

SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: AEROSOL

Product Code: Colors

SUPPLIER:

Michigan Coating Products

3761 Eastern Ave SE

Grand Rapids, MI 49508

Emergency telephone: 800-373-7542

24 hours

MANUFACTURER:

Michigan Coating Products

3761 Eastern Ave SE

Grand Rapids, MI 49508

Emergency telephone: 800-373-7542

24 hours

Product Use:

Not recommended for:

SECTION 2 - HAZARDS IDENTIFICATION

NEPA Ratings, risks phrases and suggested HMIS Hazards Categories:

GHS Ratings:

Flammable aerosol	2	Flammable aerosol class 2
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draizescor: >= 2.3 < 4.0 or persistent inflammation
Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Mutagen	18	Known to produce heritable mutations in human germ Cells Subcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity
Carcinogen	2	Limited evidence of human or animal carcinogenicity
Reproductive toxin	1A	Based on human evidence
Aspiration hazard	2	Aspiration Toxicity Category 2: Presumed- Based on animal studies- surface tension, water solubility, boiling point- kinematic viscosity ? 14 mm ² /s at 40°C & not Category 1

GHS Hazards

H221	Flammable gas
H280	Contains gas under pressure; may explode if heated
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H319	Causes serious eye irritation
H340	May cause genetic defects
H351	Suspected of causing cancer
H360	May damage fertility or the unborn child

GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat/sparks/open flames/hot surfaces - No smoking
P233	Keep container tightly closed
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/light/.../equipment
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P264	Wash ... thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection
P281 Use personal protective equipment as required
P321 Specific treatment (see ... on this label)
P331 Do NOT induce vomiting
P362 Take off contaminated clothing and wash before reuse
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352 IF ON SKIN: Wash with soap and water
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P305+P351 +P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing
P308+P313 IF exposed or concerned: Get medical advice/attention
P332+P313 If skin irritation occurs: Get medical advice/attention
P337+P313 Get medical advice/attention
P370+P378 In case of fire: Use . . . for extinction
P405 Store locked up
P403+P235 Store in a well ventilated place. Keep cool
P501 Dispose of contents/container in accordance with Local, State and Federal Regulations.

Signal Word: Danger



SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS number	Weight Concentration %
Acetone	67-64-1	35 - <50
Toluene	108-88-3	1 - <5
Ethyl acetate	141-78-6	5 - <10
Ethyl 3-ethoxypropanoate	763-69-9	5 - < 10
Isobutane	75-28-5	10 - < 15
Methyl ethyl ketone	78-93-3	5 - <15
Propane	74-98-6	10 - <15
Iron oxide yellow	51274-00-1	2 - < 8
Butanol	71-36-3	1 - <5
Nitrocellulose	9004-70-0	13 - < 20
Xylenes (o-, m-, p-isomers)	1330-20-7	2 - <8
Titanium dioxide	13463-67-7	5 - <10
Ethyl alcohol	64-17-5	2 - <8
Carbon black	1333-86-4	4 - <10

SECTION 4 - FIRST AID MEASURES

INHALATION: Remove to FRESH air. If breathing is difficult, administer oxygen . If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Remove contact lenses if possible.

SKIN CONTACT: Flush skin with plenty of water while removing contaminated clothing and shoes. Do not reuse clothing or shoes until cleaned. If irritation develops or persists, get medical attention. Discard contaminated leather articles such as shoes and belt. Do not apply oils or ointments unless ordered by the physician.

INGESTION: If fully conscious, give two glasses of water, then induce vomiting by touching back of throat with finger. Keep head below hips to prevent aspiration of liquid into the lungs. CALL A PHYSICIAN immediately. Never induce vomiting or give anything by mouth to an unconscious victim.

NOTE TO PHYSICIANS: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient. Individuals experiencing breathing difficulties after exposure to vapor generated in aerosol applications should be observed for at least 48 hours in case delayed respiratory complications develop.

SECTION 5 - FIRE FIGHTING MEASURES

Flash Point: -20 C (-4 F)

LEL: 1.00

UEL:

Flammable Limits: Highly flammable liquid and vapor (GHS Category 2)

Extinguishing Media: Alcohol Foam C02 Dry Chemical Foam Water Fog

Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, sparks, and open flame. Closed containers may explode when exposed to extreme heat. Do not use when smoking or where electrical sparks or open flame is present.

Haz. Combust. Products: Burning can produce carbon-dioxide and/or carbon monoxide.

Fire Fighting: Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.

Fire Equipment: As in a fire . always wear self-contained breathing apparatus in pressure-demand (MSA/NIOSH approved or equivalent), and full protective gear.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK PROCEDURES:

Spill supervisor: Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Remove all ignition sources. Keep non- essential personnel away from the contaminated area.

Small Spills: Absorb spilled liquid with sorbent pads, socks, or other inert material such as vermiculite sand, or earth.

Large Spills: Avoid run-off into storm sewers and ditches that lead to waterways. Use only non-sparking tools and equipment. A vapor suppressing foam may be used. Approach the spill from upwind and pick up absorbent material and place it in a suitable container. Disposal should be in accordance with Local, State, and Federal Regulations.

SECTION 7 - HANDLING AND STORAGE

HANDLING PRECAUTIONS:

Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containers closed when not in use. Do not handle or store material near heat, sparks, open flames, or other sources of ignition. Store at room temperature. Le, 40 to 95 F (4 to 35 C).

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: GROUNDING: when transferring, fill stem and container must be grounded and bonded. Store in a cool dry area with ventilation suitable for storing materials shown in section II. Keep away from heat, sparks and open flame. Do not cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition; they may explode and cause injury or death.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Acetone 67-64-1	1000 ppm TWA; 2400 mg/m3 TWA	750 ppm STEL 500 ppm TWA	NIOSH: 250 ppm TWA; 590 mg/m3 TWA
Toluene 108-88-3	200 ppm TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL
Ethyl acetate 141-	400 ppm TWA; 1400 mg/m3 TWA	400 ppm TWA	NIOSH: 400 ppm TWA; 1400 mg/m3 TWA
Ethyl 3-ethoxypropanoate 763-	Not Established	Not Established	Not Established

Isobutane 75-28-5	Not Established	1000 ppm STEL	NIOSH: 800 ppm TWA; 1900 mg/m3 TWA
Methyl ethyl ketone 78-93-3	200 ppm TWA; 590 mg/m3 TWA	300 ppm STEL 200 ppm TWA	NIOSH: 200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
Propane 74-98-6	1000 ppm TWA; 1800 mg/m3 TWA	1000 ppm TWA (listed under Aliphatic hydrocarbon gases : Alkane C1-4)	NIOSH: 1000 ppm TWA; 1800 mg/m3 TWA
Iron oxide yellow 51274-00-1	Not Established	Not Established	Not Established
Butano I 71-36-	100 ppm TWA; 300 mg/m3 TWA	20 ppm TWA	NIOSH: 50 ppm Ceiling; 150 mg/m3 Ceiling
Xylenes (o-, m-, p- isomers) 1330-20-7	100 ppm TWA; 435 mg/m3 TWA	150 ppm STEL 100 ppm TWA	Not Established
Titanium dioxide 13463-	15 mg/m3 TWA (total dust)	10 mg/m3 TWA	Not Established
Ethyl alcohol 64-17-5	1000 ppm TWA; 1900 mg/m3 TWA	1000 ppm STEL	NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA
Carbon black 1333-86-4	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable fraction)	NIOSH: 3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)

ENGINEERING: Ensure processing (curing) ovens are properly vented to prevent the introduction of processing fumes into the work place. Use explosion proof equipment and good manufacturing practice.

Sufficient ventilation, in volume and pattern, should be provided to keep air contamination below current applicable OSHA permissible exposure limit or ACGHI'S TLV limit.

OTHER PRECAUTIONS : Provide respiratory protection against fumes generated during burning. Avoid prolonged contact with skin and breathing of vapors.

PROTECTIVE GEAR: Niosh/Osha approved respirator types suitable for materials in section II recommended. Approved airline type respirators or hoods recommended in confined areas. Wear protective gloves/clothing/eye/face as required.

CONTAMINATED GEAR: Take off immediately any contaminated clothing and wash it before reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

This mixture typically exhibits the following properties under normal circumstances:

<p>Appearance Liquid dispersion</p> <p>Vapor Pressure: -99999 mmHg</p> <p>Vapor Density Heavier than air</p> <p>SG 0.86</p> <p>Freezing point: Not Applicable</p> <p>Boiling range: 56°C</p> <p>Evaporation Rate Slower than ether</p>	<p>Odor Solvent</p> <p>Odor threshold: Not Applicable</p> <p>pH: Not Applicable</p> <p>Melting point: Not Applicable</p> <p>Solubility: Not Applicable</p> <p>Flash point: -20 C, -4 F</p> <p>Physical State Liquid</p>
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Autoignition temperature: Not Applicable Viscosity: Not Applicable	Decomposition temperature: Not Applicable Boiling Point 56°C
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SECTION 10 - STABILITY AND REACTIVITY

Stability:

STABLE

Components of this mixture are incompatible with the following materials:
No data found

This mixture is likely to exhibit the following combustion products:
No data found

Hazardous polymerization will not occur.

SECTION 11- TOXICOLOGICAL INFORMATION

Mixture Toxicity

Oral Toxicity LD50: 3,451mg/kg
Inhalation Toxicity LC50: 46mg/L

Component Toxicity

108-88-3	Toluene Oral LD50: 636 mg/kg (Rat) Inhalation LC50: 13 mg/L (Rat)
71-36-3	Butanol Oral LD50: 790 mg/kg (Rat) Dermal LD50: 3,400 mg/kg (Rabbit)

Toxicological Information: No data found

ROUTES OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Contact

Exposure to this material may affect the following organs:

Blood	Eyes	Kidneys	Liver	Central Nervous System	Reproductive System
	Skin	Respiratory System			

Effects of Overexposure

Carcinogenicity:

The following chemicals comprise 0.1% or more of this mixture and are listed and / or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA.

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
75-28-5	Isobutane		Isobutane: EU REACH: Present (C) (containing >=0.1% Butadiene)
64-17-5	Ethylalcohol		Ethyl alcohol: IARC: Human carcinogen OSHA: listed
1333-86-4	Carbon black		Carbon black: NIOSH: potential occupational carcinogen IARC: Possible human carcinogen OSHA: listed

SECTION 12 - ECOLOGICAL INFORMATION

Ecological information: No data found.

Component Ecotoxicity

Acetone	96 Hr LC50 Oncorhynchus mykiss: 4.74 - 6.33 ml/L; 96 Hr LC50 Pimephales promelas: 6210 - 8120 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 8300 mg/L 48 Hr EC50 Daphnia magna: 10294 - 17704 mg/L [Static]; 48 Hr EC50 Daphnia magna: 12600 - 12700 mg/L
Toluene	96 Hr LC50 Pimephales promelas: 15.22 - 19.05 mg/L [flow-through] (1 dayold) ; 96 Hr LC50 Pimephales promelas: 12.6 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 5.89 - 7.81 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 14.1 - 17.16 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 5.8 mg/L [semi-static]; 96 Hr LC50 Lepomis macrochirus: 11.0 - 15.0 mg/L [static]; 96 Hr LC50 Oryzias latipes: 54 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 28.2 mg/L [semi-static]; 96 Hr LC50 Poecilia reticulata: 50.87 - 70.34 mg/L [static] 48 Hr EC50 Daphnia magna: 5.46 - 9.83 mg/L [Static]; 48 Hr EC50 Daphnia magna: 11.5 mg/L 96 Hr EC50 Pseudokirchneriella subcapitata: >433 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 12.5 mg/L [static]
Ethylacetate	96 Hr LC50 Pimephales promelas: 220 - 250 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 484 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 352 - 500 mg/L [semi-static] 48 Hr EC50 Daphnia magna: 560 mg/L [Static]
Ethyl 3-ethoxypropanoate	96 Hr LC50 Pimephales promelas: 62 mg/L [static] 48 Hr EC50 Daphnia magna: 970 mg/L
Methyl ethylketone	96 Hr LC50 Pimephales promelas: 3130 - 3320 mg/L [flow-through] 48 Hr EC50 Daphnia magna: >520 mg/L; 48 Hr EC50 Daphnia magna: 5091 mg/L; 48 Hr EC50 Daphnia magna: 4025 - 6440 mg/L [Static]
Butanol	96 Hr LC50 Pimephales promelas: 1730 - 1910 mg/L [static]; 96 Hr LC50 Pimephales promelas: 1740 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 100000 - 500000 µg/L [static]; 96 Hr LC50 Pimephales promelas: 1910000 µg/L [static] 48 Hr EC50 Daphnia magna: 1983 mg/L; 48 Hr EC50 Daphnia magna: 1897 - 2072 mg/L [Static] 96 Hr EC50 Desmodesmus subspicatus: >500 mg/L; 72 Hr EC50 Desmodesmus subspicatus: >500 mg/L
Xylenes (o-, m-, p- isomers)	96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 - 40.75 mg/L [static] 48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

Ethyl alcohol

96 Hr LC50 Oncorhynchus mykiss: 12.0 - 16.0 ml/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400 - 15100 mg/L [flow-through]
48 Hr LC50 Daphnia magna: 9268 - 14221 mg/L; 48 Hr EC50 Daphniamagna: 2 mg/L [Static]

SECTION 13 - DISPOSAL CONSIDERATIONS

Material that cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. State and local disposal regulations may differ from federal disposal definitions found in 40 CFR 261.3. Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14 - TRANSPORT INFORMATION

This material is classified for transport as follows:

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
DOT	AEROSOL, LTD QUANTITY			
IATA	UN1950, AEROSOL, FLAMMABLE	1950		2.1
IMDG	UN1950, AEROSOL, FLAMMABLE	1950		2.1

SECTION 15 - REGULATORY INFORMATION

Additional regulatory listings, where applicable.

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

- 1333-86-4 Carbon black Carcinogen
- 64-17-5 Ethyl alcohol Carcinogen, Carcinogen
- 13463-67-7 Titanium dioxide Carcinogen
- 108-88-3 Toluene Carcinogen, Carcinogen

This product contains the following substances subject to the reporting requirements of Section 313 of Title II of the Superfund Amendments and Reauthorization Act of 1986 and CFR Partr40

- 1330-20-7 Xylenes (o-, m-, p-isomers)
- 71-36-3 Butanol
- 108-88-3 Toluene

<u>Country</u>	<u>Regulation</u>	<u>All Components</u>
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Listed EU Risk Phrases

R11: Highly flammable

Safety Phrase

S16: Keep away from sources of ignition – Non-smoking

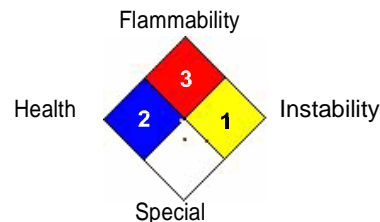
SECTION 16 - OTHER INFORMATION

Hazardous Material Information System (HMIS)

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	1
PERSONAL PROTECTION	1

HMIS & NFPA Hazard Rating Legend
 * = Chronic Health Hazard
 0 = INSIGNIFICANT
 1 = SLIGHT
 2 = MODERATE
 3 = HIGH

National Fire Protection Association (NFPA)



Date Prepared: 5/14/2015

Reviewer Revision

The information contained on this SDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.

Reviewer Revision

Date Prepared: 6/12/2015