**MATERIAL SAFETY DATA SHEET**
("Essentially Similar" to Form OSHA-174)
REYNOLDS METALS COMPANY R-1067-19

| DATE PREPARED | REVISION DATE | MSDS # |
|---|---|---|
| 10/08/90 | 11/04/92 | 5103 |

## SECTION I - MATERIAL IDENTIFICATION

MANUFACTURER: Reynolds Metals Company
P. O. Box 27003
Richmond, Virginia 23261-7003

EMERGENCY TELEPHONE NUMBER:
(804) 281-2265

PRODUCT CLASS: Wrought Aluminum Alloy
TRADE NAME: 3XXX Series Alloys

LAZER BLACK

MANUFACTURER'S CODE IDENTIFICATION
3XXX Series; RA108; RA135; RA169; RA173; RA190; RA203; RA211; RA220; RA236; MD52; MD189; MD241; MD243; MD267; MD271; MD272; MD276; MD278; MD281; MD310; MD314; MD315; MD338; MD355; MD356; MD359; MN363

## SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

| Hazardous Ingredient(s) | Typical Percent | OSHA PEL Gas ppm | OSHA PEL Fume mg/m3 | OSHA PEL Dust mg/m3 | ACGIH TLV Gas ppmm | ACGIH TLV Fume mg/m3 | ACGIH TLV Dust mg/m3 | CAS Numbers |
|---|---|---|---|---|---|---|---|---|
| Aluminum** | min 95.0 | | 5 | 15 | | 5 | 10 | 7429-90-5 |
| Silicon | max 1.8 | | | 10 | | | 10 | 7440-21-3 |
| Manganese** | max 1.8 | | 1 | 5C* | | 1 | 5 | 7439-96-5 |
| Magnesium | max 1.4 | | 10 | | | 10 | | 7439-95-4 |
| Chromium** | max 0.4 | | | 1 | | | 0.5 | 7440-47-3 |

* "C" indicates ceiling value.
** On toxic chemical list (Section 313 of SARA).

## SECTION III - PHYSICAL DATA FOR MATERIAL

FREEZING POINT: 623-651C
BOILING POINT: N/A
PHYSICAL STATE: Solid
COEFFICIENT OF WATER/OIL DIST.: N/A
APPEARANCE AND ODOR: ODORLESS, SILVERY GRAY

VAPOR DENSITY: N/A
VAPOR PRESSURE: N/A

EVAPORATION RATE: N/A
SPECIFIC GRAVITY: 2.5-2.9
SOLUBILITY IN WATER: N/A
pH: N/A
ODOR THRESHOLD: N/A

## SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

FLAMMABILITY: YES? NO? X WHAT CONDITIONS: N/A

FLASH POINT (Method Used): N/A UEL: N/A LEL: N/A

MEANS OF EXTINCTION:
This product is non-combustible in bulk form. For fires involving aluminum fines or chips, use dry sand or Class D extinguishing agents approved for this use. DO NOT USE water or other liquids, foam, or halogenated extinguishing agents.

SPECIAL PROCEDURES:
Suspended aluminum dust, allowed to accumulate in a confined area, may be explosive. If remelted, moisture present in cavities or on external surfaces may cause an explosion.

AUTO IGNITION TEMPERATURE: N/A HAZARDOUS COMBUSTION PRODUCTS: None known

SENSITIVITY TO IMPACT: None known SENSITIVITY TO STATIC DISCHARGE: None known

## SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: Stable

REACTIVITY AND UNDER WHAT CONDITIONS:
If remelted, moisture present in cavities or on external surfaces may cause an explosion. Bulk aluminum dust when damp may heat spontaneously.

INCOMPATIBILITY TO OTHER SUBSTANCES: YES? X NO?
For aluminum fines: water, some acids, alkalis, and halogenated compounds. See NFPA#491M for specific incompatible materials. National Fire Protection Association Batterymarch Park, Quincy, MA. 02269.

HAZARDOUS DECOMPOSITION PRODUCTS:
Finely divided aluminum reacts with water, some acids, and alkalis to produce hydrogen gas. Aluminum in contact with halogenated compounds can produce violent recations and/or explosions.

## SECTION VI - TOXICOLOGICAL PROPERTIES OF PRODUCT

ROUTE(S) OF ENTRY: INHALATION? YES INGESTION? NO EYE CONTACT? YES

SKIN ABSORPTION? NO

EFFECTS OF ACUTE EXPOSURE:
Aluminum dust is considered a nuisance particulate. Welding or machining aluminum may generate dusts and fumes which may cause eye, nose, and throat irritation. Generally, if exposures for aluminum oxide are kept below the exposure limit, the alloy components should not present a health risk. Ozone may be emitted as a by-product during welding or plasma arc cutting. Exposure to ozone may produce irritation to eyes, nose, and throat. Welding and/or plasma arc cutting of aluminum alloys generates ultraviolet radiation which can cause skin burns or welders flash to unprotected skin and eyes.

EFFECTS OF CHRONIC EXPOSURE:
Prolonged exposure to ozone may result in nausea, headache, and pulmonary damage. Chromium and certain of its compounds are classified as carciongens in the latest Annual Report on Carcinogens as published by the National Toxicology Program (NTP) and by the International Agency for Research on Cancer (IARC).

LD50 OF PRODUCT:
Aluminum - Not known
Silicon - orl-rat LD50 3160mg/kg
Manganese - orl-rat LD50 9000mg/kg
Magnesium - Not known
Chromium - Not known

LC50 OF PRODUCT:
Aluminum - Not known
Silicon - Not known
Manganese - Not known
Magnesium - Not known
Chromium - Not known

IRRITANCY OF PRODUCT: Mild

EXPOSURE LIMITS OF PRODUCT:
Use levels for specific ingredients shown in Section II.

SENSITIZATION TO PRODUCT: None known

SYNERGISTIC MATERIALS: None known

CARCINOGENICITY: NTP, IARC, ACGIH

REPRODUCTIVE EFFECTS: None known

TERATOGENICITY: None known

MUTAGENICITY: None known

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
Pre-existing upper respiratory and lung diseases such as, but not limited to, Bronchitis, Emphysema, and Asthma.

ND = NOT DETERMINED N/A = NOT APPLICABLE

## SECTION VII - PREVENTIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT:

GLOVES: As needed.

EYE: Safety glasses, goggles, face shield, or welding helmet, etc., as needed.

RESPIRATORY:
Use NIOSH/MSHA-approved respirator for dusts/fume/mist, if TLVs or PELs are exceeded.

FOOTWEAR: Safety shoes, as needed.

CLOTHING:
Appropriate welding protective equipment. If remelted, see Aluminum Association publication "Guidelines for Handling Molten Aluminum", #69, 900 19th St. N.W., Suite 300, Washington, D.C. 20006.

ENGINEERING CONTROLS:
If ventilation is used to convey aluminum dust, generated by grinding, sawing, etc., special ventilation procedures may be necessary to avoid explosion hazards. See National Fire Protection Association codes, NFPA #65 and #651.

LEAK AND SPILL PROCEDURE:
If remelted, see Aluminum Association publication #69 listed above.

WASTE DISPOSAL:
For disposal of this material as a waste, act in accordance with all applicable federal, state, and local waste management regulations.

HANDLING PROCEDURES AND EQUIPMENT:
See Aluminum Association publication #69 listed above.

STORAGE REQUIREMENTS:
If remelted, make certain no water or moisture is present in cavities or on external surfaces.

SPECIAL SHIPPING INFORMATION: None known

## SECTION VIII - FIRST AID MEASURES

SKIN: For minor burns, apply cold water. For severe burns, seek immediate medical attention.

EYE: Immediately flush with water for 15 minutes. Seek medical attention if irritation persists.

INHALATION: Remove to fresh air.

INGESTION: N/A

ND = NOT DETERMINED N/A = NOT APPLICABLE

## SECTION IX - SPECIAL PRECAUTIONS & COMMENTS

SARA
This product contains a chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendents and Reauthorization Act of 1986 and 40 CFR 372.

HMIS RATINGS

| | |
|---|---|
| Health: | 1 |
| Flammability: | 1 |
| Reactivity: | 1 |

All statements, technical information and recommendations contained herein are based on tests and data which this Company believes to be currently reliable, but the accuracy or completeness thereof is not guaranteed and no warranty of any kind is made with respect thereto. This information is not intended as a license to operate under or a recommendation to practice or infringe any patent of this Company or others covering any process, composition of matter or use. Since the Company shall have no control of the use of the product described herein, the Company assumes no liability for loss or damage incurred from the proper or improper use of such product.

## SECTION V - REACTIVITY DATA

CHEMICAL STABILITY: Stable

REACTIVITY AND UNDER WHAT CONDITIONS:
If remelted, moisture present in cavities or on external surfaces may cause an explosion. Bulk aluminum dust when damp may heat spontaneously.

INCOMPATIBILITY TO OTHER SUBSTANCES: YES? X NO?
For aluminum fines: water, some acids, alkalis, and halogenated compounds. See NFPA#491M for specific incompatible materials. National Fire Protection Association Batterymarch Park, Quincy, MA. 02269.

HAZARDOUS DECOMPOSITION PRODUCTS:
Finely divided aluminum reacts with water, some acids, and alkalis to produce hydrogen gas. Aluminum in contact with halogenated compounds can produce violent recations and/or explosions.

## SECTION VI - TOXICOLOGICAL PROPERTIES OF PRODUCT

ROUTE(S) OF ENTRY: INHALATION? YES INGESTION? NO EYE CONTACT? YES

SKIN ABSORPTION? NO

EFFECTS OF ACUTE EXPOSURE:
Aluminum dust is considered a nuisance particulate. Welding or machining aluminum may generate dusts and fumes which may cause eye, nose, and throat irritation. Generally, if exposures for aluminum oxide are kept below the exposure limit, the alloy components should not present a health risk. Ozone may be emitted as a by-product during welding or plasma arc cutting. Exposure to ozone may produce irritation to eyes, nose, and throat. Welding and/or plasma arc cutting of aluminum alloys generates ultraviolet radiation which can cause skin burns or welders flash to unprotected skin and eyes.

EFFECTS OF CHRONIC EXPOSURE:
Prolonged exposure to ozone may result in nausea, headache, and pulmonary damage. Chromium and certain of its compounds are classified as carciongens in the latest Annual Report on Carcinogens as published by the National Toxicology Program (NTP) and by the International Agency for Research on Cancer (IARC).

LD50 OF PRODUCT:
Aluminum - Not known
Silicon - orl-rat LD50 3160mg/kg
Manganese - orl-rat LD50 9000mg/kg
Magnesium - Not known
Chromium - Not known

LC50 OF PRODUCT:
Aluminum - Not known
Silicon - Not known
Manganese - Not known
Magnesium - Not known
Chromium - Not known

IRRITANCY OF PRODUCT: Mild

EXPOSURE LIMITS OF PRODUCT:
Use levels for specific ingredients shown in Section II.

SENSITIZATION TO PRODUCT: None known

SYNERGISTIC MATERIALS: None known

CARCINOGENICITY: NTP, IARC, ACGIH

REPRODUCTIVE EFFECTS: None known

TERATOGENICITY: None known

MUTAGENICITY: None known

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
Pre-existing upper respiratory and lung diseases such as, but not limited to, Bronchitis, Emphysema, and Asthma.

ND = NOT DETERMINED N/A = NOT APPLICABLE

## SECTION IX - SPECIAL PRECAUTIONS & COMMENTS

SARA
This product contains a chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendents and Reauthorization Act of 1986 and 40 CFR 372.

HMIS RATINGS

| | |
|---|---|
| Health: | 1 |
| Flammability: | 1 |
| Reactivity: | 1 |

All statements, technical information and recommendations contained herein are based on tests and data which this Company believes to be currently reliable, but the accuracy or completeness thereof is not guaranteed and no warranty of any kind is made with respect thereto. This information is not intended as a license to operate under or a recommendation to practice or infringe any patent of this Company or others covering any process, composition of matter or use. Since the Company shall have no control of the use of the product described herein, the Company assumes no liability for loss or damage incurred from the proper or improper use of such product.

# MATERIAL SAFETY DATA SHEET

Prepared in compliance with the Federal Hazard Communication Standard 29CFR 1910.1200

PRODUCT CODE : 448-1-2K592 PAGE: 1 of 4

## SECTION I

MANUFACTURER'S NAME: Specialty Finishes Company

MANUFACTURER'S ADDRESS: 15310 Arrow Blvd
Fontana, California 92335

EMERGENCY/INFORMATION: 8:00 a.m.-5:00 p.m. (909)356-1095
All Other Times (909)792-7933
(909)980-5094

TRANSPORTATION EMERGENCIES: CHEMTREC (800)424-9300

MANUFACTURER CODE IDENTIFICATION: 448-1-2K592

CUSTOMER CODE IDENTIFICATION: 448-1-2K592

CUSTOMER NAME: U.S. PREFINISHED METALS, INC.

PRODUCT NAME: BLACK ACRYLIC

PRODUCT CLASS: ACRYLIC MELAMINE

PRODUCT TRADE NAME: SUPER A

PREPARATION DATE : 07/19/06

## SECTION II - HAZARDOUS INGREDIENTS

| | | | OCCUPATIONAL: EXPOSURE LIMITS ALL VALUES 8 HOUR TWA UNLESS NOTED | | | | | |
|---|---|---|---|---|---|---|---|---|
| INGREDIENT | CAS NUMBER | ACGIH-TVL | OSHA-PEL | OTHER | UNITS | LEL | V.P. | % BY WEIGHT |
| Aromatic Petroleum Distillates | 64742-94-5 | NE | NE | 100 | PPM | 1.0 | <1.9 | 0.0 - 6.0 |
| Diacetone | 123-42-2 | 50 | 50 | NE | PPM | 1.8 | 0.8 | 0.0 - 9.0 |
| Isobutyl Alcohol | 78-83-1 | 50 | 50 | NE | PPM | 1.2 | 9.0 | 0.0 - 8.0 |
| Isophorone | 78-59-1 | 4 | 5-C | NE | MGCM | 0.8 | <1.0 | 0.0 - 10.0 |
| N-butyl Alcohol | 71-36-3 | 50-C | 50-C | NE | PPM | 1.4 | 4.4 | 0.0 - 7.0 |
| Xylene (Mixed Isomers) | 1330-20-7 | 100 | 100 | NE | PPM | 1.0 | 5.1 | 27.0 - 37.0 |
| Carbon Black | 1333-86-4 | 3.5* | 3.5* | NE | MGCM | N/A | N/A | |
| Formaldehyde | 50-00-0 | 0.1 | 0.1 | NE | MGCM | NDA | NDA | |

This material contains ingredients covered by the California 'SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 (PROP. 65)'

NOTES AND ABBREVIATIONS USED:

SK : Skin absorption may potentially contribute to overall exposure
TWA : Time weighted average
C : Ceiling limit
PPM : Parts per million
MGCM : Milligrams per cubic meter
NE : Not established
N/A : Not applicable
OTHER : Manufacturer recommended PEL
V.P. : Vapor pressure listed mm Hg @ 20 C unless otherwise noted
NDA : No Data Available
LEL : Lower Explosive Limit (% by volume in air)
* : Value and hazard are for particulate (nuisance) dust which is not present in form supplied.

# MATERIAL SAFETY DATA SHEET

Prepared in compliance with the Federal Hazard Communication Standard 29CFR 1910.1200

PRODUCT CODE : 448-1-2K592 

## SECTION III - PHYSICAL DATA

| | |
|---|---|
| BOILING RANGE | : 226 - 350 \| F |
| VAPOR DENSITY | : Heavier than air |
| EVAPORATION RATE | : Slower than ether |
| PERCENT VOLATILE BY VOLUME | : 57-59 |
| WEIGHT PER GALLON | : 8.17-8.37 LBS./GAL. |
| VOC RANGE | : 4.11-4.31 LBS./GAL. |

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

| | |
|---|---|
| FLAMMABILITY CLASSIFICATION | : OSHA - FLAMMABLE LIQUID-CLASS IC |
| | : DOT - FLAMMABLE LIQUID |
| FLASH POINT | : 90 \| F T.C.C. |

SPECIAL FIRE FIGHTING PROCEDURES: During emergency conditions, decomposition products may cause health hazard. (See reactivity data) Evacuate area of unprotected personnel. Wear self-contained breathing apparatus with full facepiece operated in the positive pressure demand mode when fighting fires. Water spray may be useful in minimizing vapors and cooling containers exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and may be moved by ventilation and ignited by heat, pilot lights, other flames, or ignition sources at locations distant form material handling point. Keep containers tightly closed and isolated from heat, electrical equipment, sparks and flame. Never use welding or cutting torch on or near container (even empty) because product (even just residue) can ignite explosively.

All five gallon or larger containers including tank cars and trucks must be grounded and/or bonded when material is transferred.

## SECTION V - HEALTH HAZARD DATA

ROUTES OF EXPOSURE: Product can effect the body if it is inhaled, comes in contact with eyes or skin, or is swallowed.

EFFECTS OF OVEREXPOSURE TO PRODUCT:

EYE CONTACT: This material may cause eye irritation. Direct contact with liquid or exposure to its vapors or mists may cause burning, tearing, redness, and blurred vision.

SKIN CONTACT: Prolonged and repeated contact with skin can cause defating and drying of the skin which may result in skin irritation and dermatitis. Contact may result is skin absorption, but symptoms of toxicity are not anticipated by this route alone under normal conditions of use. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

# MATERIAL SAFETY DATA SHEET

Prepared in compliance with the Federal Hazard Communication Standard 29CFR 1910.1200

PRODUCT CODE : 408-1-2751 

## SECTION I

MANUFACTURER'S NAME: Specialty Finishes Company

MANUFACTURER'S ADDRESS: 15310 Arrow Blvd
Fontana, California 92335

EMERGENCY/INFORMATION: 8:00 a.m.-5:00 p.m. (909)356-1095
All Other Times (909)792-7933
(909)980-5094

TRANSPORTATION EMERGENCIES: CHEMTREC (800)424-9300

MANUFACTURER CODE IDENTIFICATION: 408-1-2751

CUSTOMER CODE IDENTIFICATION: 408-1-2751

CUSTOMER NAME: U.S. PRE-FINISHED METALS

PRODUCT NAME: TROPHY CLEAR

PRODUCT CLASS: POLYESTER

PRODUCT TRADE NAME: SUPER SERIES 1000

PREPARATION DATE : 07/19/06

## SECTION II - HAZARDOUS INGREDIENTS

| | | | OCCUPATIONAL: EXPOSURE LIMITS ALL VALUES 8 HOUR TWA UNLESS NOTED | | | | | |
|---|---|---|---|---|---|---|---|---|
| INGREDIENT | CAS NUMBER | ACGIH-TVL | OSHA-PEL | OTHER | UNITS | LEL | V.P. | % BY WEIGHT |
| Aromatic Petroleum Distillates | 64742-94-5 | NE | NE | 100 | PPM | 1.0 | <1.9 | 26.0 - 36.0 |
| Diacetone | 123-42-2 | 50 | 50 | NE | PPM | 1.8 | 0.8 | 0.0 - 9.0 |
| Isobutyl Alcohol | 78-83-1 | 50 | 50 | NE | PPM | 1.2 | 9.0 | 0.0 - 7.0 |
| Isophorone | 78-59-1 | 4 | 5-C | NE | MGCM | 0.8 | <1.0 | 0.0 - 9.0 |
| Methyl Ethyl Ketone | 78-93-3 | 200 | 200 | NE | PPM | 2.0 | 70 | 0.0 - 7.0 |
| N-butyl Acetate | 123-86-4 | 150 | 150 | NE | PPM | 1.7 | 8.4 | 0.0 - 9.0 |
| N-butyl Alcohol | 71-36-3 | 50-C | 50-C | NE | PPM | 1.4 | 4.4 | 0.0 - 8.0 |
| Formaldehyde | 50-00-0 | 0.1 | 0.1 | NE | MGCM | NDA | NDA | |

This material contains ingredients covered by the California 'SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986 (PROP. 65)'

NOTES AND ABBREVIATIONS USED:

SK : Skin absorption may potentially contribute to overall exposure
TWA : Time weighted average
C : Ceiling limit
PPM : Parts per million
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NE : Not established
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OTHER : Manufacturer recommended PEL
V.P. : Vapor pressure listed mm Hg @ 20 C unless otherwise noted
NDA : No Data Available
LEL : Lower Explosive Limit (% by volume in air)
* : Value and hazard are for particulate (nuisance) dust which is not present in form supplied.

# MATERIAL SAFETY DATA SHEET

Prepared in compliance with the Federal Hazard Communication Standard 29CFR 1910.1200

PRODUCT CODE : 408-1-2751 

## SECTION III - PHYSICAL DATA

| | |
|---|---|
| BOILING RANGE | : 180 - 336 ¦ F |
| VAPOR DENSITY | : Heavier than air |
| EVAPORATION RATE | : Slower than ether |
| PERCENT VOLATILE BY VOLUME | : 62-64 |
| WEIGHT PER GALLON | : 8.36-8.56 LBS./GAL. |
| VOC RANGE | : 4.60-4.80 LBS./GAL. |

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

| | |
|---|---|
| FLAMMABILITY CLASSIFICATION | : OSHA - COMBUSTIBLE LIQUID-CLASS II |
| | : DOT - COMBUSTIBLE LIQUID |
| FLASH POINT | : 105 ¦ F T.C.C. |

SPECIAL FIRE FIGHTING PROCEDURES: During emergency conditons, decomposition products may cause health hazard. (See reactivity data) Evacuate area of unprotected personnel. Wear self-contained breathing apparatus with full facepiece operated in the positive pressure demand mode when fighting fires. Water spray may be useful in minimizing vapors and cooling containers exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and may be moved by ventilation and ignited by heat, pilot lights, other flames, or ignition sources at locations distant form material handling point. Keep containers tightly closed and isolated from heat, electrical equipment, sparks and flame. Never use welding or cutting torch on or near container (even empty) because product (even just residue) can ignite explosively.

All five gallon or larger containers including tank cars and trucks must be grounded and/or bonded when material is transferred.

## SECTION V - HEALTH HAZARD DATA

ROUTES OF EXPOSURE: Product can effect the body if it is inhaled, comes in contact with eyes or skin, or is swallowed.

EFFECTS OF OVEREXPOSURE TO PRODUCT:

EYE CONTACT: This material may cause eye irritation. Direct contact with liquid or exposure to its vapors or mists may cause burning, tearing, redness, and blurred vision.

SKIN CONTACT: Prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in skin irritation and dermatitis. Contact may result is skin absorption, but symptoms of toxicity are not anticipated by this route alone under normal conditions of use. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

of spill until clean-up has been completed. Maintain adequate ventilation. Shut off source of leak or spill if safe to do so. Dike area of spill to prevent spreading and pump liquid to salvage container. Remaining liquid may be taken up with aborbent material. Place contained material in approved salvage container with non-sparking tools. Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occured.

WASTE DISPOSAL METHOD: Dispose of in accordance with all local, county, state, and federal regulations.

# SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: If workplace limit(s) of product or any component is exceeded (see Section II), use appropriate, properly fitted NIOSH/MSHA approved respirator in absence of proper environmental control (see your safety equipment supplier for proper respirator). Respiratory protection program must be in accordance with OSHA Standard 29CFR 1910.134. Engineering and administrative controls should be implemented to reduce exposure.
VENTILATION: Provide sufficient mechanical (general and/or local) ventilation to maintain exposure below TLV(s) and prevent vapor buildup.
PROTECTIVE GLOVES: Use of chemical resistant, wear resistant gloves is advised to avoid contact with the product.
EYE PROTECTION: Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also may permit the use of other types of safety glasses (consult your safety equipment supplier).
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eye wash station, safety shower, chemical resistant apron, safety shoes, and protective clothing to cover exposed areas of the body.
WORK/HYGIENIC PRACTICES: Wash hands before eating, smoking, or using the restroom. Eat only in designated areas. Smoke only in approved designated areas.

# SECTION IX - SPECIAL PRECAUTIONS OR OTHER COMMENTS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep away from heat, sparks, and flame. Use with adequate ventilation. Avoid prolonged or repeated breathing of vapors. Keep containers tightly closed when not in use, and protect from moisture and foreign materials. Ground containers and equipment when pouring to avoid static discharge. Never use pressure to empty the container. The container is not a pressure vessel.

OTHER PRECAUTIONS: Do not take internally. Containers of this material may be hazardous when emptied. Since emptied containers may retain product residues (vapors, liquid, and/or solid), all hazard precautions given in this Data Sheet must be observed in handling empty containers. Dispose of container in accordance with local, county, state, and federal laws.

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA BELIEVED TO BE CORRECT. HOWEVER NO GUARANTEE OR WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, IS MADE WITH RESPECT TO THE INFORMATION CONTAINED HEREIN.

# MATERIAL SAFETY DATA SHEET

Prepared in compliance with the Federal Hazard Communication Standard 29CFR 1910.1200



INHALATION (BREATHING): Excessive inhalation of vapors can cause nasal and respiratory irritation. Central nervous system effects include dizziness, weakness, fatigue, nausea, headache, possible unconsiousness, and even death. Respiratory symptoms associated with pre-existing lung disorders may be aggrivated by exposure to this material.

INGESTION (SWALLOWING): Ingestion can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Aspiration of material into lungs can cause chemical pneumonitis, which can be fatal.
MEDICAL CONDITIONS THAT MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT: Pre-existing eye, skin, liver, kidney, and respiratory disorders.

EFFECTS OF CHRONIC OVEREXPOSURE AND OTHER HEALTH EFFECTS AND COMMENTS:

This product contains the following substance(s) that have been identified as a carcinogen or probable carcinogen by NTP, IARC, or OHSA as of this date, in an amount equal to or greater than 0.1 %:

Formaldehyde is carcinogenic to animals (nasal cancer, lifetime inhalation study, rats). It is listed as an experimental carcinogen (IARC, NTP) and probable human carcinogen (IARC).

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful of fatal. As a precation, exposure to liquids, vapors mists, or fumes should be minimized. Reports of animal test studies on oneor more of the individual ingredients have shown possible effects of the liver, kidneys, lungs, and blood.

EMERGENCY AND FIRST AID PROCEDURES:
EYE CONTACT: Immediately flush eyes with water for at least 15 minutes. Hold eyelids open during the water flushing.
GET MEDICAL ATTENTION
SKIN CONTACT: Thoroughly wash exposed area with soap and water. Remove contaminated clothing and launder before re-use.
INGESTION (SWALLOWING): Do not induce vomitting. Keep person warm and quiet. OBTAIN IMMEDIATE MEDICAL ASSISTANCE to determine best emergency treatment. Never give anything by mouth to an unconsious person.
INHALATION (BREATHING): If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm and quiet. GET IMMEDIATE MEDICAL ATTENTION.

# SECTION VI - REACTIVITY DATA

STABILITY : Stable
HAZARDOUS POLMERIZATION : Will not occur
INCOMPATIBILITY (MATERIALS TO AVOID): Avoid contact with strong oxidizing agents, acids, or bases, water, reactive metals such as aluminum or magnesium, open flame, welding arcs, resistance heaters, or any other device that can result in thermal decomposition of the product.
HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition or burning may produce carbon monoxide, carbon dioxide, various hydrocarbons, formaldehyde, and other oxides of nitrogen.

# SECTION VII - SPILL OR LEAK PROCEDURES

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

# MATERIAL SAFETY DATA SHEET

Prepared in compliance with the Federal Hazard Communication Standard 29CFR 1910.1200

PRODUCT CODE : 448-1-2K592



FOR SMALL SPILLS: Eliminate possible ignition sources. Do not flush with water. Use absorbent material, placing the contained material in an approved salvage container. Use non-sparking tools for handling the contained material.

FOR LARGE SPILLS: Eliminate possible ignition sources. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Maintain adequate ventilation. Shut off source of leak or spill if safe to do so. Dike area of spill to prevent spreading and pump liquid to salvage container. Remaining liquid may be taken up with aborbent material. Place contained material in approved salvage container with non-sparking tools. Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occured.

WASTE DISPOSAL METHOD: Dispose of in accordance with all local, county, state, and federal regulations.

## SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: If workplace limit(s) of product or any component is exceeded (see Section II), use appropriate, properly fitted NIOSH/MSHA approved respirator in absence of proper environmental control (see your safety equipment supplier for proper respirator). Respiratory protection program must be in accordance with OSHA Standard 29CFR 1910.134. Engineering and administrative controls should be implemented to reduce exposure.

VENTILATION: Provide sufficient mechanical (general and/or local) ventilation to maintain exposure below TLV(s) and prevent vapor buildup.

PROTECTIVE GLOVES: Use of chemical resistant, wear resistant gloves is advised to avoid contact with the product.

EYE PROTECTION: Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also may permit the use of other types of safety glasses (consult your safety equipment supplier).

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eye wash station, safety shower, chemical resistant apron, safety shoes, and protective clothing to cover exposed areas of the body.

WORK/HYGIENIC PRACTICES: Wash hands before eating, smoking, or using the restroom. Eat only in designated areas. Smoke only in approved designated areas.

## SECTION IX - SPECIAL PRECAUTIONS OR OTHER COMMENTS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Keep away from heat, sparks, and flame. Use with adequate ventilation. Avoid prolonged or repeated breathing of vapors. Keep containers tightly closed when not in use, and protect from moisture and foreign materials. Ground containers and equipment when pouring to avoid static discharge. Never use pressure to empty the container. The container is not a pressure vessel.

OTHER PRECAUTIONS: Do not take internally. Containers of this material may be hazardous when emptied. Since emptied containers may retain product residues (vapors, liquid, and/or solid), all hazard precautions given in this Data Sheet must be observed in handling empty containers. Dispose of container in accordance with local, county, state, and federal laws.

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA BELIEVED TO BE CORRECT. HOWEVER NO GUARANTEE OR WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, IS MADE WITH RESPECT TO THE INFORMATION CONTAINED HEREIN.