SECTION 1 – Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifiers

Product Name:	**CATALYST 3**
Product Class:	Catalyst Solution
Manufacturer's I.D.	CATALYST 3
CAS Number:	N/A – Mixture
Index Number:	N/A – Mixture

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

Identified Uses:	Coatings
Uses Advised Against:	N/A

1.3 Details of the Supplier of the safety data sheet

Company:	Kane International Corporation 411 Theodore Fremd Avenue Rye, NY 10580
Phone:	(914) 921-3100

1.4 Emergency telephone number

For Emergencies Involving a Spill, Leak, Fire, Exposure, or Accident

Contact CHEMTREC	**(800) 424-9300**

SECTION 2 – Hazards Identification

2.1 Classification of the Substance or Mixture

OSHA
Hazards: Flammable liquid, combustible dust.

Overexposure targets the following organs: Central nervous system, respiratory system and skin. Contains ethanol which is reported to cause hepatic and renal damage on repeated overexposure.

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Flammable liquids (Category 2)
STOT- SE (Category 1: Respiratory tract system and central nervous system)
Skin corrosion/irritation (Category 1)
Serious eye damage/ eye irritation (Category 1)

See Section 15.3 for additional comments concerning the classification of this product.

2.2 Label Elements

GHS Label Elements, including precautionary statements:

Pictogram

Signal Word Danger

Hazard Statement(s)

H225	Highly flammable liquid and vapor.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H319	Causes eye irritation.
H333 + H335 + H336	May be harmful if inhaled and may cause respiratory irritation and drowsiness or dizziness
H412	Harmful to aquatic life with long lasting effects

Precautionary Statement(s)	
P210	Keep away from heat/sparks/open flames. No Smoking.
P233	Keep container tightly closed.
P240	Ground / bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release into the environment.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.

2.3 Other Hazards

None

SECTION 3 – Composition / Information on Ingredients

3.1 Substances

Formula: Mixture, proprietary

Molecular Weight: Mixture, proprietary

3.2 Mixtures

Description of the mixture:

Solution of p-Toluene Sulfonic Acid in alcohol.

Summary of Information Included:

All hazardous constituents with a concentration of 1% or greater, or 0.1% or greater if the constituent is a PBT/vPvB substance or otherwise required by the OSHA Hazard Communication Standard, are listed in Section 3.2.1 below. Other (non-hazardous) ingredients are listed in Section 3.2.2 for the purpose of accounting for 100% of the mixture. This is the only section of the SDS that lists non-hazardous constituents.

The classification hazard(s) of each of the hazardous ingredients is provided in Section 3.2.3, along with the reason(s) for listing the chemical as hazardous. Refer to Section 15.3 for additional information concerning any pending registrations or the justification for the classification.

3.2.1 Hazardous Ingredients

Ingredient	CAS #	EC #	Index #	Wt %	Synonyms
Ethanol	64-17-5	200-578-6	603-002-00-5	<55.0%	Grain alcohol, Ethyl alcohol
p-Toluene Sulfonic Acid	104-15-4	203-180-0	016-030-00-2	<45.0%	Tosic acid, p-TSA, p-Tolysulfonic acid 4-Methylbenzenesulfonic acid

3.2.2 Other (Non-Hazardous) Ingredients

Ingredient	CAS #	EC #	Index #	Wt %	Synonyms
N/A	N/A	N/A	N/A	N/A	

3.2.3 Classification

Ingredient	CAS #	Reason Listed	Classification per 67/548/EEC	Classification per Regulation (EC) No. 1272/2008 (CLP)
Ethanol	64-17-5	1,2	F; R11	H225 (2)
p-Toluene Sulfonic Acid	104-15-4	1,2	Xi; R36/37/38	H302 (3), H314 (1), H319 (1) H333+335+336 (3), H412 (1)

1 Substance is classified with a health or environmental hazard
2 Substance has a workplace exposure limit
3 Substance meets the criteria for PBT per Regulation (EC) No. 1907/2006, Annex XIII
4 Substance meets the criteria for vPvB per Regulation (EC) No. 1907/2006, Annex XIII

* See Section 15.3 for a discussion of the European Union requirements.

SECTION 4 – First Aid Measures

4.1 Description of first aid measures

Inhalation Overexposure: Rescue personnel should don appropriate protective gear. Remove to fresh air. If breathing stops, apply artificial respiration and seek immediate medical attention. If breathing is difficult, give oxygen and seek medical attention. Keep victim warm.

Eye Contact: Flush with large quantities of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention. In case of irritation from airborne exposure, move to fresh air. Get medical attention if symptoms persist.

Skin Contact: Wash affected skin with soap and water for 15 minutes. Get medical attention if symptoms occur. Remove contaminated clothing and shoes. Wash clothing before reuse. Destroy or thoroughly clean shoes before reuse.

Ingestion: DO NOT induce vomiting. Do not give liquids. However, IMMEDIATE medical advice should be obtained.

If the victim is coughing, choking, has shortness of breath, or difficulty breathing, transport to the nearest medical facility for additional treatment.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

4.2 Most important symptoms and effects, both acute and delayed

Repeated or prolonged contact can cause skin irritation, redness, and drying. Eye contact can cause moderate to severe irritation, redness, or swelling. Inhalation of mist or vapors causes irritation to eyes, nose, and throat.

Coughing, choking, has shortness of breath, or difficulty breathing or fever greater than 101º F, shortness of breath, chest congestion or continued coughing or wheezing following exposure are symptoms of possible aspiration and require immediate treatment.

4.3 Indication of any immediate medical attention and special treatment needed

Ingestion requires immediate medical attention. Any signs of aspiration must be treated immediately.

No data available on other exposure. Treat symptomatically.

SECTION 5 – Firefighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media:

Use carbon dioxide or dry chemical for small fires. Use aqueous foam or water for larger fires.

5.2 Special hazards arising from the substance or mixture

Sealed containers may rupture when exposed to fire or excessive heat due to build-up of pressure. Vapors may explode when mixed with air and ignited.

5.3 Advice for firefighters

Special Fire Fighting Procedures:

Remove all ignition sources from affected and potentially affected areas. Use water to cool fire-exposed structures and containers.

Special Protective Equipment

Fire fighters should wear self-contained breathing apparatus and complete personal protective equipment operated in a pressure demand or other positive pressure mode.

SECTION 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing to prevent unnecessary skin contact and to avoid overexposure to vapors. Use non-sparking tools and equipment.

6.2 Environmental precautions

Prevent runoff from entering drains, sewers, streams or other waterways.

6.3 Methods and material for containment and cleaning up

Ventilate the spill area. Dike spill area, soak up with a non-combustible absorbent material, and place in a closed container.

Notification and reporting

Spills or releases to the environment may be reportable. See Section 15 for United States federal reporting requirements. For all other locations, consult appropriate regulations to determine possible reporting requirements prior to using this product.

SECTION 7 – Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapors and mists. Use in cool, well-ventilated area. Do not apply to hot surfaces or use in areas where may be exposed to electric spark of any type. Keep containers closed when not in use. Ground containers or take other measures to prevent the build-up of a static charge.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool location. Keep away from excessive heat and open flames.

SECTION 8 – Exposure controls / personal protection

8.1 Control parameters

Hazardous Ingredients			Workplace Control Parameters [1]			
Ingredient	**CAS #**	**Wt %**	**OSHA TWA**	**OSHA STEL**	**ACGIH TWA**	**ACGIH STEL**
Ethanol	64-17-5	55.0%	1000 ppm**	1000 ppm**	1000 ppm**	1000 ppm**

[1] Workplace control parameters may vary. Please consult the listing for the country where this product will be used to determine the relevant exposure limits.
**Potential contribution to overall exposure is possible via skin absorption.

"N/A" = Information is Not Available
"C" = Ceiling limit value

8.2 Exposure Controls

Appropriate engineering controls

Use local exhaust if necessary to maintain concentrations well below exposure limits. Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the work day.

Personal protective equipment

Eye Protection: Chemical splash goggles. Wear a full face shield if splashing is possible to prevent unnecessary eye contact.

Skin (Hand) Protection: For operations where contact can occur, wear impervious (Neoprene) gloves to avoid unnecessary skin contact. Review published literature and glove manufacturer data to determine suitable gloves. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for anticipated use conditions.

Skin (Body) Protection: Wear impervious clothing as necessary to prevent unnecessary skin contact.

Respiratory Protection: Use a properly fitted organic vapor or self-contained breathing apparatus appropriate to the manner in which the product is handled where excessive vapor, mists or aerosols are present. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Other Protective Equipment: For operations where contact can occur, a safety shower and eye wash facility should be available.

SECTION 9 – Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical State: Liquid

Form: Liquid

Color: Clear to lightly colored

Odor: Characteristic solvent odor

Odor Threshold: Not determined

pH: No data available

Melting Point: No data available

Boiling Range: >78.3°C (>173°F)

Flash Point: 12.8°C (55°F)

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Lower Explosion Limit (LEL): <3.3% (estimated)

Upper Explosion Limit (LEL): Unknown

Vapor Pressure at 20 °C: <43 mm Hg (estimated)

Vapor Density: Heavier than air

Density (Specific Gravity): 8.4 $\pm$ 0.1 lbs/gallon (1.006 g/mL)

Solubility in Water: Miscible.

Explosive Properties: No data available

Oxidizing Properties: No data available

Other Information

Evaporation Rate: Faster than Butyl Acetate

Percent Volatile by Weight: 55.0%

VOC: 554.10 g/l

9.2 Other safety information

No data available

SECTION 10 – Stability and reactivity

10.1 Reactivity: None known

10.2 Chemical stability: Stable

10.3 Possibility of hazardous reactions: Hazardous polymerization will not occur

10.4 Conditions to avoid: Excessive heat.

10.5 Incompatible materials: Strong acids and oxidizing agents.

10.6 Hazardous decomposition products: Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide, chlorine, and hydrochloric acid.

SECTION 11 – Toxicological information

11.1 Information on toxicological effects

This product has not been tested for acute or chronic toxicological effects. The toxicological information presented below is for the product components:

ACUTE TOXICITY:

Ethanol, CAS# 64-17-5

LD_{50} (Oral, Rat)	LC_{50} (Inhalation, Rat)	LD_{50} (Skin, Rat)
7,060 mg/kg	20,000 ppm [10 hrs]	No Data

p-Toluene Sulfonic acid,

CAS# 104-15-4

LD_{50} (Oral, Rat)	LC_{50} (Inhalation, Rat)	LD_{50} (Skin, Rat)
1,410 mg/kg	No Data	No Data

EFFECTS OF OVEREXPOSURE

Vapors: Prolonged inhalation may be harmful.

Skin Contact: May be harmful in contact with skin. May cause skin burns.

Eye Contact: Causes serious eye damage.

Ingestion: Can cause digestive tract burns. May be harmful if swallowed.

Medical Conditions Prone To Aggravation By Exposure: Respiratory tract irritation, dermatitis.

Primary Routes of Entry: Inhalation, Skin Contact.

Carcinogenicity: NTP (Known): No; **NTP (Anticipated):** No; **IARC Category:** 3; **OSHA:** N/A

SECTION 12 – Ecological information

12.1 Toxicity: No information is available concerning ecological data for this product.

Ethanol, CAS# 64-17-5

Test type: LC_{50} (Fish)	Test type: LC_{50}	Test type: EC_{50} (Algae)
Time: 96 hr	(Invertebrates)	Time: 24 hr
Species: Fathead minnow	Time: 48 hr	Species: Algae
Value: 220 – 250 mg/l	Species: Daphnia magna	Value: 4,300 mg/l
	Value: 560 mg/l	

p-Toluene Sulfonic acid, CAS# 104-15-4

Test type: LC_{50} (Fish)	Test type: EC_{50} (Crustacea)	Test type: EC_{50} (Algae)
Time: 96 hr	Time: 48 hr	Time: 72 hr
Species: Golden Orfe	Species: Daphnia	Species: Algae
Value: 325 mg/l	Value: 100 mg/l	Value: 73mg/l

12.2 Information on toxicological effects: No data available

12.3 Bioaccumulative potential: No data available

12.4 Mobility in soil: No data available

12.5 Results of PBT and vPvB assessment: No data available

12.6 Other adverse effects: No data available.

SECTION 13 – Disposal considerations

13.1 Waste treatment methods

Incinerate in an approved incinerator or dispose of according to applicable local, state / provincial, and federal regulations

General information

Dispose of according to all applicable local, regional and national laws or regulations. Use appropriately licensed disposal services to manage this flammable and corrosive liquid. Do not reuse empty containers.

Empty containers:

Empty containers which have not been cleaned possess residual product and should be handled in the same way as full containers of this product. Recipients of these containers must be warned of the possible hazard(s) that may be caused by product residues.

RCRA (United States) INFORMATION:

Since this product is not sold as waste, we have not tested it as a waste. Based on our knowledge of the product, its raw materials and processes employed during its manufacture, we believe that this product could be considered to be a RCRA ignitable waste, D0001,D032 We recommend that you carry out your own tests and evaluations prior to discarding any materials and that any waste is disposed of in accordance with all applicable federal, state or provincial, and local regulations

European Waste Codes:

Since this product is not sold as waste, we have not tested it as a waste. We recommend that you carry out your own tests and evaluations prior to discarding any materials and that any waste is disposed of in accordance with all applicable national, state or provincial, and local regulations

SECTION 14 – Transportation information *(not meant to be all inclusive)*

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult the appropriate regulation(s) for information specific to the shipment to be made.

US Department of Transportation (DOT)

DOT Shipping Name: Flammable Liquid, Corrosive n.o.s (Ethanol; p-Toluenesulfonic acid)
DOT Hazard Class: 3
DOT UN/NA Number: UN2924
DOT Label(s): Flammable Liquid, Corrosive.
Packing Group: III

Transport Canada Transportation of Dangerous Goods (TDG)

Shipping Name and Description: Resin solution, flammable
UN Number: 2924
Class: 3
Packing Group: III

IATA

Shipping Name and Description: Resin Solution
UN Number: 2924
Class: 3
Packing Group: III
Subrisk: N/A
Inhalation Packing Group I: Yes

SECTION 15 – Regulatory information *(not meant to be all inclusive)*

15.1 UNITED STATES

TSCA [Toxic Substances Control Act]: This product complies with all TSCA inventory requirements.

SARA Section 313: *This product contains the following chemical(s) subject to the reporting requirements of Section 313 of the Emergency Planning and Community Response Act of 1986 and of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.*

Component	CAS#	Wt %
P-Toluene Sulfonic acid	104-15-4	45.0%

SARA Section 311 and 312:

SARA Section 311 and 312 hazard classification(s) for this product are listed below.

Immediate (acute) health hazard- Yes

Delayed (chronic) health hazard- No

Fire hazard- Yes

SARA Section 302 and 304:

This product contains the following Extremely Hazardous Substances (EHS) subject to the emergency planning and release reporting requirements of Sections 302 and 304 of the Emergency Planning and Community Response Act of 1986 and of 40 CFR 355:

Component	CAS#	Wt %
p-Toluene Sulfonic acid	104-15-4	45.0

CERCLA Information: Releases to air, land, or water which exceed the reportable quantity must be reported to the National Response Center (800-424-8802).

This product contains the following chemical(s) subject to CERCLA reporting requirements:

Component	CAS#	Wt %
p-Toluene Sulfonic acid	104-15-4	45.0%

CALIFORNIA PROP - 65

This product contains the following ingredient(s) known to the state of California to cause cancer, birth defects or other reproductive harm:

This product is not subject to California Proposition 65 notification requirements.

Additional Right-To-Know Composition Information

This product contains the following ingredients which appear on other hazardous substance or ingredient disclosure lists.

Component	CAS#	Wt %	Lists
Ethanol	1330-20-7	55.0%	CN, MA1, NJ1, PA1, RI1
p-Toluene Sulfonic acid	104-15-4	45.0%	CN, MA1, NJ1, PA1, RI1

CN=Canadian Ingredient Disclosure List **MA1**=Massachusetts Hazardous Substances List **MA2**=Massachusetts Extraordinary Hazardous Substances List **NJ1**=New Jersey Workplace Hazardous Substances List **NJ2**=New Jersey Special Health Hazards List (NJ2 Category) **NL**=Not listed, Concentration Based Disclosure **PA1**=Pennsylvania Hazardous Substances List **PA2**=Pennsylvania Special Hazardous Substances List

15.2 CANADA

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

Domestic Substances List (DSL) Status: All components of this product are included on the Canadian DSL or NDSL lists.

15.3 EUROPEAN UNION

This safety datasheet has been prepared according to the requirements of Regulation (EC) No. 1907/2006 and 1272/2008. All solvent ingredients are listed on the REACH registry and the resin ingredients are pre-registered as per the requirements for polymers.

This product is a mixture of solvents and resins. Although it has not been tested as a mixture, the physical, acute, and chronic hazards are believed to be those of the solvent constituents, unless described otherwise in the procedure used to derive the classification. The published information for these constituents has been included in Section 3, Section 11, and Section 12. The resin is currently being evaluated in accordance with the established timelines and applicable data will be included when available.

Procedure used to derive the classification:

The known hazard data for the for the hazardous constituents listed in Section 3 was evaluated to classify the mixture in accordance with the methods in CLP Annex I, Part 3 and Part 4.

SECTION 16 – Other information

Additional Hazard Classifications:

HMIS CLASSIFICATION	
Health hazard	3
Flammability	3
Physical hazard	0
Protective equipment	G
NFPA RATING	
Health hazard	3
Fire	3
Reactivity hazard	0

Date Issued: 07/23/2015, GHS formatted.

Supersedes: N/A

Disclaimer:

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