecotoxicity:	Not classified according to the used criteria, however, it presents relevant data, as described below.
Persistence and degradability:	It is expected that the product presents persistence and it is not considered readily biodegradable. Information regarding to:

	- Polymethylene polyphenyl isocyanate: Degradation rate: 0% to 28 days.
Bioaccumulative potential:	Presents high bioacumulative potencial in aquatic organisms. Information regarding to: - Polymethylene polyphenyl isocyanate: log K_{ow}: 4.51 - 4,4'-diphenylmethane diisocyanate: BCF: 1283 log K_{ow}: 4.51 to 5.22.
Mobility in soil:	Not determined.
Other adverse effects:	No other environmental effects known.

13 - DISPOSAL CONSIDERATIONS

Disposal methods:	Must be disposed of as waste in compliance with local regulations. The treatment and disposal should be evaluated for each specific product. Keep the product remains in its original and properly closed containers. Disposal should be performed as established for the product.

14 - TRANSPORT INFORMATION

International regulations

Road:	DOT - U.S. Department of Transportation.- Code of Federal Regulations.
UN number:	1993
Proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Xylene)
Primary risk class or division:	3
Subsidiary risk class or division:	NA
Packing group:	III
Environmental hazards:	The product is not considered dangerous for the environment for land transport.
Sea:	IMO - International Maritime Organization: • IMDG Code - International Maritime Dangerous Goods Code.
UN number:	1993
Proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Xylene)
Primary risk class or division:	3
Subsidiary risk class or division:	NA
Packing group:	III
Environmental hazards:	It's not considered a marine pollutant for transportation.
EmS:	F-E, S-E
Air:	IATA - International Air Transport Association: • DGR - Dangerous Goods Regulation.
UN number:	1993
Proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Xylene)

Primary risk class or division:	3
Subsidiary risk class or division:	NA
Packing group:	III
Environmental hazards:	The product is not considered dangerous for the environment for air transport.
Transport in bulk according to MARPOL 73/78, Annex II, and the IBC Code:	Consult regulations: • International Maritime Organization: MARPOL: Articles, protocols, annexes, unified interpretations of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, consolidated edition. IMO, London, 2006; • International Maritime Organization: IBC code: International code for the construction and equipment of shipping carrying dangerous chemicals in bulk: With Standards and guidelines relevant to the code. IMO, London, 2007.
Special precautions for user:	Not applicable.

15 - REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question:	Convention concerning Safety in the use of Chemicals at Work (Convention 170) - International Labour Organization, 1990. **TSCA**: We certify that all the components of this product are listed on the TSCA Inventory Active.

16 - Other information, including date of preparation or last revision

This document was prepared based on current knowledge about the proper product handling and under normal conditions of use, in accordance with the application specified on the packaging. Any other use of the product involving their combination with other products, and use various forms of those indicated, are the responsibility of the user. Warns that the handling of any chemical substance requires the prior knowledge of its hazards for the user. In the workplace it is for the user company's product promotes training of its collaborators about the possible risks arising from exposure to the chemical.

Change control:

Version	Manufacture date	Changes
00	06/19/2024	Elaboration

Abbreviations:
ACGIH - American Conference of Governmental Industrial Hygienists;
ATEmix - Acute Toxicity Estimate of the mixture;
BCF - Bioconcentration factor;
BEI - Biological Exposure Index;
CAS - Chemical Abstracts Service;
Ceiling - The concentration that should not be exceeded during any part of the working exposure.
K_{ow} - Octanol-water partition coefficient;
LC_{50} - Lethal Concentration 50%;
NIOSH - National Institute for Occupational Safety and Health;
OSHA - Occupational Safety & Health Administration;
PEL - Permissible Exposure Limit;
REL - Recommended Exposure Limit;
STEL - Short Term Exposure Limit;
TLV - Threshold Limit Value;

TWA - Time Weighted Average;
UN - United Nations.

Bibliographic references:

ACGIH - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIALS HYGIENISTS. TLVs® and BEIs®: Based on the Documentation of the Threshold Limit Values (TLVs®) for Chemical Substances and Physical Agents & Biological Exposure Indices (BEIs®). Cincinnati-USA, 2023.

GHS - GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS. 10th rev. ed. New York and Geneva: United Nations, 2023.