Material Safety Data Sheet

| | | | Pag | | 1 |
|--|---|--|--|---|-----------------|
| | | Original Date: | | | |
| | | Revision Date: | 02/04/2 | 003 | |
| BASF CORPORATION | | | | | |
| 6125 INDUSTRIAL PKWY | | | | | |
| PO BOX 2757 | | | | | |
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| (419) 877-5308 | | | | | |
| | | 424-9300 CHEMTREC | | | |
| | | ELP (BASF Hotline) | | | |
| | | AYS, NIGHTS, WEEKE | | AYS. | |
| SI | ECTION 1 - 1 | PRODUCT INFORMATIO | N | | |
| UR50 Mid Temp Reducer | | | | | |
| Product ID: NLR UR50Z | Z | | | | |
| Common Chemical Name: | | | | | |
| PAINT RELATED MATERIAL | | | | | |
| Synonyms: | | | | | |
| N/A | | | | | |
| Molecular Formula: | | | | | |
| N/A | | | | | |
| Chemical Family: Paint | | | | | |
| | | | | | |
| Molecular Wt.: NOT APPLIC | CABLE | | | | |
| | CABLE ECTION 2 - 1 | INGREDIENTS | | | |
| | | INGREDIENTS | | | |
| | | CAS | Amoun | | |
| SI | | | Amoun 55.0 - | | 0/0 |
| Chemical Name: | | CAS | | | olo |
| Chemical Name: n-BUTYL ACETATE | ECTION 2 - : | CAS 123-86-4 | | | o\0 |
| Chemical Name: n-BUTYL ACETATE | ECTION 2 - 3 | CAS 123-86-4 200 PPM | | | 00 |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV | STEL TWA TWA | CAS 123-86-4 200 PPM 150 PPM | | 65.0 | olo 010 |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL | STEL TWA TWA | CAS 123-86-4 200 PPM 150 PPM 150 PPM | 55.0 - | 65.0 | |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER | STEL TWA TWA | CAS 123-86-4 200 PPM 150 PPM 150 PPM | 55.0 - | 65.0 | |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE | STEL TWA TWA ACETA() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 | 55.0 - 1.0 - | 65.0 | |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE PEL/TLV NOT ESTABLISHED | STEL TWA TWA ACETA() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 | 55.0 - 1.0 - | 65.0 | 00 |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE PEL/TLV NOT ESTABLISHED PROPYLENE GLYCOL METHYL ETHI | STEL TWA TWA ACETA() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 | 55.0 - 1.0 - | 65.0 | 00 |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE PEL/TLV NOT ESTABLISHED PROPYLENE GLYCOL METHYL ETHI TATE | STEL TWA TWA ACETA() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 | 55.0 - 1.0 - | 65.0 5.0 20.0 | 00 00 |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE PEL/TLV NOT ESTABLISHED PROPYLENE GLYCOL METHYL ETHI TATE PEL/TLV NOT ESTABLISHED | STEL TWA TWA ACETA() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 108-65-6 | 55.0 - 1.0 - 10.0 - | 65.0 5.0 20.0 | 00 00 |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE PEL/TLV NOT ESTABLISHED PROPYLENE GLYCOL METHYL ETHI TATE PEL/TLV NOT ESTABLISHED 1,2,4 TRIMETHYLBENZENE | STEL TWA TWA ACETA() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 108-65-6 | 55.0 - 1.0 - 10.0 - | 65.0 5.0 20.0 3.0 | 00 00 |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE PEL/TLV NOT ESTABLISHED PROPYLENE GLYCOL METHYL ETHI TATE PEL/TLV NOT ESTABLISHED 1,2,4 TRIMETHYLBENZENE PEL/TLV NOT ESTABLISHED | STEL TWA TWA ACETA() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 108-65-6 95-63-6 | 55.0 - 1.0 - 10.0 - 1.0 - | 65.0 5.0 20.0 3.0 | olo olo olo |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE PEL/TLV NOT ESTABLISHED PROPYLENE GLYCOL METHYL ETHI TATE PEL/TLV NOT ESTABLISHED 1,2,4 TRIMETHYLBENZENE PEL/TLV NOT ESTABLISHED STODDARD SOLVENT | STEL TWA TWA ACETA() ER ACE() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 108-65-6 95-63-6 8052-41-3 | 55.0 - 1.0 - 10.0 - 1.0 - | 65.0 5.0 20.0 3.0 | olo olo olo |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE PEL/TLV NOT ESTABLISHED PROPYLENE GLYCOL METHYL ETHI TATE PEL/TLV NOT ESTABLISHED 1,2,4 TRIMETHYLBENZENE PEL/TLV NOT ESTABLISHED STODDARD SOLVENT ACGIH TLV | STEL TWA TWA ACETA() ER ACE() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 108-65-6 95-63-6 8052-41-3 100 PPM | 55.0 - 1.0 - 10.0 - 1.0 - | 65.0 5.0 20.0 3.0 15.0 | olo olo olo |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE PEL/TLV NOT ESTABLISHED PROPYLENE GLYCOL METHYL ETHI TATE PEL/TLV NOT ESTABLISHED 1,2,4 TRIMETHYLBENZENE PEL/TLV NOT ESTABLISHED STODDARD SOLVENT ACGIH TLV OSHA PEL VM & P NAPHTHA | STEL TWA TWA ACETA() ER ACE() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 108-65-6 95-63-6 8052-41-3 100 PPM 500 PPM | 55.0 - 1.0 - 10.0 - 1.0 - 5.0 - | 65.0 5.0 20.0 3.0 15.0 | olo olo olo |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE PEL/TLV NOT ESTABLISHED PROPYLENE GLYCOL METHYL ETHI TATE PEL/TLV NOT ESTABLISHED 1,2,4 TRIMETHYLBENZENE PEL/TLV NOT ESTABLISHED STODDARD SOLVENT ACGIH TLV OSHA PEL | STEL TWA TWA ACETA() ER ACE() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 108-65-6 95-63-6 8052-41-3 100 PPM 500 PPM | 55.0 - 1.0 - 10.0 - 1.0 - 5.0 - | 65.0 5.0 20.0 3.0 15.0 5.0 | olo olo olo |
| Chemical Name: n-BUTYL ACETATE ACGIH TLV OSHA PEL ETHYLENE GLYCOL BUTYL ETHER TE PEL/TLV NOT ESTABLISHED PROPYLENE GLYCOL METHYL ETHI TATE PEL/TLV NOT ESTABLISHED 1,2,4 TRIMETHYLBENZENE PEL/TLV NOT ESTABLISHED STODDARD SOLVENT ACGIH TLV OSHA PEL VM & P NAPHTHA PEL/TLV NOT ESTABLISHED | STEL TWA TWA ACETA() ER ACE() | CAS 123-86-4 200 PPM 150 PPM 150 PPM 112-07-2 108-65-6 95-63-6 8052-41-3 100 PPM 500 PPM 64742-89-8 | 55.0 - 1.0 - 10.0 - 1.0 - 5.0 - 1.0 - | 65.0 5.0 20.0 3.0 15.0 5.0 | alo alo alo alo |

UR50 Mid Temp Reducer NLR UR50ZZ

Page : 2

SECTION 3 - PHYSICAL PROPERTIES (cont)

Odor: Ester Typical Low/High U.O.M. Specific Gravity: 0.87 7.28 Bulk Density: LB/GAL NOT AVAILABLE pH: Typical Low/High Pressure Deg. @ Boiling Pt: 246 - 378 F 1 ATMOSPHERES Freezing Pt: NOT AVAILABLE NOT AVAILABLE Decomp. Tmp: 8.35 MM HG 20 DEG. C XX Vapor Pressure: Х HEAVIER THAN AIR Vapor Density (Air = 1): Solids Percent: 0 100 Volatile by Vol. %: Other Physical Properties: TOTAL VOC: 7.3 LB/GL 872 GM/LTR VOC (MINUS WATER AND EXEMPT SOLVENTS): 7.3 LB/GL 872 GM/LTR WT. OF VOC PER VOL. OF MATL: 7.3 LB/GL 872 GM/LTR SECTION 4 - FIRE AND EXPLOSION DATA Typical Low/High Deg. Method Flash Point: 77 74 – F SETA CLOSED CUP 80 Autoignition: NOT AVAILABLE Flam. Limits: 0.9 -8.5 % Extinguishing Media: Use foam, CO2 or dry chemical extinguishing media. Fire Fighting Procedures: Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool containers to prevent pressure build-up due to extreme heat. Run-off water from fire may be contaminated; contain if possible. Notify authorities. Unusual Hazards: Keep container tightly closed. Avoid heat, open flames, sparks, static electricity and electrical equipment. Closed containers may explode to extreme heat. Do not apply on hot surfaces. Product may emit flammable vapors which when mixed with air may burn or explode. Vapors are heavier than air, and may collect in low areas or travel to ignition sources. During a fire, irritating and toxic gases may be generated by thermal decomposition or combustion. SECTION 5 - HEALTH EFFECTS Routes of entry for solids and liquids include eye and skin

contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases. SECTION 5 - HEALTH EFFECTS (cont)

Page : 3

Acute Overexposure Effects:

The primary route of entry when using paint and paint related products is considered to be inhalation. Anesthetic. Irritation of the respiratory tract or acute nervous system depression. Overexposure may result in headaches and nausea possibly followed by loss of consciousness. Ingestion: Gastrointestinal irritation including vomiting can occur. Aspiration of the material into the lungs may result in chemical pneumonitis, which can be fatal. Butyl acetate vapors are irritating to the eyes and respiratory tract. Prolonged or repeated skin contact with butyl acetate may result in dryness or dermatitis.

Contact with eyes, skin, respiratory tract, or mucous membranes will cause irritation.

Inhalation of butyl acetate vapors may result in headache, dizziness, nausea, irritation of the respiratory tract, and CNS depression. Prolonged inhalation exposures have been known to produce upper respiratory tract irritation and acute transient signs of reduced activity at concentrations at 1500 ppm and above in rats, with no cumulative neurotoxic effects. Overexposure may cause irritation of the eyes, nose and throat.

Inhalation of the vapors can cause nasal and respiratory irritation, CNS effects including dizziness, weakness, fatigue, nausea, headache, and possible unconsciousness and even death. Ingestion may result in G.I. irritation, nausea, vomiting, and diarrhea. Ethylene glycol monobutyl ether acetate is readily absorbed through the skin and can result in toxic effects.

Acute overexposure to petroleum distillate vapors may cause CNS effects, including headache, dizziness, drowsiness and confusion. Ingestion causes nausea, vomiting, blurred vision, and CNS disorders. Aspiration of the liquid into the lungs may result in chemical pneumonitis, which may be fatal.

Inhalation of low concentrations of stoddard solvent causes CNS effects and irritation to the eyes, nose and throat. Contact with the skin may result in irritation.

Inhalation of 1,2,4-trimethylbenzene may result in CNS effects including CNS depression, nausea, anxiety and headache. Aspiration of the liquid into the lungs may result in pulmonary edema and chemical pneumonitis. Asthmatic bronchitis may be aggravated by 1,2,4-trimethylbenzene exposure.

In a short-term inhalation study, rats and mice exposed to 0, 300, 1000 or 3000 ppm did not exhibit any adverse effects. Chronic Overexposure Effects:

The primary route of entry when using paint or paint related products is considered to be inhalation. Some reports have associated repeated, prolonged overexposure to solvents with permanent central nervous system changes. Misuse by concentrating and inhaling the

contents may be harmful or fatal.

In a teratogenicity study, pregnant rabbits were exposed to n-butyl acetate vapors at 0 or 1500 ppm from day 1 to day 19 of gestation; pregnant rats were exposed at the same concentrations from day 1 to day 16 of gestation. Body weight changes were observed in the rats but not the rabbits. Reproductive performance was not affected.

SECTION 5 - HEALTH EFFECTS (cont)

Page : 4

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Rabbit fetus size was not affected by exposure, but fetal size in all
  exposed groups of rats was reduced, suggesting embryotoxicity.
  Prolonged or repeated overexposure to ethylene glycol mono butyl
  ether acetate may result in severe irritation to the eyes and skin.
  Prolonged or repeated skin contact with petroleum distillates may
  cause defatting and dermatitis.
  Repeated dermal contact with stoddard solvent may result in
  follicular dermatitis. Repeated exposures may result in irreversible
  effects on the CNS system and kidney damage, liver damage and
  pulmonary congestion.
  In a subchronic toxicity study, male rats were gavaged with either
  0.5 or 2.0 g/kg 1,2,4-trimethylbenzene once daily, for 5 days/week
  for four weeks. Mortality occured in 1 rat from the low dose group;
  all rats died in the high dose group during the study.
First Aid Procedures - Skin:
  Wash affected areas with soap and water. Remove and launder
  contaminated clothing before reuse. If irritation develops,
  get medical attention.
First Aid Procedures - Eyes:
  Flush with copious amounts of water for at least 15 minutes. Hold
  eyelids open to facilitate rinsing. Seek medical assistance
  immediately.
First Aid Procedures - Ingestion:
  If swallowed, dilute with water. DO NOT INDUCE VOMITING DUE TO
  ASPIRATION HAZARD. Never give fluids or induce vomiting if the
  victim is unconscious or having convulsions. Get immediate medical
  attention.
First Aid Procedures - Inhalation:
  Remove to fresh air. Restore breathing. Keep warm and quiet.
  Notify a physician.
First Aid Procedures - Notes to Physicians:
  Contact the local Poison Control Center or call BASF Emergency
  Response at 1-800-832-HELP (4357).
First Aid Procedures - Aggravated Medical Conditions:
  No data is available which addresses medical conditions that are
  generally recognized as being aggravated by exposure to this product.
  Please refer to the effects of overexposure section for effects
  (if any) observed in animals.
First Aid Procedures - Special Precautions:
  None
                          SECTION 6 - REACTIVITY DATA
Stability Data:
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Stable:
Incompatability:
Strong acids, alkalies, and oxidizers.
Conditions/Hazards to Avoid:
Heat, sparks and open flames, electrical and static discharge.
Hazardous Decomposition/Polymerization:
Hazardous polymerization does not occur. Material is stable under
normal conditions. Products of combustion are unknown, other than
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CO2, carbon smoke and possible CO.

UR50 Mid Temp Reducer NLR UR50ZZ

Page : 5

| Corrosive Properties: |
|--|
| Not corrosive. |
| Oxidizer Properties: |
| Not an oxidizer |
| Other Reactivity Data: |
| None known. |
| SECTION 7 - PERSONAL PROTECTION |
| Clothing: |
| Solvents are absorbed through the skin. To minimize dermal contact |
| wear rubber gloves. Remove contaminated clothing to prevent |
| prolonged skin contact. |
| Eyes: |
| Safety glasses with side-shields or chemical goggles. |
| Respiration: |
| Use NIOSH/MSHA TC23C Chemical/Mechanical type filter system to remov |
| a combination of particles, gas & vapors. Use an air supplied |
| respirator if necessary. |
| Ventilation: |
| Use adequate ventilation in volume and pattern to keep TWA's and |
| STEL's (Section 2) below recommended levels, and flammable limits in |
| air (Section 4) below the level necessary to produce explosion or |
| fire. General mechanical ventilation should comply with OSHA 1910.94 |
| Explosion Proofing: |
| See Section 4 - Fire and Explosion Data. |
| Other Personal Protection Data: |
| None applicable to this product. |
| SECTION 8 - SPILL-LEAK/ENVIRONMENTAL |
| General: |
| Ventilate area. Eliminate all sources of ignition (pilot lights, |
| electric motors, sparks, open flames, etc.). Wear appropriate |

| Ventilate area. Eliminate all sources of ignition (pilot lights, | | | | |
|--|--|--|--|--|
| electric motors, sparks, open flames, etc.). Wear appropriate | | | | |
| protective equipment. Avoid prolonged breathing of vapors, avoid | | | | |
| eye and dermal contact. Confine spills. Collect with absorbent | | | | |
| material and clean up with spark proof tools. Place in appropriately | | | | |
| labeled waste containers. Avoid discharge into sewers and waterways. | | | | |
| Report to appropriate agencies if reportable quantities have been | | | | |
| spilled. | | | | |
| Waste Disposal: | | | | |
| Dispose of in accordance with federal, state and local regulations. | | | | |
| Incinerate or landfill in RCRA permitted facility by a licensed | | | | |
| contractor. Do not incinerate closed containers. | | | | |
| Container Disposal: | | | | |
| Unused material and empty containers must be disposed of in | | | | |
| accordance with local, state and federal regulations. | | | | |
| Other Spill/Leak Procedures: | | | | |
| No other spill procedures necessary. | | | | |
| SECTION 9 - STORAGE AND HANDLING | | | | |
| | | | | |

General:

Do not store over 120 F. When storing hazardous material, consult

SECTION 9 - STORAGE AND HANDLING (cont)

fire marshal for local storage requirements. Use static lines when mixing and transferring material. Do not allow material to free fall for more than five (5) inches. Do not cut, puncture, drop or slide containers. Container is hazardous when open or empty. It may contain explosive vapor or dangerous residue. Other Storage and Handling Data: "FOR INDUSTRIAL USE ONLY". Do not sand, flame cut, weld or braze on coated metal without a NIOSH/MSHA approved respirator and appropriate ventilation. SECTION 10 - REGULATORY INFORMATION TSCA Inventory Status Listed on Inventory: YES SARA - 313 Listed Chemicals: CAS: 4 AMOUNT: 3.0 % NAME: GLYCOL ETHERS CAS: 95-63-6 AMOUNT: 2.0 % NAME: 1,2,4 TRIMETHYLBENZENE RCRA Haz. Waste No .: N/A Hazard Ratings: Health: Fire: Reactivity: Special: 2* 3 HMIS 0 NA WARNING: This product contains a chemical(s) known to the state of California to cause cancer and birth defects or other reproductive harm. SECTION 11 - TRANSPORTATION INFORMATION DOT Proper Shipping Name: SEE BELOW DOT Technical Name: SEE BELOW DOT Primary Hazard Class: SEE BELOW DOT Secondary Hazard Class: SEE BELOW DOT Label Required: SEE BELOW DOT Placard Required: SEE BELOW DOT Poison Constituent: SEE BELOW BASF Commodity Codes: UN/NA Code: E/R Guide: Bill of Lading Description: PAINT RELATED MATERIAL, 3, UN1263, PG III "IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS

Page : 6

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