



M A T E R I A L S A F E T Y D A T A S H E E T

DUPLO 402D DIGITAL DULL UV - PLASTIC

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SECTION 1 - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: NICOAT - National Industrial Coatings

ADDRESS : 1600 Glenlake Avenue
Itasca, IL 60143

INFORMATION PHONE: (630) 860-7070

DATE PRINTED: 10/7/2009

FAX NUMBER : (630) 860-7172

EMERGENCY PHONE : (630) 860-7070

SUPERSEDES : ALL PREVIOUS MSDS'.

SECTION 2 - REPORTABLE INGREDIENTS / IDENTITY INFORMATION

REPORTABLE COMPONENTS	CAS NUMBER	WEIGHT PERCENT
ACRYLATED MONOMER		30 - 70%
Acrylated oligomer / Monomer blend		1 - 20%
PHOTOINITIATOR		1 - 20%
KETONE TYPE PHOTOINITIATOR		1 - 20%

SECTION 3 - GENERAL COMPOSITION INFO

COMPONENT	% OF FORMULATION
Acrylated Monomer	60.0% - 70.0%
Acrylated Monomer Blends	20.0% - 25.0%
Multifunctional Acrylate Esters	10.0% - 20.0%
Photoinitiator	5.0% - 10.0%
Additives to Control Slip, Foam, and Inerts	1.0% - 4.0%

SECTION 4 - FIRST AID MEASURES

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

INHALATION-Not expected to be a hazard due to low volatility under standard conditions. Inhalation of mist or vapor may cause respiratory tract irritation.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

Nicoat

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SKIN-Can cause moderate irritation and redness. Possible skin allergen.
EYE-Can cause moderate irritation, burning sensation, swelling, and redness.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:

INGESTION-Considered slightly toxic.

CARCINOGENICITY: NTP **CARCINOGEN:** N/A.

IARC MONOGRAPHS: N/A. **OSHA REGULATED:** N/A.

EMERGENCY AND FIRST AID PROCEDURES:

SKIN-Wash thoroughly with soap and water. Remove contaminated clothing and footwear. Wash clothing before reuse and discard footwear which cannot be decontaminated. If irritation should develop, get medical attention.

EYE-Immediately flush with plenty of water for at least 15 minutes holding eyelids apart to ensure flushing of the entire surface. Washing within one minute is essential to achieve maximum effectiveness. Get medical attention.

INHALATION-Remove to fresh air.

INGESTION-Do not induce vomiting. If vomiting should occur spontaneously, keep airway clear. Get medical attention. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:

>200 Deg. F

METHOD USED:

Koehler Closed Cup

FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER:

ND.

UPPER:

ND.

EXTINGUISHING MEDIA:

Carbon Dioxide, Dry Chemical, Foam, and Water Spray.

SPECIAL FIREFIGHTING PROCEDURES:

Cool exposed containers with water spray. Use self-contained breathing apparatus in confined areas.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Product may polymerize at high temperatures. Polymerization is a highly exothermic reaction and may produce sufficient heat to cause thermal decomposition and/or rupture of containers. Thermal decomposition can lead to the evolution of irritant vapors or gases and/or fires.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Stop Leaks. Clean up large spills with vacuum truck. Soak up small spills with absorbant material and place in labeled waste container for disposal. Mild alcohols can be used to clean contaminated surfaces. Wear adequate personal protective clothing and equipment.

OTHER PRECAUTIONS:

Chronic Effects: Dermatitis. May aggravate existing skin, eye, and lung conditions.

FOR INDUSTRIAL USE ONLY.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Product may congeal or stratify if subjected to below freezing temperatures. Allow to warm to room temperature and mix well before using. Do not store above 90F (32C). Store in a cool, shaded, well-ventilated, dry area away from heat and sunlight. Store away from foodstuffs, alkaline substances and other materials likely to initiate polymerization.

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION (SPECIFY TYPE):

NIOSH/MSHA-approved respirator if necessary. Follow manufacturer's recommendations.

VENTILATION:

Local Exhaust - general room ventilation is required.

PROTECTIVE GLOVES:

Neoprene gloves that are impervious to acrylates.

EYE PROTECTION:

Goggles or side-shield spectacles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

N/A.

WORK/HYGIENIC PRACTICES:

Use good personal hygiene practices. Wash thoroughly after use. Wash clothing.

SECTION 9 - PHYSICAL CHARACTERISTICS

BOILING POINT:	Not available.
DENSITY:	8.64 lb/gl
PRODUCT V.O.C. (LB/GL) (VIA METHOD 24):	0.0
SOLVENT BY WEIGHT (%):	0.0
VAPOR PRESSURE (MM HG):	Not Determined.
VAPOR DENSITY (AIR=1):	Not Determined.
EVAPORATION RATE:	Not Determined.
MELTING POINT:	N/A
SOLUBILITY IN WATER:	Not soluble.
APPEARANCE AND ODOR:	Clear liquid with acrylate odor.

SECTION 10 - STABILITY AND REACTIVITY

STABILITY:

Normally Stable.

CONDITIONS TO AVOID:

Direct heating, dirt or chemical contamination, sunlight, ultraviolet light or ionizing radiation. When it is required to warm product, a controlled temperature not exceeding 120F (49C) may be used for limited periods.

INCOMPATIBILITY (MATERIALS TO AVOID):

Primary and secondary amines, acids, alkalies, and free radical producing initiators.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS:

Carbon dioxide, carbon monoxide, or other toxic vapors may be released during a fire involving this product.

HAZARDOUS POLYMERIZATION:

May occur.

SECTION 11 - TOXICOLOGICAL

REPORTABLE COMPONENTS

ACRYLATED MONOMER
Acrylated oligomer / Monomer blend
PHOTOINITIATOR
KETONE TYPE PHOTOINITIATOR



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SECTION 12 - ECOLOGICAL

ENVIRONMENTAL FATE AND TRANSPORT

BIODEGRADATION:

ENVIRONMENTAL TOXICITY

N/A.

OTHER TOXICOLOGICAL ADVICE:

N/A.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Dispose of product by incineration in an approved chemical waste facility (or by other approved methods) in accordance with applicable Federal, State, and local regulations. Avoid landfilling liquids. Since emptied containers retain product residues, all labeled hazard precautions must be observed.

SECTION 14 - TRANSPORT INFO

LAND TRANSPORT

USDOT N/A.

SEA TRANSPORT

IMDG N/A.

AIR TRANSPORT

IATA/ICAO N/A.

SECTION 15 - REGULATORY INFORMATION

TSCA (USA TOXIC SUBSTANCE CONTROL ACT)

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) Inventory.

CALIFORNIA PROP 65, SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986



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

EINECS (EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES)

Included on inventory.

SARA SECTION 313

This product contains the following toxic chemical(s) subject to the reporting of SECTION 313 of the EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT OF 1986 and of CFR 372:

CAS NUMBER: CHEMICAL NAME: PERCENT BY WEIGHT:

*** NO REPORTABLE QUANTITIES OF HAZARDOUS INGREDIENTS ARE PRESENT ***

THIS INFORMATION MUST BE INCLUDED IN ALL MSDS' THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.

SECTION 16 - HMIS AND OTHER INFORMATION

HMIS RATING	
HEALTH	2
FLAMMABILITY	1
REACTIVITY	1
PERSONAL PROTECTION	C

TERMS AND CONDITIONS

1. OFFER AND ACCEPTANCE. The quotation with the accompanying specifications constitutes a binding contract between the parties. NICOAT shall not be responsible for loss or expense arising from delays in delivery of goods and/or services attributable to matters outside NICOAT's direct control, including but not limited to, labor disturbances, freight delays, work stoppages, material or labor shortages, governmental action and acts of God. If Buyer rejects NICOAT's goods, Buyer shall make its rejection in writing to NICOAT within thirty (30) days after delivery to Buyer. Unless Buyer accepts replacement goods from NICOAT, Buyer's sole remedy for any nonconforming goods shall be cancellation of the order and refund of any payment by Buyer upon return of the nonconforming goods to NICOAT. In the absence of such notice of dissatisfaction, Buyer hereby agrees and acknowledges that the quality of the goods and/or services provided by NICOAT conform to the terms of this agreement. Buyer shall pay NICOAT its published price within thirty (30) days after delivery to Buyer, or on the terms otherwise agreed to.

2. DISCLAIMER of WARRANTIES AND LIMITATION OF REMEDIES. NICOAT does not recommend the use of ALKALINE PIGMENTS (E.G. REFLEX BLUE, RHODAMINE RED, ETC.) WITH ANY OF ITS COATINGS. The general description, application data and statements contained in the product literature and labels are guidelines only.



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NICOAT warrants that its goods will meet NICOAT's written specifications and descriptions at the time of delivery. NICOAT will replace any returned goods found upon examination by NICOAT to be nonconforming or defective. BECAUSE THIS PRODUCT MAY BE USED FOR A VARIETY OF APPLICATIONS OVER WHICH NICOAT HAS NO CONTROL, NICOAT NEITHER MAKES NOR AUTHORIZES TO BE MADE ANY EXPRESS OR IMPLIED REPRESENTATION OR WARRANTY WITH REGARD TO THESE GOODS CONCERNING THE PERFORMANCE, USE, FITNESS FOR PARTICULAR PURPOSE, SUITABILITY FOR USE ON ANY SURFACE OR MERCHANTABILITY OF THE GOODS, WHETHER USED ALONE OR IN COMBINATION WITH OTHER PRODUCTS. BUYER SHOULD TEST THE GOODS IN ADVANCE TO VERIFY THEIR SUITABILITY FOR PARTICULAR USES.

NICOAT ASSUMES NO LIABILITY TO BUYER OR BUYER'S CUSTOMERS FOR ANY INCIDENTAL, CONSEQUENTIAL OR DIRECT DAMAGE OF ANY KIND REGARDLESS OF CAUSE, INCLUDING INJURY TO PERSONS OR PROPERTY. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS.

3. **DEFAULT BY BUYER.** If Buyer accepts this offer and then defaults in the payment or performance of any of its obligations hereunder, the entire balance due hereunder, together with accrued interest if any, shall become immediately due and payable without notice or demand. Upon Buyer's default, NICOAT shall have all the rights and remedies available to it at law or in equity to enforce and protect its rights hereunder, which remedies should be cumulative and not exclusive. Buyer shall indemnify and hold NICOAT harmless from and against any liability, loss, cost, claim, damage, action in respect thereto and expense, including attorney's fees and costs, asserted against or incurred by NICOAT by reason of, or on account of Buyer's default.

4. **MISCELLANEOUS.** All notices, demands and other communications given under the parties' contract shall be in writing that is hand-delivered, sent by telephonic facsimile or sent by registered or certified mail, return receipt requested, postage prepaid, to such addresses as the parties shall furnish each other in writing. Except as otherwise provided by law, the date of telephonic facsimile, mailing or hand-delivery shall constitute the receipt of such notices, demands and other communications.

This document, together with NICOAT's specifications, when accepted, will constitute the entire agreement of the parties, and they shall not amend or vary its terms except by a written instrument signed by all the parties. This document, when accepted, shall be binding upon, and shall inure to the benefit of the parties and their respective successors and assigns. The invalidity of any provision of this document shall not diminish the enforceability of any other term of this document. Any party to this document, when accepted, may enforce specifically any or all of its terms. Any waiver of any term, condition or breach of the parties' contract by any party shall not waive any subsequent act or breach. Captions appear in this document for convenience only, and they shall not amend, modify or limit the provisions hereof.

The laws of Illinois shall govern the construction of this contract. The parties shall resolve any disputes hereunder in a court of competent jurisdiction in Illinois, and each party hereby consents to jurisdiction in the State of Illinois and venue in DuPage County, Illinois for purposes of enforcing this agreement and hereby waives any and all rights to contest such jurisdiction and venue.