

MATERIAL SAFETY DATA SHEET

Spot-E

FILE NO.: 004
MSDS DATE: 01 / August / 2012

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Spot-E
SYNONYMS: Naga
PRODUCT CODES:

MANUFACTURER: Sonnaya Ulitka S.L.
DIVISION: Spot-A Materials
ADDRESS: Calle Lillull, nº 319-321, 08019 Barcelona, Spain

EMERGENCY PHONE (Europe): 112
CHEMTREC PHONE:
OTHER CALLS: +34 931867412
FAX PHONE:

CHEMICAL NAME:
CHEMICAL FAMILY: Acrylate Monomers, Acrylate Urethane Oligomers
CHEMICAL FORMULA:

PRODUCT USE: Photoactive Resin
PREPARED BY:

SECTION 1 NOTES:

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT: REPORTABLE</u>	<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313</u>
Aliphatic Acrylate		8-25%		
Aliphatic Urethane Acrylate		8-25%		
Aromatic Acrylate		10-40%		
Aliphatic Acrylate		40%		

A PEL or TLV has not been established

SECTION 2 NOTES:

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: WARNING



Warning



Irritant

Flamability: 0
Health: 2
Reactivity: 0
Other: 0

ROUTES OF ENTRY: May be absorbed through the skin

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH HAZARDS:

EYES: Moderate eye irritant

SKIN: Slight skin irritant/may cause skin sensitization

INGESTION: No data found; not expected to be an ingestion hazard

INHALATION: May cause respiratory tract irritation

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CHRONIC HEALTH HAZARDS: No appropriate human or animal chronic health effects data known to exist.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

INHALATION

If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

EYE CONTACT

In case of eye contact, immediately rinse with clean water for 20-30 minutes. Retract eyelids often. Obtain emergency medical attention.

SKIN CONTACT

Remove contaminated clothing as needed. Wash skin thoroughly with mild soap/water. Flush with lukewarm water for 15 minutes. If sticky, a waterless cleaner may be used.

INGESTION

Ingestion unlikely. However, if ingested, obtain emergency medical attention.

EMERGENCY MEDICAL TREATMENT PROCEDURES

If pain, blinking, tears, or redness continue, patient should contact ophthalmologist.

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT METHOD=(PMCC)
GT 93C/200F

AUTOIGNITION TEMP. METHOD=
N/DA

FLAMMABLE LIMITS (% VOLUME IN AIR)

LOWER: N/DA

UPPER: N/DA

FIRE AND EXPLOSION HAZARDS

High temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat/pressure. Closed containers may rupture or explode during runaway polymerization.

EXTINGUISHING MEDIA

Dry chemical
CO2
Water spray
Foam
Water fog

SPECIAL FIREFIGHTING PROCEDURES

Do not enter fire area without proper protection. See Section 4 - decomposition products possible. Fight fire from safe distance/protected

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location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Water may be ineffective in firefighting due to low solubility. Use water spray/fog for cooling. Pressure relief system may plug with solids, increasing risk of overpressure. Notify authorities if liquid enters sewer/public waters.

SECTION 5 NOTES:

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED

Spilled or released material may polymerize and release heat/gases. Extinguish all ignition sources and ventilate area. Wear protective equipment during clean-up. Dike and recover large spill. Soak up small spill with inert solids (such as vermiculite, clay) and sweep/shovel into vented disposal container. Wash spill area with a strong detergent and water solution; rinse with water but minimize water use during clean-up. For spills on water, contain, minimize dispersion and collect. Dispose/report per regulatory requirements.

WASTE DISPOSAL METHODS

Non-contaminated, properly inhibited material is not a RCRA hazardous waste. However, contaminated material/soil/water may be RCRA/OSHA hazardous waste due to potential for internal heat generation (see 40 CFR 261 and 29 CFR 1910).

It is the responsibility of the generator to determine at the time of disposal whether the material meets the criteria of a hazardous waste. Comply with all applicable federal, state and local regulations. Use registered transporters. Disposal options include landfilling solids at permitted sites; fuel blending or incinerating liquids. Assure emissions comply with applicable regulations. Dilute aqueous waste may biodegrade; avoid overloading/poisoning plant biomass. Assure effluent complies with applicable regulations.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE PROCEDURES

Wear appropriate protective equipment when handling this material (See Section 8 of MSDS). Most acrylic monomers have low viscosities; hence, pouring, material transfer and processing of these materials do not necessitate heating. Viscous monomers may require heating to facilitate handling. To facilitate product transfer from original container, product may be heated to 60C/140F for not more than 24 hours. Do NOT use localized heat sources such as band heaters to heat/melt product. Do NOT use steam. Hot boxes or hot rooms are recommended for heating/melting material. The hot box or hot room should be set at a maximum temperature of 60C/140F. Do not overheat--this may compromise product quality and/or result in an uncontrolled hazardous polymerization. If product freezes, heat as indicated above and mix gently to redistribute the inhibitor. Product should be consumed in its entirety after heating/melting--avoid multiple "re-heats" which may affect product quality or result in product degradation. Product is packaged with inhibitor(s). Unless inhibited, product can polymerize, raising temperature and pressure possibly rupturing container. Check inhibitor content periodically, adding to bulk material if needed. In addition, the product's inhibitor(s) require the presence of dissolved oxygen. Maintain, at a minimum, the original headspace in the product container and do not blanket or mix with oxygen-free gas as it renders inhibitor ineffective. Ensure air space (oxygen) is present during product heating/melting.

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION

:

If this material is handled at elevated temperature or under mist forming conditions, NIOSH/MSHA approved respiratory protection equipment should be used.

EYE PROTECTION

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Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid, airborne particles, or vapor. Contact lenses should not be worn.

SKIN PROTECTION

Depending on the conditions of use, protective gloves, apron, boots, head and face protection should be worn. This equipment should be cleaned thoroughly after each use.

ENGINEERING CONTROLS

If this material is handled at elevated temperature or under mist forming conditions, NIOSH/MSHA approved respiratory protection equipment should be used.

OTHER HYGIENIC PRACTICES

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

OTHER WORK PRACTICES

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing/wash thoroughly before reuse. Shower after work using plenty of soap and water.

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, light yellow liquid

ODOR: Low odor

PHYSICAL STATE: Liquid

pH AS SUPPLIED: AP 6.8 to 7.2

pH (Other):

BOILING POINT: N/DA

MELTING POINT: N/DA

FREEZING POINT: N/DA

VAPOR PRESSURE (mmHg): Negligible

VAPOR DENSITY (AIR = 1): N/AP

SPECIFIC GRAVITY (H₂O = 1): AP 1.10-1.12 at 25C/77F

EVAPORATION RATE: Negligible

BASIS (=1):

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

SOLUBILITY IN WATER: Negligible

PERCENT SOLIDS BY WEIGHT: 2%

PERCENT VOLATILE: 0%

VOLATILE ORGANIC COMPOUNDS (VOC): Nil

MOLECULAR WEIGHT: N/DA

VISCOSITY: AP 100 to 150 cps at 25C/77F

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SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABLE

UNSTABLE

STABILITY: Stable

CONDITIONS TO AVOID (STABILITY):

High temperatures, localized heat sources (ie, drum or band heaters), oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, inert gas blanketing; Strong oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers

INCOMPATIBILITY (MATERIAL TO AVOID):

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

Acrid smoke-fumes/carbon monoxide/carbon dioxide and perhaps other toxic vapors may be released during a fire involving this product.

HAZARDOUS POLYMERIZATION: May occur

CONDITIONS TO AVOID (POLYMERIZATION): Leave appropriate headspace above surface level to provide Oxygen inhibition for best stability.

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE

INHALATION

No significant signs or symptoms indicative of any adverse health hazard are expected to occur at standard conditions due to the low volatility of this material. However, aerosols, or vapors which may be generated at elevated processing temperatures, may cause respiratory tract irritation. Symptoms of irritation may include coughing, mucous production and shortness of breath.

EYE CONTACT -- PRIMARY ROUTE

May cause moderate irritation with symptoms including burning sensation, tearing, redness or swelling.

SKIN ABSORPTION -- PRIMARY ROUTE

Some acrylate materials are absorbed through the skin. Although no appropriate human or animal health effects data are known to exist, the potential for skin absorption does exist for this material.

SKIN IRRITATION -- PRIMARY ROUTE

May cause minor skin irritation. Symptoms of irritation may include a slight localized redness or rash and swelling. Although no appropriate human or animal health effects data is known to exist, this material may cause an allergic skin reaction (sensitization) in susceptible individuals upon repeated exposure.

INGESTION

Although no appropriate human or animal health effects data is known to exist, this material is not expected to be an ingestion hazard.

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MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

This material or its emissions may induce an allergic or sensitization reaction and thereby aggravate systemic disease.

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:

DECONTAMINATION PROCEDURES

Follow standard plant procedures or supervisor's instructions for decontamination operations.

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

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SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME:
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENT:

WATER TRANSPORTATION

PROPER SHIPPING NAME:
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

AIR TRANSPORTATION

PROPER SHIPPING NAME:
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

OTHER AGENCIES:

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SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT):

TSCA status: All components of this product are listed, or excluded from listing, on the United States Environmental Protection

TSCA Section 12(b):

TSCA Section 12(b) - Export Notification: This product does not contain any chemicals at concentrations subject to Section 12(b) export notification.

CALIFORNIA PROPOSITION 65:

California Proposition 65 Information: This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

Agency Toxic Substances

Control Act (TSCA) inventory.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

311/312 HAZARD CATEGORIES:

NPCA - HMIS RATING

Health

2

Flammability

1

Reactivity

2

Personal protection**

D

**Respiratory protection may be necessary depending on conditions of use.

Refer to Section 8 of this MSDS for respiratory protection guidelines.

313 REPORTABLE INGREDIENTS:

STATE REGULATIONS:

INTERNATIONAL REGULATIONS:

SECTION 15 NOTES:

This material contains an inhibitor (HQ, MEHQ, etc.) at <1%. The type and amount meet product specifications.

*Note - qualifiers and codes used in this MSDS

EQ = Equal; AP = Approximately; LT = Less Than; GT = Greater Than;

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TR = Trace; UK = Unknown; N/AP = Not Applicable; N/P = No Applicable

Information Found; N/DA = No Data Available

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

PREPARATION INFORMATION:

DISCLAIMER: