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(MS)

MATERIAL SAFETY DATA SHEET



NOVUS Inc.
 10425 Hampshire Avenue South
 Minneapolis, MN 55438
 Emergency phone # (952) 944-8000

Medical Emergencies (800) 228-5635 x 334
 Transportation Emergencies (800) 424-9300
 (Outside U.S. call (703) 527-3887 collect)
 Business phone # (952) 944-8000

SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT NAME(S): NOVUS Plastic Polish #1 (P/N 7020, 7024, 7026, & 7050) **NOVUS I.D. NUMBER:** 7010

CHEMICAL NAME: NA **PRODUCT USE:** Clean and restore plastic surfaces.

SECTION 2 - HAZARDOUS INGREDIENTS

INGREDIENT	% BY WEIGHT	CAS #	EXPOSURE LIMITS	LD50 (SPECIES & ROUTE)	LC50 (SPECIES)
Isopropyl Alcohol	1-5	67-63-0	400 ppm (1,2) 500 ppm (4)	NE	NE

NOTES: (1) ACGIH TLV (TWA) (2) - OSHA PEL (TWA) (3) - ACGIH STEL (4) - OSHA STEL (5) - MFR/SUPPLIER TLV
 LD 50 VALUES ARE VIA ORAL ROUTE UNLESS OTHERWISE INDICATED
 ** TOXIC CHEMICAL REPORTABLE PER SECTION 313, TITLE III SARA AND 40 CFR372

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE: Liquid	APPEARANCE: White opaque liquid	ODOR: Slight odor
VAPOR PRESSURE (mmHg): <33	% VOLATILE: 94	VAPOR DENSITY (AIR=1): NE
EVAPORATION RATE (BuAc=1): < 1	BOILING POINT (deg C): 99	FREEZING POINT (deg C): NE
PH: NE	DENSITY (gr/ml): 1.006	SOLUBILITY IN WATER: Complete

SECTION 4 - FIRE AND EXPLOSION DATA

FLAMMABILITY IF YES, UNDER WHICH CONDITIONS:
 YES NO

EXTINGUISHING MEDIA: Use media suitable for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES: No special procedures required.

FLASH POINT (PMCC) deg F: >200 **UPPER FLAMMABILITY LIMIT: (% BY VOLUME)** NE **LOWER FLAMMABILITY LIMIT: (% BY VOLUME)** NE

AUTOIGNITION TEMPERATURE (deg C): NE **HAZARDOUS COMBUSTION PRODUCTS:** Carbon Dioxide and Carbon Monoxide.

EXPLOSION SENSITIVITY TO IMPACT: NE **SENSITIVITY TO STATIC DISCHARGE:** NE

DATA

SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY: IF NO, UNDER WHICH CONDITIONS:
 YES NO

INCOMPATIBILITY WITH OTHER SUBSTANCES: Strong oxidizers.
 YES NO IF SO, WHICH ONES?

REACTIVITY, AND UNDER WHICH CONDITIONS? Product is not considered highly reactive.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide and Carbon Monoxide.

PRODUCT NAME(S): NOVUS Plastic Polish #1 (P/N 7020, 7024, 7026, & 7050)

SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY: SKIN CONTACT SKIN ABSORPTION EYE CONTACT INHALATION INGESTION

EFFECTS OF ACUTE EXPOSURE TO PRODUCT: May be mildly irritating to the eyes, nose, and throat. May cause mild skin irritation in certain individuals.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT: Prolonged inhalation of mist may cause mild respiratory irritation.

EXPOSURE LIMITS: See section 2.	IRRITANCY OF PRODUCT: Mild: Eyes, skin, and respiratory	SENSITIZATION TO PRODUCT: None reported or anticipated	CARCINOGENICITY: NE
MUTAGENICITY: NE	REPRODUCTIVE TOXICITY: NE	MUTAGENICITY: NE	SYNERGISTIC PRODUCTS: NE

SECTION 7 - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT	
CLOTHING (SPECIFY): Not normally required, however in situations of extended skin contact, neoprene or other chemical resistant gloves are recommended.	RESPIRATORY (SPECIFY): Not normally required. For symptoms of overexposure, wear NIOSH - approved respirator for organic vapors.
EYE (SPECIFY): Not normally required, however the use of safety glasses is recommended.	OTHER (SPECIFY): If possible, eye wash and safety shower should be available.
ENGINEERING CONTROLS (SPECIFY): Local exhaust may be necessary under some usage/handling conditions. Specific needs should be addressed by health/safety personnel.	
LEAK/SPILL PROCEDURE: Wear personal protective equipment. Remove heat and ignition sources, ventilate area, clean up with inert absorbant.	
WASTE DISPOSAL: Waste may be burned in an approved incinerator or disposed of according to local, state, provincial, and federal regulations.	
HANDLING PROCEDURES/EQUIPMENT AND STORAGE REQUIREMENTS: Store in closed container in cool, dry location, away from direct sunlight or sources of intense heat.	
SPECIAL SHIPPING INFORMATION: KEEP FROM FREEZING	

SECTION 8 - FIRST AID MEASURES

SYMPTOMS / EFFECTS OF OVEREXPOSURE:	Respiratory irritation. High concentrations may cause headache, dizziness, and nausea. Prolonged or repeated exposure may lead to skin irritation and dermatitis. Eye contact may be irritating and may cause damage.
EYES:	Immediately flush eyes with large amounts of water for at least 15 minutes while holding the eyelids open. Get prompt medical attention.
SKIN:	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists.
INHALATION:	Move victim to fresh air and treat symptomatically. Seek medical attention if irritation persists.
INGESTION:	Contact local poison control center or physician IMMEDIATELY!

SECTION 9 - MSDS PREPARATION INFORMATION

THIS MATERIAL SAFETY DATA SHEET IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTENT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.

PREPARED BY: NOVUS Inc. CHEMISTRY DEPARTMENT

DATE: 6-14-00

MATERIAL SAFETY DATA SHEET

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 PLASTIC POLISH 10425 Hampshire Avenue South
 Minneapolis, MN 55438

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 Outside U.S. call (703) 527-3887 collect
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SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT NAME(S): NOVUS Plastic Polish #2 (P/N 7030, 7032, 7033, & 7072)	NOVUS I.D. NUMBER: 7011
CHEMICAL NAME: NA	PRODUCT USE: Clean and restore plastic surfaces.

SECTION 2 - HAZARDOUS INGREDIENTS

INGREDIENT	% BY WEIGHT	CAS #	EXPOSURE LIMITS	LD50 (SPECIES & ROUTE)	LC50 (SPECIES)
Odorless Mineral Spirits	7-13	64742-48-9	400 ppm (5)	NE	NE
Silica, Amorphous, Diatomaceous Earth	3 - 7	61790-53-2	.05 mg/kg (2)	NE	NE
Morpholine	1-5	110-91-8	20 ppm (1,2) .30 ppm (3,4)	Rat: 1050 mg/kg Rabbit, skin: 500 mg/kg	Rat: 12,000 ppm (8 hr.)
Oleic Acid	1-5	112-80-1	NE	Rat: 20 ml/kg	NE

NOTES: (1) ACGIH TLV (TWA) (2) - OSHA PEL (TWA) (3) - ACGIH STEL (4) - OSHA STEL (5) - MFR/SUPPLIER TLV
 LD 50 VALUES ARE VIA ORAL ROUTE UNLESS OTHERWISE INDICATED
 ** TOXIC CHEMICAL REPORTABLE PER SECTION 313, TITLE III SARA AND 40 CFR372

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE: Liquid	APPEARANCE: Tan opaque liquid	ODOR: Slight solvent odor
VAPOR PRESSURE (mmHg): <75	% VOLATILE: 75	VAPOR DENSITY (AIR=1): NE
EVAPORATION RATE (BuAc=1): < 1	BOILING POINT (deg C): 80	FREEZING POINT (deg C): NE
PH: NE	DENSITY (g/ml): 1.01	SOLUBILITY IN WATER: Appreciable

SECTION 4 - FIRE AND EXPLOSION DATA

FLAMMABILITY IF YES, UNDER WHICH CONDITIONS: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, or Foam.		
SPECIAL FIRE FIGHTING PROCEDURES: Use water spray or fog to cool fire exposed containers.		
FLASH POINT (PMCC) deg F: >200	UPPER FLAMMABILITY LIMIT: (% BY VOLUME) NE	LOWER FLAMMABILITY LIMIT: (% BY VOLUME) NE
AUTOIGNITION TEMPERATURE (deg C): NE	HAZARDOUS COMBUSTION PRODUCTS: Carbon Dioxide and Carbon Monoxide.	
EXPLOSION SENSITIVITY TO IMPACT: NE		SENSITIVITY TO STATIC DISCHARGE: No

SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY: IF NO, UNDER WHICH CONDITIONS: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
INCOMPATIBILITY WITH OTHER SUBSTANCES: Strong oxidizers. YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF SO, WHICH ONES?	
REACTIVITY, AND UNDER WHICH CONDITIONS? Product is not considered highly reactive.	
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide and Carbon Monoxide.	

PN 0217 REV. 6/00 NA - NOT APPLICABLE UN - UNAVAILABLE NE - NOT ESTABLISHED

PRODUCT NAME(S): NOVUS Plastic Polish #2 (P/N 7030, 7032, 7033, & 7072)

SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY: SKIN CONTACT SKIN ABSORPTION EYE CONTACT INHALATION INGESTION

EFFECTS OF ACUTE EXPOSURE TO PRODUCT: May cause respiratory irritation. Exposure to high concentrations may cause headache, dizziness, and nausea. Eye contact may cause burning and irritation. Skin contact is a possible route of entry.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT: Prolonged or repeated skin contact may lead to drying, irritation, and dermatitis.

EXPOSURE LIMITS: See section 2.	IRRITANCY OF PRODUCT: Mild: Eyes, skin, and respiratory	SENSITIZATION TO PRODUCT: NE	CARCINOGENICITY: NE
TERATOGENICITY: NE	REPRODUCTIVE TOXICITY: NE	MUTAGENICITY: NE	SYNERGISTIC PRODUCTS: NE

SECTION 7 - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT	
CLOTHING (SPECIFY): Wear chemical resistant gloves and clothing as needed to prevent skin contact.	RESPIRATORY (SPECIFY): Not normally required. If TLV or PEL is exceeded, wear a NIOSH approved respirator for organic vapors.
EYE (SPECIFY): Wear chemical safety goggles.	OTHER (SPECIFY): If possible, eye wash and safety shower should be available.
ENGINEERING CONTROLS (SPECIFY):	Local exhaust may be necessary under some useage/handling conditions. Specific needs should be addressed by health/safety personnel.
LEAK/SPILL PROCEDURE:	Wear personal protective equipment. Remove heat and ignition sources, ventilate area, clean up with inert absorbant.
WASTE DISPOSAL:	Waste may be burned in an approved incinerator or disposed of according to local, state, provincial, and federal regulations.
HANDLING PROCEDURES/EQUIPMENT AND STORAGE REQUIREMENTS:	Store in closed container in cool, dry location, away from direct sunlight or sources of intense heat.
SPECIAL SHIPPING INFORMATION:	KEEP FROM FREEZING

SECTION 8 - FIRST AID MEASURES

SYMPTOMS / EFFECTS OF OVEREXPOSURE: Respiratory irritation. High concentrations may cause headache, dizziness, and nausea. Prolonged or repeated exposure may lead to skin irritation and dermatitis. Eye contact is irritating and may cause damage.

EYES: Immediately flush eyes with large amounts of water for at least 15 minutes while holding the eyelids open. Get prompt medical attention.

SKIN: Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists.

INHALATION: Move victim to fresh air and treat symptomatically. Seek medical attention if irritation persists.

INGESTION: Contact local poison control center or physician IMMEDIATELY!

SECTION 9 - MSDS PREPARATION INFORMATION

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DATE: 6-14-00

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SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT NAME(S): NOVUS Plastic Polish #3 (P/N 7080, 7081, 7082, & 7085)	NOVUS I.D. NUMBER: 7107
CHEMICAL NAME: NA	PRODUCT USE: Clean and restore plastic surfaces.

SECTION 2 - HAZARDOUS INGREDIENTS

INGREDIENT	% BY WEIGHT	CAS #	EXPOSURE LIMITS	LD50 (SPECIES & ROUTE)	LC50 (SPECIES)
Dipropylene Glycol Monomethyl Ether	3-7	34590-94-8	100 ppm (1,2) 50 ppm (4)	Rat: 5.4 mg/kg Rabbit, skin: >20 mg/kg	NE
Alumina (dust, as nuisance particulate, total)	10-30	1344-28-1	10 mg/m ³ (1) 15 mg/m ³ (2)	Rat: 3160 ml/kg	NE

NOTES: (1) ACGIH TLV (TWA) (2) - OSHA PEL (TWA) (3) - ACGIH STEL (4) - OSHA STEL (5) - MFR/SUPPLIER TLV
LD 50 VALUES ARE VIA ORAL ROUTE UNLESS OTHERWISE INDICATED
** TOXIC CHEMICAL REPORTABLE PER SECTION 313, TITLE III SARA AND 40 CFR372

SECTION 3 - PHYSICAL DATA

PHYSICAL STATE: Liquid	APPEARANCE: White, opaque - gel like	ODOR: Lemon
VAPOR PRESSURE (mmHg): NE	% VOLATILE: <80	VAPOR DENSITY (AIR=1): NE
EVAPORATION RATE (BuAc=1): <1	BOILING POINT (deg C): NE	FREEZING POINT (deg C): NE
PH: 7	DENSITY (g/ml): 1.188	SOLUBILITY IN WATER: Appreciable

SECTION 4 - FIRE AND EXPLOSION DATA

FLAMMABILITY IF YES, UNDER WHICH CONDITIONS:
YES NO

EXTINGUISHING MEDIA: Water spray, Carbon Dioxide, Dry Chemical, or Universal Foam.

SPECIAL FIRE FIGHTING PROCEDURES: None

FLASH POINT (PMCC) deg F: >200	UPPER FLAMMABILITY LIMIT: (% BY VOLUME) NE	LOWER FLAMMABILITY LIMIT: (% BY VOLUME) NE
AUTOIGNITION TEMPERATURE (deg C): NE	HAZARDOUS COMBUSTION PRODUCTS: Will not occur.	
EXPLOSION SENSITIVITY TO IMPACT: NE	SENSITIVITY TO STATIC DISCHARGE: No	

SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY: IF NO, UNDER WHICH CONDITIONS:
YES NO

INCOMPATIBILITY WITH OTHER SUBSTANCES:
YES NO IF SO, WHICH ONES?

REACTIVITY, AND UNDER WHICH CONDITIONS? Product is not considered reactive.

HAZARDOUS DECOMPOSITION PRODUCTS: Will not occur.

PRODUCT NAME(S): NOVUS Plastic Polish #3 (P/N 7080, 7081, 7082, & 7085)

SECTION 6 - TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY: SKIN CONTACT SKIN ABSORPTION EYE CONTACT INHALATION INGESTION

EFFECTS OF ACUTE EXPOSURE TO PRODUCT: Eye contact may cause mild discomfort with slight irritation of the conjunctiva, seen as redness and watering. Swallowing may cause abdominal discomfort, nausea, and diarrhea.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT: Mild skin irritation with prolonged exposure.

EXPOSURE LIMITS: See section 2.	IRRITANCY OF PRODUCT: Mild: Eyes and skin	SENSITIZATION TO PRODUCT: NE	CARCINOGENICITY: None known
TERATOGENICITY: NE	REPRODUCTIVE TOXICITY: NE	MUTAGENICITY: NE	SYNERGISTIC PRODUCTS: NE

SECTION 7 - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT	
CLOTHING (SPECIFY): Wear chemical resistant gloves and clothing as needed to prevent prolonged skin exposure.	RESPIRATORY (SPECIFY): Not normally required.
EYE (SPECIFY): Safety glasses suggested if handling poses exposure risk.	OTHER (SPECIFY): If possible, eye wash and safety shower should be available.
ENGINEERING CONTROLS (SPECIFY): Specific needs should be addressed by health/safety personnel.	
LEAK/SPILL PROCEDURE: Cover with absorbent material or flush with hot water. Collect and dispose following government regulations.	
WASTE DISPOSAL: Follow all local, state, provincial, and federal regulations.	
HANDLING PROCEDURES/EQUIPMENT AND STORAGE REQUIREMENTS:	Use good manufacturing practices. Freezing may adversely affect product appearance, but not functionality.
SPECIAL SHIPPING INFORMATION: Keep from freezing.	

SECTION 8 - FIRST AID MEASURES

SYMPTOMS / EFFECTS OF OVEREXPOSURE: May include mild redness and itching.	
EYES:	Flush eyes with large amounts of water for at least 15 minutes while holding the eyelids open. Seek medical attention if irritation persists.
SKIN:	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists.
INHALATION:	Move victim to fresh air and treat symptomatically. Seek medical attention if irritation persists.
INGESTION:	Contact physician or other medical source.

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PREPARED BY: NOVUS Inc. CHEMISTRY DEPARTMENT

DATE: 12-8-99