

SAFETY DATA SHEET

SDS Date: 10-08-2012

I. IDENTIFICATION OF THE PREPARATION AND THE COMPANY

Product Name: ARRIBA TWIST – TROPIC WAVE
Product Code:
Intended use: Liquid Odor Counteractant
Company: SAN JAMAR EUROPE
Schoorstraat 26A, Bus-1
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II. COMPOSITION/INFORMATION ON INGREDIENTS

listed ingredient(s) are health hazards within the meaning of Directive 67/548/EEC and are subject to recognized exposure limit values pursuant to Community provisions.

Chemical Name	PERCENT	CAS #	EINECS #	Classification
2-Methyl-2,4-pentanediol	1 - 5	107-41-5	203-489-0	Xi; R36/38
1,6-Octadien-3-ol, 3,7-dimethyl-	1 - 5	78-70-6	201-134-4	R38; Xi
2-Propenoic acid, 2-methyl-, dodecyl ester	0.1 - 1	No CAS #	205-570-6	R50/53; R36/37/38; N; Xi

The composition of this product is classified as a trade secret in accordance with CFR 29 1910. 1200 . Ingredients not precisely identified are proprietary or nonhazardous.

Classification for Product: R52/53

III. HAZARDS IDENTIFICATION

Risks: R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Routes of Entry: Skin contact, Eye contact, Inhalation

Target Organ Acute Toxicity: Kidneys, Eyes, Skin, Nervous System, Respiratory Tract

Chemical Interactions That Change Toxicity: None Known

Medical Conditions Aggravated: Kidney disease, Eye disease, Skin disease including eczema and sensitization, Respiratory disease including asthma and bronchitis

Immediate (Acute) Health Effects:

Inhalation Irritation: Can cause respiratory irritation.

Skin Contact: Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

Skin Absorption: No absorption hazard in normal industrial use.

Eye Contact: Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.

Ingestion Irritation: Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis.

Ingestion Toxicity: Harmful if swallowed.

Long-Term (Chronic) Health Effects:

Carcinogenicity: None of the substances have been shown to cause cancer in long term animal studies. Not a carcinogen according to NTP, IARC, or OSHA.

Reproductive and Developmental Toxicity: No data available to indicate product or any components present at greater than 0.1% may cause birth defects.

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

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IV. FIRST AID

Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.
Eyes:	Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.
Skin Contact:	Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.
Ingestion:	Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS. Induce vomiting as a last measure. Induced vomiting may lead to aspiration of the material into the lungs potentially causing chemical pneumonitis.
Notes to Doctor:	No additional first aid information available

V. FIRE FIGHTING MEASURES

Flammability Summary: Combustible

Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used to extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire.
Fire Hazards:	Vapors may be ignited by sparks, flames or other sources of ignition if material is above the flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back. Combustible Liquid. Can form explosive mixtures at temperatures at or above the flash point. Empty containers that retain product residue (liquid, solid/sludge, or vapor) can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. Any of these actions can potentially cause an explosion that may lead to injury or death.
Fire Fighting Instructions:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Combustible Liquid. Can form explosive mixtures at temperatures at or above the flash point. Empty containers that retain product residue (liquid, solid/sludge, or vapor) can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose container to heat, flame, sparks, static electricity, or other sources of ignition. Any of these actions can potentially cause an explosion that may lead to injury or death.
Hazardous Combustion Products:	Carbon dioxide Carbon monoxide Toxic fumes. Toxic gases

VI. ACCIDENTAL RELEASE MEASURES

Special Protection:	No health effects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section VIII of this MSDS
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Clean-up: No special spill clean-up considerations. Collect and discard in regular trash.

VII. HANDLING AND STORAGE

Handling: Mildly irritating material. Avoid unnecessary exposure. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Avoid contact with material, avoid breathing dusts or fumes, use only in a well ventilated area. Wash thoroughly after handling Do not get in eyes, on skin and clothing Ground and bond containers when transferring material "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Use spark-proof tools and explosion-proof equipment Keep in air-tight containers- material is hygroscopic. Remove contaminated clothing and wash before reuse

Storage: Store in a cool dry place. Isolate from incompatible materials. Keep container closed when not in use Store in a cool dry place Keep away from heat, sparks, and flame Store in a tightly closed container Keep away from sources of ignition

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure. Engineering controls must be designed to meet the OSHA chemical specific standard in 29 CFR 1910. Ventilation is required to maintain operator exposure below published exposure limits. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits Explosion proof exhaust ventilation should be used.

Respiratory Tract: Respiratory protection will be required when handling this product. Use respirators only if ventilation cannot be used to eliminate symptoms or reduce the exposure to below acceptable levels. Follow a respiratory protection program that meets 29 CFR 1910.134 and ANSI Z88.2 requirements whenever work place conditions warrant the use of a respirator. Wear a NIOSH approved respirator if any exposure is possible.

Eyes: Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses. Wear goggles and a Face shield

Skin: Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield

Gloves: No information available

Chemical Name
2-Methyl-2,4-pentanediol
1,6-Octadien-3-ol, 3,7-dimethyl-
2-Propenoic acid, 2-methyl-, dodecyl ester

Exposure Limits - UK

Exposure Limits - German
10 ppm MAK; 49 mg/m³ MAK

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IX. PHYSICAL AND CHEMICAL DATA

Physical State: Liquid
Color: Very pale yellow
Odour: None Comparable to Standard
pH: Not Available
Solubility in Water: Soluble in water- No
Octanol/Water Coeff: 0.14
Vapor Density: > 1
Evaporation Rate: : Not Available
Specific Gravity: 0.8454
Bulk Density: 0.8454

Flash Point: 65.56 deg. C
Boiling Point: 177 deg. C
Melting Point: -58 deg. C
Upper Flammable/Explosive Limit, % in air: 6
Lower Flammable/Explosive Limit, % in air: 1.2

X. STABILITY AND REACTIVITY

Stability Information: Stable under normal conditions.
Conditions to Avoid: None known. Contamination Elevated temperatures
Chemical Incompatibility: Strong oxidizing agents Amines Strong acids Caustics (bases) Acetic anhydride Strong reducing agents Chlorinated compounds
Hazardous Decomposition Products: Carbon dioxide Carbon monoxide Toxic fumes. Toxic gases

XI. TOXICOLOGICAL INFORMATION

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Chemical Name	CAS Number	LD50/LC50
2,4-Pentanediol, 2-methyl-	107-41-5	Inhalation LC50 Rat : >310 mg/m ³ /1H; Oral LD50 Rat : 3700 mg/kg; Oral LD50

XII. ECOLOGICAL INFORMATION

Ecological Toxicity Values:

XIII. DISPOSAL CONSIDERATIONS

Waste Description for Spent Product: Spent or discarded material may be a hazardous waste.
Disposal Methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the sole responsibility of the waste generator. As your supplier, we have no control over the management practices or manufacturing processes of parties handling or using this material. The information presented here pertains only to the product when used as intended, according to this MSDS. For unused and uncontaminated product, the preferred options include sending to a licensed and permitted incinerator or other thermal destruction device. Various federal, state or provincial

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agencies may have specific regulations concerning the transportation, handling, storage, use or disposal of this product which may not be covered in this MSDS. The user shall have to review these regulations to ensure full compliance with all applicable regulations.

XIV. TRANSPORTATION INFORMATION

Agency	Shipping Name	Packing Group	Hazard Class	Subsidiary Risks	UN/NA
IATA					

XV. REGULATORY INFORMATION

According to the Directives 88/379/EEC and subsequent amendments or modification, the product is classified and labelled as follows:

Category(s) and Indications(s) of Danger: R52/53

Hazard Symbol(s):

Risk Phrase(s): R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety Phrase(s):

Label Ingredients:

XVI. ADDITIONAL INFORMATION

The information in this safety data sheet is provided in accordance with the requirements of the Chemicals (Hazard Information and Packaging) Regulations. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.