SAFETY DATA SHEET

Wearlon 711 Catalyst

Plastic Maritime Corporation encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

Section 1. Product and Company Identification

GHS product identifier: Wearlon 711 Catalyst
Synonyms: None
SDS Number: **S**W711Catalyst
Product Description: Aromatic sulfonic acid in isopropanol
Molecular Weight: 172.2
Intended Recommended Use: Catalyst

Manufacturer/Supplier/ Importer:
Plastic Maritime Corporation
PO Box 2131 – Traver Road
Wilton, NY 12831
Telephone - 518-587-7624

Customer Information Email: SDSQuestions@WearlonCorp.com

Telephone: For additional health and safety or regulatory information, call 518-587-7624

Emergency telephone numbers: CHEMTREC US Domestic Emergency 800-424-9300
CHEMTREC International Emergency 703-527-3887

Section 2. Hazards Identification

GHS Classification
Flammable Liquid Hazard Category 2
Corrosive To Metal Hazard Category 1
Specific Target Organ Toxicity – Single Exposure Hazard Category 3
Skin Corrosion / Irritation Hazard Category 2
Serious Eye Damage / Eye Irritation Hazard Category 2A

GHS Label element
Hazard pictograms:

Signal Word: Danger

Hazard Statements
Highly flammable liquid and vapor
May be corrosive to metals
May cause drowsiness or dizziness
May cause respiratory irritation
Causes skin irritation
Causes serious eye irritation

Precautionary statements
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
Keep only in original container.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wash face, hands, and any exposed skin thoroughly after handling.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water, - shower.
In case of fire: Use CO2, dry chemical, or foam for extinction.
Absorb spillage to prevent material-damage.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation occurs: Get medical advice/attention.
Take off all contaminated clothing and wash it before reuse.

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.
Store in a well-ventilated place. Keep cool.
Store in a corrosive resistant container with a resistant inner liner.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local and national regulations.

Hazards Not Otherwise Classified (HNOC), Other Hazards
Not applicable

Section 3. Composition/Information on Ingredients

HAZARDOUS INGREDIENTS

Component / CAS No.	%	GHS Classification	Carcinogen
Isopropanol 67-63-0	52 - 56	Flam. Liq. 2 (H225) STOT SE 3 (H336) Skin Irrit. 3 (H316) Eye Irrit. 2A (H319)	Not applicable
Toluenesulfonic acid, p- 104-15-4	38 - 43	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319)	-
Toluenesulfonic acid, p- 88-20-0	0 – 2.2	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2A (H319)	-

The specific chemical identify and/or exact percentage of composition for one or more ingredients has been withheld as a trade secret.

Additional GHS classification or other information may be included in this section but has not been adopted by OSHA. See Section 16 for full text of H phrases.

Section 4. First Aid Measures

Description of necessary first aid measures

Eye contact: Rinse immediately with plenty of water for at least 15 minutes. Obtain medical advice if there are persistent symptoms.

Skin contact: Remove contaminated clothing and shoes without delay. Wash immediately with plenty of water. Do not reuse contaminated clothing without laundering. Get medical attention if pain or irritation persists after washing or if signs and symptoms of overexposure appear.

Ingestion: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. Apply artificial respiration if patient is not breathing. Obtain medical attention immediately.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

None known

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDS

Not applicable

Section 5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: Use water spray, alcohol foam, carbon dioxide, or dry chemical to extinguish fires. Water stream may be ineffective.

Protective Equipment: Firefighters, and others exposed, wear self-contained breathing apparatus. Wear full firefighting protective clothing. See SDS Section 8 (Exposure Controls/Personal Protection).

Special Hazards: Keep containers cool by spraying with water if exposed to fire.

Section 6. Accidental Release Measures

Personal precautions Where exposure level is known, wear approved respirator suitable for level of exposure. Where exposure level is not known, wear approved, positive pressure, self-contained respirator. In addition to the protective clothing/equipment in Section 8 (Exposure Controls/Personal Protection), wear impermeable boots.

Methods for cleaning up Remove sources of ignition. Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

References to other sections: See Sections 8 and 13 for additional information.

Section 7. Handling and storage

Handling

Precautions: Keep in the original container. Keep away from heat, sparks, and open flame. – No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical ventilating, lighting, and other equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye/face protection. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid breathing vapors or spray mist.

Special Handling Statements: This material will corrode steel or aluminum at a rate greater than 6.25 mm (0.25 inches/year) @55°C (130° F). It is thus considered to be a corrosive material for transportation purposes. Containers must be bonded and grounded when pouring or transferring material.

Storage Areas containing this material should have fire safe practices and electrical equipment in accordance with applicable regulations and/or guidelines. Standards are primarily based on the material's flashpoint, but may also take into account properties such as miscibility with water or toxicity. All local and national regulations should be followed. In the Americas, National Fire Protection Association (NFPA) 30: Flammable and Combustible Liquids Code, is a widely used standard. NFPA 30 establishes storage conditions for the following classes of materials: Class I Flammable Liquids, Flashpoint <37.8°C. Class II Combustible Liquids, 37.8°C < Flashpoint <60°C. Class IIIa Combustible Liquids, 60°C < Flashpoint < 93°C. Class IIIb Combustible Liquids, Flashpoint > 93°C.
Storage Temperature: Store at 0° - 30°C (32° - 86°F)
Reason: Quality.

Section 8. Exposure Controls/Personal Protection

Engineering measures:
Utilize a closed system process where feasible. Where this material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

Respiratory Protection:
Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure. Recommended respirators include those certified by NIOSH.

Eye Protection:
Prevent eye and skin contact. Provide eye wash fountain and safety shower in close proximity to points of potential exposure. Wear eye/face protection such as chemical splash proof goggles or face shield.

Skin Protection:
Prevent contamination of skin or clothing when removing protective equipment. Wear impermeable gloves and suitable protective clothing.

Hand Protection:
Nitrile or fluorinated rubber gloves. Consider the porosity and elasticity data of the glove manufacturer and the specific conditions in the work place. Replace gloves immediately when torn or any change in appearance (dimension, color, flexibility, etc.) is noticed.

Additional Advice:
Food, beverages, and tobacco products must not be carried, stored, or consumed where this material is in use. Before eating, drinking, or smoking, wash face and hands thoroughly with soap and water.

Exposure Limits(s)

67-63-0 Isopropanol

OSHA (PEL):	400 ppm (TWA)
	980 mg/m^3 (TWA)
ACGIH (TLV):	400 ppm (STEL)
	200 ppm (TWA)
Other Value:	Not established

Section 9. Physical and Chemical Properties

Color:	colorless
Appearance:	low viscosity liquid
Odor:	isopropanol
Boiling Point:	~ 83°C / 181°F (value for 2-propanol)
Melting Point:	Not applicable
Vapor Pressure:	32 mm Hg @ 20°C
Specific Gravity/Density:	~ 0.98 g/cm^3
Vapor Density:	32 mm Hg @ 20°C
Percent Volatile (% by wt.):	52 – 62 (by weight)
pH:	Not applicable
Saturation in Air (% By Vol.):	Not available
Evaporation Rate:	1.44 (Butyl acetate = 1) (value for 2-propanol)\
Solubility in Water:	completely soluble
Volatile Organic Content:	4.3
Flash Point:	21°C / 69.8°F Setaflash Closed Cup
Flammable Limits (% By Vol):	Lower: 2.5 Upper: 12.0
Autoignition Temperature:	457.8°C / 856°F
Decomposition Temperature:	Not available
Partition coefficient: (N-octanol/water):	Not available
Odor Threshold:	See Section 8 for exposure limits.
Viscosity (Kinematic):	Not available

Section 10. Stability and Reactivity

Stability:	Stable
Conditions to avoid:	None known
Polymerization:	Will not occur
Conditions to avoid:	None known
Materials to avoid:	Alkaline materials
Hazardous Decomposition Products:	Carbon dioxide Carbon monoxide (CO) Sulphur dioxide Sulfur trioxide

Section 11. Toxicological Information

Product Toxicity Information

Likely Routes of Exposure: Oral, Skin, Eyes, Respiratory System.

ACUTE TOXICITY DATA

oral	rat	Acute LD50	6400 mg/kg
dermal	rabbit	Acute LD50	> 10000 mg/kg
inhalation	rat	Acute LC50 4 hr	> 5 mg/l (Dust/Mist) estimated

LOCAL EFFECTS ON SKIN AND EYE

Acute irritation	skin	irritating
Acute irritation	eye	No data

ALLERGIC SENSITIZATION

Sensitization	skin	Not sensitizing
Sensitization	respirator	Not sensitizing

GENOTOXICITY

Assays for Gene Mutations

Ames Salmonella Assay	No data

HAZARDOUS INGREDIENT TOXICITY DATA

Isopropanol has acute oral (rat) and dermal (rabbit) LD50 values of 5.0 g/kg and 12.8 g/kg, respectively. The 4-hour inhalation LC50 (rat) for isopropanol is >16,000 ppm (40.86 mg/L). Acute overexposure to isopropanol vapor may cause mild irritation of the eyes and respiratory tract. Chronic overexposure to isopropanol vapors may cause central nervous system depression, headaches, dizziness, nausea, and

staggered gait. Liquid isopropanol may cause moderate to severe eye irritation. In laboratory animal studies, isopropanol has produced fetotoxic effects at levels that were maternally toxic and developmental effects at levels that were maternally non-toxic, and inhalation exposures that produced reduced fetal weight at non-maternally toxic levels. Literature reports chronic exposure has caused kidney problems and testicular effects in laboratory animals.

Acute overexposure to p-toluenesulfonic acid vapor or mist may cause eye, skin, and respiratory irritation. The liquid is a moderate to severe eye and skin irritant. The oral LD50 value in rats is 2.5 g/kg.

The toxicological properties of o-toluene sulfonic acid have not been fully investigated. Acute overexposure to o-toluenesulfonic acid vapor or mist may cause eye, skin, and respiratory irritation. Direct contact with this material may cause moderate eye and skin irritation. The acute oral (rat) LD50 value is estimated to be >2.5 g/kg.

Section 12. Ecological Information

Toxicity, persistence and degradability, bioaccumulative potential, mobility in soil, other adverse effects.

This material is not classified as dangerous for the environment.
This material is not readily biodegradable.
This material does not significantly bioaccumulate.
The ecological assessment for this material is based on an evaluation of its components.

Results of PBT and vPvB Assessment
Not determined

Hazardous Ingredient Toxicity Data

Component / CAS No.	Toxicity to Algae	Toxicity to Fish	Toxicity to Water Flea
Isopropanol 67-63-0	EC > 1000 mg/L – Desmodesmus subspicatus (72h) EC50 > 1000 mg/L – Desmodesmus subspicatus (96h)	LC50 = 11130 mg/L – Pimephales promelas (96h) LC50 = 9640 mg/L – Pimephales promelas (96h) LC50 > 1400000 µg/L Lepomis macrochirus (96h)	EC50 = 13299 mg/L – Daphnia magna (48h)
Toluenesulfonic acid, p- 104-15-4	Not available	Not available	Not available
Toluenesulfonic acid, o- 88-20-0	Not available	Not available	Not available

Section 13. Disposal Considerations

The information on RCRA waste classification and disposal methodology provided below applies only to the product, as supplied. If the material has been altered or contaminated, or it has exceeded its recommended

shelf life, the guidance may be inapplicable. Hazardous waste classification under federal regulations (40 CFR Part 261 et seq) is dependent upon whether a material is a RCRA "listed hazardous waste" or has any of the four RCRA "hazardous waste characteristics." Refer to 40 CFR Part 261.33 to determine if a given material to be disposed of is a RCRA "listed hazardous waste"; information contained in Section 15 of this SDS is not intended to indicate if the product is a "listed hazardous waste." RCRA Hazardous Waste Characteristics: There are four characteristics defined in 40 CFR Section 261.21-61.24: Ignitability, Corrosivity, Reactivity, and Toxicity. To determine Ignitability, see Section 9 of this SDS (flash point). For Corrosivity, see Sections 9 and 14 (pH and DOT corrosivity). For Reactivity, see Section 10 (incompatible materials). For Toxicity, see Section 3 (composition). Federal regulations are subject to change. State and local requirements, which may differ from or be more stringent than the federal regulations, may also apply to the classification of the material if it is to be disposed. The Company encourages the recycle, recovery, and reuse of materials, where permitted, as an alternate to disposal as a waste. The Company recommends that organic materials classified as RCRA hazardous wastes be disposed of by thermal treatment or incineration at EPA approved facilities. The Company has provided the foregoing for information only; the person generating the waste is responsible for determining the waste classification and disposal method.

Section 14. Transport Information

This section provides basic shipping classification information. Refer to appropriate transportation regulations for specific requirements.

US DOT

Dangerous Goods? X
- Proper Shipping Name: Flammable liquid, corrosive, n.o.s.
- Hazard Class: 3
- Subsidiary Class: 8
- Packing Group: II
- UN/ID Number: UN2924
- Transport Label Required: Flammable Liquid, Corrosive
- Technical Name (N.O.S.): Contains isopropanol and p-toluenesulfonic acid

TRANSPORT CANADA

Dangerous Goods? X
- Proper Shipping Name: Flammable liquid, corrosive, n.o.s.
- Hazard Class: 3
- Subsidiary Class: 8
- Packing Group: II
- UN/ID Number: UN2924
- Transport Label Required: Flammable Liquid, Corrosive
- Technical Name (N.O.S.): Contains isopropanol and p-toluenesulfonic acid

ICAO / IATA

Dangerous Goods? X
Proper Shipping Name: Flammable liquid, corrosive, n.o.s.
Hazard Class: 3
Subsidiary Class: 8
Packing Group: II
UN/ID Number: UN2924
Transport Label Required: Flammable Liquid
Corrosive
Technical Name (N.O.S.): Contains isopropanol and p-toluenesulfonic acid

IMO

Dangerous Goods? X
Proper Shipping Name: Flammable liquid, corrosive, n.o.s.
Hazard Class: 3
Subsidiary Class: 8
Packing Group: II
UN/ID Number: UN2924
Transport Label Required: Flammable Liquid
Corrosive
Technical Name (N.O.S.): Contains isopropanol and p-toluenesulfonic acid

Section 15. Regulatory information

Inventory Information

United States (USA): All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.

Canada: All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.

European Economic Area (including EU): This product is compliant with the registration of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, pre-registered and/or registered.

Australia: All components of this product are included on the Australian Inventory of Chemical Substances (AICS) or are not required to be listed on AICS.

China: All components of this product are included on the Chinese inventory or are not required to be listed on the Chinese inventory.

Japan: All components of this product are included on the Japanese (ENCS and ISHL) inventories or are not required to be listed on the Japanese inventories.

Korea: All components of this product are included on the Korean (ECL) inventory or are not required to be listed on the Korean inventory.

Philippines: All components of this product are included on the Philippine (PICCS) inventory or are not required to be listed on the Philippine inventory.

Switzerland: All components of this product are exempt from the new substance notification requirements for Switzerland (SR 813.11 art. 16-17).

Other Environmental Information

The following components of this product may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372), Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc.). See Section 13 for information on waste classification and waste disposal of this product.

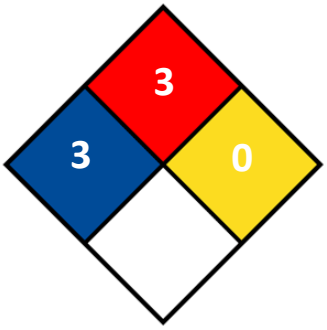
Component / CAS No.	%	TPQ (lbs)	RQ (lbs)	S313	TSCA 12B
Isopropanol 67-63-0	52-56	None	0	Yes	No

Product Hazard Classification Under Section 311 of SARA

- **Acute**
- **Fire**

Section 16. Other information

NFPA Hazard Rating (National Fire Protection Association) :



Flammability: 3 – Liquids and solids that can be ignited under almost all ambient temperature conditions.
Health: 3 – Materials that, under emergency conditions, can cause serious or permanent injury.
Instability: 0 – Materials that in themselves are normally stable, even under fire exposure conditions.

Component Hazard Phrases

Isopropanol

H225 – Highly flammable liquid and vapor.
H316 – Causes mild skin irritation.
H319 – Causes serious eye irritation.
H336 – May cause drowsiness or dizziness.

Toluenesulfonic acid, p-

H315 – Causes skin irritation.
H319 – Causes serious eye irritation.
H335 – May cause respiratory irritation.

Toluenesulfonic acid, o-

H315 – Causes skin irritation.
H319 – Causes serious eye irritation.
H335 – May cause respiratory irritation.

Notice to reader

The information provided herein was believed by Plastic Maritime Corporation (Plastic Maritime) to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Plastic Maritime are subject to Plastic Maritime's terms and conditions of sale. PLASTIC MARITIME MAKES NO WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY PLASTIC MARITIME, except that the product shall conform to Plastic Maritime's specifications. Nothing contained herein constitutes an offer for the sale of any product.