DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

FCE Summary Report

Facility :	Holland Panel F	Products					SRN :	B6614
Location :	615 E 40th St						District :	Kalamazoo
							County :	ALLEGAN
City: ⊦	IOLLAND	State:	MI	Zip Code :	49423	Comp Status	liance :	Compliance
Source Class : MAJOR Staff : Cody Yazzie					<i>l</i> azzie			
FCE Begin Date : 4/29/2018 FCE Completion 4/29/2019 Date :					4/29/2019			
Comments	:							

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
03/28/2019	Scheduled Inspection	Compliance	Schedule Inspection
03/12/2019	ROP Annual Cert	Compliance	No deviations were reported.
03/12/2019	ROP SEMI 2 CERT	Compliance	No deviations were reported.
03/12/2019	MACT (Part 63)	Compliance	Semi-Annual Wood building Products NESHAP (40 CFR 63 Subpart QQQQ) This was the Semi Annual NESHAP QQQQ compliance Report. The facility reported to be well under the monthly aggregate HAP emission rates of 0.17 lbs HAPs per gallon of solids.
09/13/2018	ROP Semi 1 Cert	Compliance	No Deviations were reported.
09/13/2018	MACT (Part 63)	Compliance	This was the Semi Annual NESHAP QQQQ compliance Report. The facility is well under the monthly aggregate HAP emission rates of 0.17 lbs HAPs per gallon of solids.
09/05/2018	ROP Semi 1 Cert	Compliance	No deviations were reported.
09/05/2018	MACT (Part 63)	Compliance	This was the Semi Annual NESHAP QQQQ compliance Report. The facility is well under the monthly aggregate HAP emission rates of 0.17 lbs HAPs per gallon of solids.
05/16/2018	Other	Compliance	MAERS Audit

Name: Corly Many Date: 4/29/19 Supervisor: RIL 4/36/19 Page 1 of 1

DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: Scheduled Inspection

B661448703			
FACILITY: Holland Panel Produc	ots	SRN / ID: B6614	
LOCATION: 615 E 40th St, HOL	LAND	DISTRICT: Kalamazoo	
CITY: HOLLAND		COUNTY: ALLEGAN	
CONTACT: William Kok , Genera	al Manager	ACTIVITY DATE: 03/28/2019	
STAFF: Cody Yazzie	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR	
SUBJECT: Schedule Inspection			
RESOLVED COMPLAINTS:			

On March 28, 2019 Air Quality Division (AQD) staff (Cody Yazzie and Chance Collins) arrived at 615 East 40th Street, Holland Michigan at 10:45 AM to conduct an unannounced air quality inspection of Holland Panel Products (hereafter HPP). Staff made initial contact with William Kok, HPP, General Manager, after a brief introduction and statement for the reason of our visit Mr. Kok took staff to his office for further discussions.

HPP is a stationary source that currently has 16 staff members that operate on 1-ten hour shift five days a week. The facility uses fiberboard, hardboard, and particle board to manufacture store panels and fixtures that are often used by store chains and display designers. Woodworking equipment, including saws, routers, drills, and perforating stamp machines are all controlled by baghouses. These fabric filter control devises are located outside, but vent back inside the building area. The wood panels are finished on a conveyorized line. Water based coatings, ultraviolet (UV) coatings, and fillers are used in the process. Stations in the line may include, cleaning, roll coating, UV cure oven, sanding, IR curing, curtain coating, printing, and a gas fired curing oven.

HPP is currently subject to the National Emission Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products. HPP's historical use of HAP containing materials and EPA's "once in, always in" policy is keeping them subject to the ROP program. AQD Staff did mention to Mr. Kok that the "once in, always in" has been withdrawn but is currently being challenged in court. Because of this Staff explained that HPP could apply for an Opt-Out Permit if they were able to show Potential to Emit Calculations and Actual Emissions records that showed HPP did not exceed major source thresholds. Staff also explained that because the policy was being challenged in court that it could be overturned and HPP could be required to comeback into the ROP program.

HPP was last inspected by the AQD on December 6, 2016 and was determined to be in Compliance at that time with MI-ROP-B6614-2012. Staff asked, and Mr. Kok stated that the facility does not have any emergency generators, boilers, or cold cleaners at the facility.

Mr. Kok gave staff a tour of the facility. Required personal protective equipment are steel toe boots and safety glasses. Mr. Kok stated that he had some recordkeeping material that he could share with Staff, but the NESHAP QQQQ recordkeeping is done by Chris Boyk. Mr. Kok provided AQD Staff with Mr. Boyk's contact information for the recordkeeping information. Staff observations and review of records provided during and following the inspection are summarized below:

EUPAINTLINE1:

This emission unit is a conveyorized process with numerous stations. The different stations include: two reverse roll coating (RRC), two ultraviolet cure ovens, sander, preheat oven, two denibber stations, curtain coater, direct roll coaters, base coat oven.

EUPAINTLINE1 is required to track the monthly and 12-month rolling VOC emissions that are emitted from the use of the water based and UV coating that are applied. HPP is keeping monthly usage records that that include a description of the coating used and item identification number. For each coating the density and VOC emission factors in both Ibs/gallon and Ibs/gallon minus H2O. These emission factors come from the supplier SDS sheet. Staff checked item identifications: RM-WHITEBASE, P50340, P50001, and P50512. The review of these SDS sheets showed that the facility correctly assigned coating density and emission factors based on the supplier SDS. HPP calculates its 12 month rolling VOC emissions by combining VOC emission from both UV and Water-based coatings. During 2018 the facility never had VOC emission above 2.69 Tons/year. This is well below the 25 Tons/year 12-month rolling time period limit.

HPP also has a VOC material limit for their coatings used. This is an instantaneous limit which must be complied with at all times. The maximum lbs VOC/gallon minus H2O that was used at the facility was 0.914. This is compliant with the 1.0 lbs VOC/gallon material limit used in EUPAINTLINE1. As stated previously Staff reviewed the most usage coating's SDS sheets and found that the recordkeeping reflected accurate information, so the facility appears to be compliant with the VOC material limit in Special Condition II.1.

The facility is also required to track Acetone usage. The facility is keeping a 12-month rolling of Acetone emissions. For the year 2018 HPP never used more than 2.34 tons per year of Acetone emissions. This is well below the 3.3 tons/year Acetone limit that specified in Special Condition I.2.

The facility is required to capture all waste materials and store them in closed containers stated in Special Condition III.1. The facility appears to be capturing all waste materials. HPP drains the waste solvents into a container that are kept fully closed and shipped as waste about every six weeks. Staff did also not that the facility appeared to be complying with Special Condition III.2 by keeping all VOC containing material covered to minimize fugitive emissions.

EUEDGECOAT:

EUEDGECOAT is a spray application coating unit that operates under Exemption Rule 287(2) (c). This process is used to apply coatings to the edges of stacked panels. The facility is keeping monthly records for this operation. The yearly usage for 2018 was recorded as 64 lbs. This is calculated to be 5.94 gallons per year during 2018. This is well below the limit of 200 gallons per month that is allowed under the exemption. This emission unit is located in a separate coating bay. The bay has an exhaust fan that discharges through the wall at ground level that is covered with a particulate filter. The condition of the particulate filter was torn and needing to be replaced. Staff told Mr. Kok that the exemption rule does require the dry filter control to be maintained, and the current condition of the particulate filter is unacceptable. Staff told Mr. Kok that if he provided a photograph showing that the filter had been replaced that Staff would consider the issue resolved. Mr. Kok provided a photograph of the replaced filter before the completion of the inspection report.

FGNESHAP:

The facility is subject to 40 CFR Part 63, Subpart QQQQ. This NESHAP applies to facilities that applies surface coating of wood building products.

As apart of this NESHAP the facility must comply with an Organic HAP emission limit. The emission limits are based on the subcategory of the wood building product that the facility is producing. The two subcategories that could be produced at the facility are interior wall paneling and tileboard and other interior panels. The facility demonstrates compliance by complying with the more stringent limit of 0.17 lb HAP/gallon solids associated with the subcategory "Other Interior Panels".

The company has been electing to comply with the emission limits by using the emission rate without add-on controls option. For this option the HPP calculates the 12-month rolling emission rate is less than or equal to the 0.17 lb HAP/gallon solids. During 2018 the facility reported a maximum 12-month rolling emission rate to be 0.149 lbs HAP/gallon solids in December of 2018. This is well below the 0.17 lb HAP/gallon limit.

This regulation also has a material limit that requires no usage of organic HAP's in each thinner or cleaning material that the facility uses. The facility currently only uses four different cleaning materials. The facility uses Methyl Ethyl Ketone (MEK), 2-butoxyethanol (Ethylene Glycol Monobutyl Ether), Isopropyl Alcohol (IPA), and Acetone. None of these cleaning materials are considered HAP's. Both MEK and 2-Butoxyethanol have been removed from the EPA's HAPs list. MEK was removed in December 2005 and 2-butoxyethanol was removed in November 2004.

FGPARTICULATE:

FGPARTICULATE is a collection of woodworking units that are used to saw, machine, and perforate the panel boards. These units appear to operate under exemption Rule 285(2)(I)(vi) (B). The facility has two bachouse units. The West unit is a dedicated unit that controls the Slotwall Router. The East unit combines ductwork from the saws, a CNC machine, punch presses, and a few routers. Both units are equipped with a differential pressure gauge and have the exhaust sent back into the general in-plant environment.

At the time of the inspection and based on a review of records obtained during or following the inspection, the facility appears to be in compliance with MI-ROP-B6614-2017. Staff stated to Mr. Kok that a report of the inspection would be sent to the facility for their records. Staff concluded the inspection at 12:30 PM.-CJY

NAME Cody James

DATE 4 29 19 SUPERVISOR RIL 4 30 19



SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID:	RM-WHITEBASE - Blended		
Product Name:	WHITE BASE		
Revision Date:	Apr 18, 2016	Date Printed:	Feb 10, 2017
Version:	2.0	Supersedes Date:	Feb 03, 2016
Manufacturer's Name:	Panel Processing Inc. (PPI Coatir	ngs Division)	
Address:	696 Race Street Coldwater, , MI,	US, 49036	
Emergency Phone:	517-279-8051		
Information Phone Numb	er: 517-279-8051		
Fax:			

SECTION 2) HAZARDS IDENTIFICATION

Classification:	
Skin Irritation - Category 3	
Pictograms:	
Not classified	
Signal Word:	
Warning	
Hazardous Statements - Health:	
Causes mild skin irritation	
Precautionary Statements - General:	
If medical advice is needed, have product container or label at hand.	
Keep out of reach of children.	
Read label before use.	
Precautionary Statements - Prevention:	
Not classified	
Precautionary Statements - Response:	
If skin irritation occurs: Get medical advice/attention.	
Precautionary Statements - Storage:	
Not classified	
Precautionary Statements - Disposal:	
Not classified	
Acute toxicity of 25.26% of the mixture is unknown	

SECTION 3) COMPO	SITION / INFORMATION ON INGREDIENTS	
CAS	Chemical Name	% By Weight
0007732-18-5	WATER	38.84%
NA-ERAEnviro	Non Hazardous Solid	23.93%

2.43%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

IF exposed or concerned: Get medical advice/attention.

Skin Contact:

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before re-use.

IF exposed or concerned: Get medical advice/attention.

Eye Contact:

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Ingestion:

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Give exposed individual 6 to 8 ounces of liquid.

SECTION 5) FIRE-FIGHTING MEASURES

Unusual Fire and Explosion Hazards::

Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed container may explode when exposed to extreme heat. Do not apply to hot surfaces. Never use welding or cutting torch on or near container (even when empty), because product (even residue), may ignite explosively.

Suitable Extinguishing Media:

Use dry chemical,CO2,water spray (fog) or foam.

Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Unsuitable Extinguishing Media:

Not available

Fire-fighting Procedures:

Water spray may be ineffective on fire but can protect firefighters and cool containers. Use fog nozzle if water is used. Water may be used to cool closed containers to prevent buildup and possible auto-ignition or explosion when exposed to extreme heat.

Specific Hazards in Case of Fire:

Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup, which could result in container rupture.

Special Protective Actions:

Wear protective pressure self-contained breathing apparatus (SCBA) and full lurnout gear.

Care should always be exercised in dust/mist areas.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure:

Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Stay upwind; keep out of low areas.

Flammable/combustible material.

ELIMINATE all ignition sources (no smokes, flares, sparks or flames in immediate area).

Cover with inert material to reduce fumes. Prevent from spreading by making a barrier with sand, earth or other containment material. Collect with absorbent, non-combustible, inert material and place in appropriate closed containers.

Use only non-sparking tools for clean-up.

Ventilate area of spill.

Recommended Equipment:

Positive pressure, full-face piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions:

Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Methods and Materials for Containment and Cleaning up:

Dike around spilled material, apply absorbent material and shovel into container. Remove container to safe area and seal.

Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

SECTION 7) HANDLING AND STORAGE

General:

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements:

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Use explosion-proof ventilation equipment.

Storage Room Requirements:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them. Ground all structures, transfer containers and equipment to conform to the national electrical code. Use procedures that prevent static electrical sparks. Static electricity may accumulate and create a fire hazard.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection:

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Depending on conditions of use, additional protection may be required such as apron, arm covers, or full body suit. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated before rewearing.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

In outdoor or open areas use (NIOSH/MSHA approved) mechanical filter respirator to remove solid airborne particles of over spray during spray application. In restricted ventilation areas use (NIOSH/MSHA approved) air line type respirators or hoods. Respiratory protection may also be necessary in any later manufacturing operations in which the product may become airborne in the form of vapor or dust.

Appropriate Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA TWA (ppm)
ETHYLENE GLYCOL MONOBUTYL ETHER	20	97			5	24				1	: • • •	50
Chemical Name	OSHA TWA (mg/m3)	OSHA STEL (pom)	OSHA STEL (mo/m3)	OSHA Skin designation								

	(ing/ins)	(ppm)	(mg/m3)	designation
ETHYLENE GLYCOL MONOBUTYL ETHER	240			1

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties	
Density	10.77000 lb/gal
Density VOC	0.30542 lb/gal
Density VOC Less H2O and Exempts(lb/gal)	0.84247 ib/gal
% HAPS	0.00000%
% Solids by Vol	36.25000%
% Solids By Weight	51.00000%
% VOC	2.83582%
Appearance	
Odor Threshold	
Odor Description	
pH	
Water Solubility	
Flammability	
Flash Point Symbol	
Flash Point	
Viscosily	
Lower Explosion Level	
Upper Explosion Level	

18.2892 mmHg

SECTION 10) STABILITY AND REACTIVITY

Vapor Pressure Vapor Density Melting Point Freezing Point Low Boiling Point High Boiling Point Decomposition Pt Auto Ignition Temp Evaporation Rate

Stability:

Material is stable at standard temperature and pressure. Conditions to Avoid: Avoid exposure to sparks, open flame, hot surfaces, and all sources of heat and ignition. May produce hazardous fumes when heated to decomposition as in welding. Fumes may contain carbon monoxide, carbon dioxide, and oxides of nitrogen.

Hazardous Reactions/Polymerization:

Will not occur.

Incompatible Materials:

Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products:

Not available.

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation: Excessive overexposure may be harmful or fatal.

Ingestion of this product will cause irritation of the gastrointestinal tract and may cause effects resembling those from inhalation of vapor. Ingestion may cause possible kidney and liver damage.

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain nervous system damage.

Aspiration Hazard:

No Data Available

Carcinogenicity:

No Data Available

Germ Cell Mutagenicity:

No Data Available

Reproductive Toxicity:

No Data Available

Respiratory/Skin Sensitization:

No Data Available

Serious Eye Damage/Irritation:

No Data Available

Skin Corrosion/Irritation:

Causes mild skin irritation

Specific Target Organ Toxicity - Repeated Exposure:

No Data Available

Specific Target Organ Toxicity - Single Exposure:

No Data Available

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

LC50 (female rat): 450 ppm (4-hour exposure) (2)

LC50 (male ral): 486 ppm (4-hour exposure) (2)

LD50 (oral, male weanling ral): 3000 mg/kg (1)

LD50 (oral, hate wearing rat): 3000 mg/kg (1) LD50 (oral, 6-week old male rat): 2400 mg/kg (1) LD50 (oral, yearling male rat): 560 mg/kg (1) LD50 (oral, rebit): 320 mg/kg (2500 mg/kg (1)LD50 (oral, male mouse): 1230 mg/kg (1) LD50 (oral, rabbit): 320 mg/kg (1)

LD50 (dermal, male rabbit); 406 mg/kg (cited as 0.45 mL/kg) (1)

Potential Health Effects - Miscellaneous

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can be absorbed through the skin in harmful amounts. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneat injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity:

No Data Available

RM-WHITEBASE - Blended

Persistence and Degradability:

No data available.

Bio-accumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal:

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information:

Non-Hazardous water-based paint

IMDG Information:

Non-Hazardous water-based paint

IATA Information:

Non-Hazardous water-based paint

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0007732-18-5	WATER	38.849	6 TSCA
NA-ERAEnviro	Non Hazardous Solid	23.93%	6 SARA312
0000111-76-2	ETHYLENE GLYCOL MONOBUTYL ETHER	2.43%	% SARA313, CERCLA, SARA312, TSCA
0001336-21-6	AMMONIUM HYDROXIDE	0.049	6 SARA313, CERCLA, SARA312, TSCA

SECTION 16) OTHER INFORMATION

Glossary:

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDGCanadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- ESE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPANational Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ - Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA

- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

Version 1.0:

Revision Date: Apr 18, 2016 First Edition.

DISCLAIMER

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To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.



SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID:	P50001				
Product Name:	WATERBORNE HARDBOARD FILLER				
Revision Date:	Apr 18, 2016	Date Printed:	Feb 08, 2018		
Version:	2.0	Supersedes Date:	May 05, 2015		
Manufacturer's Name:	Panel Processing Inc. (PPI Coatings Division)				
Address:	696 Race Street Coldwater, , MI, US, 49	036			
Emergency Phone:	517-279-8051				
Information Phone Numbe	r:517-279-8051				
Fax:					

SECTION 2) HAZARDS IDENTIFICATION

Classification

Skin Irritation - Category 3

Carcinogenicity - Category 1B

Pictograms



Signal Word Danger Hazardous Statements - Health Causes mild skin irritation

May cause cancer.

Precautionary Statements - General

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Precautionary Statements - Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

If skin irritation occurs: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to disposal recycling center. Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight	
0007732-18-5	WATER	33.36%	
0001317-65-3	CALCIUM CARBONATE	22.23%	
NA-ERAEnviro	Non Hazardous Solid	21.48%	
NA	Acrylic polymer(s)	18.06%	
0000111-76-2	ETHYLENE GLYCOL MONOBUTYL ETHER	2.98%	
0064742-65-0	MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC	0.33%	
0000050-00-0	FORMALDEHYDE	0.02%	
0000542-75-6	1,3-DICHLOROPROPENE	0.00%	
0000075-09-2	METHYLENE CHLORIDE	0.00%	

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing.

If exposed or concerned: Get medical advice attention.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before re-use.

Eye Contact

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth immediately. Give exposed individual 6 to 8 ounces of liquid. (Never give anything by mouth to an unconscious person.)Do NOT induce vomiting unless advised by a physician. Contact a physician immediately.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, foam, carbon dioxide water spray or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

The National Fire Protection Association Class B extinguisher is designed to extinguish fires originating from burning liquids.

Unsuitable Extinguishing Media

Water spray may be ineffective.

Fire-fighting Procedures

Water spray may be ineffective on fire but can protect firefighters and cool containers. Use fog nozzle if water is used. Water may be used to cool closed containers to prevent buildup and possible auto-ignition or explosion when exposed to extreme heat.

Specific Hazards in Case of Fire

Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed container may explode when exposed to extreme heat. Do not apply to hot surfaces. Never use welding or cutting torch on or near container (even empty) because product (even residue) may ignite explosively.

Flammability classification : Class 3B

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Care should always be exercised in dust/mist areas.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Stay upwind and away from spill unless wearing appropriate protective equipment. Stop and/or contain discharge if it may be done safely. Keep all sources of ignition away. Ventilate area of spill. Use non-sparking tools for cleanup. Cover with inert material to reduce fumes. Keep out of drains, sewers, or waterways.

Recommended Equipment

Positive pressure, full-face piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions

Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Methods and Materials for Containment and Cleaning up

Dike around spilled material, apply absorbent material and shovel into container. Remove container to safe area and seal.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements

Provide general dilution or local exhaust ventilation in volume and pattern to keep TLV of the most hazardous ingredient below acceptable limit, LEL below stated limit, and to remove decomposition products during welding or lame cutting on surfaces coated with this product.

Use ventilation as required to control vapor concentrations. Avoid prolonged or repeated breathing of vapors. If exposure exceeds TLV, use a NIOSH/MSHA approved respirator to prevent overexposure.

Storage Room Requirements

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Use non-sparking ventilation systems, approved explosion-proof equipment and intrinsically safe electrical systems in areas where this product is used and stored.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Use full face-shield and chemical safety goggles when there is potential for contact. Locate safety shower and eyewash station close to chemical handling area.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection

In outdoor or open areas use (NIOSH/MSHA approved) mechanical filter respirator to remove solid airborne particles of over spray during spray application. In restricted ventilation areas use (NIOSH/MSHA approved) air line type respirators or hoods. Respiratory protection may also be necessary in any later manufacturing operations in which the product may become airborne in the form of vapor or dust.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA TWA (ppm)
1,3- Dichloropropene	1	4.5			1a	5a			1	•		
CALCIUM CARBONATE						10,5a				1		
ETHYLENE GLYCOL MONOBUTYL ETHER	20	97			5	24	:			. 1	· · ·	50
FORMALDEHYDE	0.1		0.3		0.016b				1	1,2	1	0.75 (a)
METHYLENE CHLORIDE	50	174		• •	b				1	1,2	1	25 (a)
MINERAL OIL, PETROLEUM DISTILLATES. SOLVENT-DEWAXED HEAVY PARAFFINIC			a		:					1	· · ·	500

Chemical Name	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Skin designation
1,3- DICHLOROPROPENE				
CALCIUM CARBONATE	[15]; [5 (a)];			
ETHYLENE GLYCOL MONOBUTYL ETHER	240			1
FORMALDEHYDE		2 / 15minutes		
Methylene Chloride		125 /15 minutes		
MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC	2000			

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	12.35000 lb/gal
Density VOC	0.37038 lb/gal
Density VOC Less H2O and Exempts(lb/gal)	0.78104 lb/gal

% HAPS	0.00000%
% Solids by Vol	48.16000%
% Solids By Weight	65.35000%
% VOC	3.00000%
Appearance	
Odor Threshold	
Odor Description	
рН	
Water Solubility	
Flammability	
Flash Point Symbol	
Flash Point	998
Viscosity	
Lower Explosion Level	
Upper Explosion Level	
Vapor Pressure	17.2952 mmHg
Vapor Density	
Freezing Point	
Melting Point	
Low Boiling Point	
High Boiling Point	
Decomposition Pt	
Evaporation Rate	
Auto Ignition Temp	

SECTION 10) STABILITY AND REACTIVITY

Stability

Material is stable at standard temperature and pressure.

Conditions to Avoid

Avoid exposure to sparks, open flame, hot surfaces, and all sources of heat and ignition.

Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products

May produce hazardous fumes when heated to decomposition as in welding. Fumes may contain carbon monoxide, carbon dioxide, and oxides of nitrogen.

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity

Ingestion may cause possible kidney damage.

Ingestion may cause possible liver damage.

Ingestion of this product will cause irritation of the gastrointestinal tract and may cause effects resembling those from inhalation of vapor.

Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Aspiration Hazard

No Data Available

Carcinogenicity

May cause cancer.

Germ Cell Mutagenicity

No Data Available

Reproductive Toxicity

No Dala Available

Respiratory/Skin Sensitization

No Data Available

Serious Eye Damage/Irritation

No Dala Available

Skin Corrosion/Irritation

Causes mild skin irritation

Specific Target Organ Toxicity - Repeated Exposure

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain nervous system damage.

Specific Target Organ Toxicity - Single Exposure

Ingestion may cause possible kidney damage. Ingestion may cause possible liver damage.

Chronic Exposure

0000050-00-0 FORMALDEHYDE

Formaldehyde has caused cancer in test animals at high concentrations (5-15ppm).

Formaldehyde is classified as a Suspected Human Carcinogen (A2) by ACGIH, and as Probably Carcinogenic to Humans (Group 2A) by IARC. Formaldehyde has caused cancer in test animals.

0000075-09-2 METHYLENE CHLORIDE

Inhalation exposure may result in neurological symptoms, including paraesthesiae, respiratory irritation and gastrointestinal disturbances. Long term exposure causes damage to the CNS and to the liver. Repeated or prolonged contact with skin may cause dermatitis.

Acute Exposure

0000075-09-2 METHYLENE CHLORIDE

The substance is irritating to the eyes, skin and respiratory tract. It can cause effects on the CNS, blood, liver, heart and lungs. Exposure could cause carbon monoxide poisoning resulting in impaired functions. Exposure at high concentrations could cause lowering of consciousness and death. Methylene Chloride is a potent irritant of mucous membranes. If swallowed, the substance may cause vomiting and could result in aspiration pneumonitis.

Potential Health Effects - Miscellaneous

0000075-09-2 METHYLENE CHLORIDE

Is an IARC, NTP or OSHA Carcinogen. There is limited evidence that this substance causes spontaneous abortions. Contact can severely irritate and burn the skin and eyes with possible eye damage. Skin contact may cause inflammation and burns. Inhalation of high concentrations can have narcotic effects; Carbon monoxide produced as a metabolite in the body.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can be absorbed through the skin in harmful amounts. May cause injury to the kidneys, liver, blood and/or bone marrow. Repealed overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

0000075-09-2 METHYLENE CHLORIDE

LC50 (guinea pig): 11600 ppm (6-hour exposure) (7)

LC50 (rat): 57000 ppm (15-minute exposure) (8)

LC50 (mouse): 16186 ppm (8-hour exposure) (9)

LD50 (oral, rat): 2100 to 3000 mg/kg (1)

0064742-65-0 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC

LD50 (Rodent - rat, Oral) : >5000 mg/kg, Toxic effects : Details of toxic effects not reported other than lethal dose value. LD50 (Rodent - rabbit, Administration onto the skin) : 5000 mg/kg, Toxic effects : Details of toxic effects not reported other than lethal dose value.

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

LC50 (female rat): 450 ppm (4-hour exposure) (2)

LC50 (male rat): 486 ppm (4-hour exposure) (2)

LD50 (oral, male weanling rat): 3000 mg/kg (1)

LD50 (oral, 6-week old male rat): 2400 mg/kg (1) LD50 (oral, 6-week old male rat): 2400 mg/kg (1)

LD50 (oral, female ral): 530 mg/kg; 2500 mg/kg (1)LD50 (oral, male mouse): 1230 mg/kg (1)

LD50 (oral, rabbit): 320 mg/kg (1)

LD50 (dermal, male rabbit): 406 mg/kg (cited as 0.45 mL/kg) (1)

0001317-65-3 CALCIUM CARBONATE

LD50 (oral, rat): 6450 mg/kg (10; unconfirmed)

FORMALDEHYDE 0000050-00-0

LC50 (rat): 8000 ppm (4-hour exposure) (24)

LD50 (oral, male rat): 2500 mg/kg (25)

LD50 (oral, rat): 2920 mg/kg (26) LD50 (oral, rat): 2920 mg/kg (26) LD50 (dermal, guinea pig): greater than 15000 mg/kg (cited as greater than 0.94 mL/kg) (27) LD50 (dermal, rat): 5070 mg/kg (28, unconfirmed)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

No Data Available

Persistence and Degradability

No data available.

Bio-accumulative Potential

Contains constituents with the potential to bio-accumulate.

0064742-65-0 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC

Contains constituents with the potential to bioaccumulate.

Mobility in Soil

0064742-65-0 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC

Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

DO NOT FLUSH TO SEWER, WATERSHED, OR WATERWAY,

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information

No data available.

IMDG Information

No data available.

IATA Information

No data available.

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0007732-18-5	WATER	33.36%	TSCA
0001317-65-3	CALCIUM CARBONATE	22.23%	SARA312.TSCA
NA-ERAEnviro	Non Hazardous Solid	21.48%	SARA312
0000111-76-2	ETHYLENE GLYCOL MONOBUTYL ETHER	2.98%	SARA313, CERCLA.SARA312,TSCA
0064742-65-0	Mineral CIL, Petroleum Distillates, solvent- Dewaxed Heavy Paraffinic	0.33%	SARA312,TSCA
0004080-31-3	1-(3-CHLOROALLYL)-3,5,7 -TRIAZA-1- AZONIAADAMANTANE CHLORIDE	0.13%	SARA313, SARA312, TSCA
0000050-00-0	FORMALDEHYDE	0.02%	SARA313, CERCLA.SARA312,TSCA,RCRA,CA_Prop65 - California Proposition 65
0000542-75-6	1,3-DICHLOROPROPENE	0.00%	CERCLA, SARA312, TSCA, RCRA, CA_Prop65 - California Proposition 05
0000075-09-2	METHYLENE CHLORIDE	0.00%	CERCLA, SARA312, TSCA, RCRA, CA_Prop65 - California Proposition 65
0000140-88-5	ETHYL ACRYLATE	0.00%	SARA313, CERCLA, SARA312, TSCA, RCRA, CA_Prop65 - California Proposition 65

SECTION 16) OTHER INFORMATION

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDGCanadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- ESE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; U- Lethal Dose; NFPANational Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information Substances Control Act Public Law 94-System.

Version 2.0:

Revision Date: Apr 18, 2016

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.



SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID:	P50340					
Product Name:	BLACK ENAMEL					
Revision Date:	Apr 18, 2016	Date Printed:	Apr 30, 2016			
Version:	2.0	Supersedes Date:	Jun 01, 2015			
Manufacturer's Name:	Panel Processing Inc. (PPI Coating	Panel Processing Inc. (PPI Coatings Division)				
Address:	696 Race Street Coldwater, , MI, US	696 Race Street Coldwater, , MI, US, 49036				
Emergency Phone:	517-279-8051					
Information Phone Numb	er:517-279-8051					
Fax:						

SECTION 2) HAZARDS IDENTIFICATION

Classification:

Skin Irritation - Category 3

Eye Irritation - Category 2B

Carcinogenicity - Category 2

Pictograms:



Signal Word:

Warning

Hazardous Statements - Health:

Causes mild skin irritation

Causes eye irritation

Suspected of causing cancer.

Precautionary Statements - General:

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Precautionary Statements - Prevention:

Wash thoroughly after handling.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response:

If skin irritation occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing,

If eye irritation persists: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage:

Store locked up.

Precautionary Statements - Disposal:

Dispose of contents/container to disposal recycling center. Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Acute toxicity of 3.23% of the mixture is unknown

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS % By Weight CAS **Chemical Name** 35.91% 0007732-18-5 WATER Proprietary Proprietary Polymer 10.92% 0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER 1.65% OXIDIZED ETHENE HOMOPOLYMER 0068441-17-8 1.62% 0001333-86-4 CARBON BLACK 0.60%

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

Skin Contact:

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for 15-20 minutes. Call a POISON CENTER/doctor if you feel unwell. Wash contaminated clothing before reuse.

Eye Contact:

If irritation occurs, cautiously rinse eyes with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelids open. If eye irritation persists: Get medical advice/attention.

Ingestion:

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Give exposed individual 6 to 8 ounces of liquid.

SECTION 5) FIRE-FIGHTING MEASURES

Unusual Fire and Explosion Hazards::

Keep container tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not apply to hot surfaces. Never use welding or cutting torch on or near container (even when empty), because product (even residue), may ignite explosively.

Suitable Extinguishing Media:

Use dry chemical,CO2,water spray (fog) or foam.

Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Unsuitable Extinguishing Media:

Not available

Fire-fighting Procedures:

Water spray may be ineffective on fire but can protect firefighters and cool containers. Use fog nozzle if water is used. Water may be used to cool closed containers to prevent buildup and possible auto-ignition or explosion when exposed to extreme heat.

Specific Hazards in Case of Fire:

Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup, which could result in container rupture.

Special Protective Actions:

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Care should always be exercised in dust/mist areas.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure:

Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material.

Stay upwind; keep out of low areas.

ELIMINATE all ignition sources (no smokes, flares, sparks or flames in immediate area)

Cover with inert material to reduce fumes. Prevent from spreading by making a barrier with sand, earth or other containment material.

Collect with absorbent, non-combustible, inert material and place in appropriate closed containers.

Use only non-sparking tools for clean-up.

Ventilate area of spill.

Recommended Equipment:

Positive pressure, full-face piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions:

Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

SECTION 7) HANDLING AND STORAGE

General:

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements:

Provide general dilution or local exhaust ventilation in volume and pattern to keep TLV of the most hazardous ingredient below acceptable limit, LEL below stated limit, and to remove decomposition products during welding or lame cutting on surfaces coated with this product.

Use ventilation as required to control vapor concentrations. Avoid prolonged or repeated breathing of vapors. If exposure exceeds TLV, use a NIOSH/MSHA approved respirator to prevent overexposure.

Storage Room Requirements:

Keep container(s) lightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Depending on conditions of use, additional protection may be required such as apron, arm covers, or full body suit. Launder solled clothes or properly disposed of contaminated material, which cannot be decontaminated before rewearing.

Wear resistant gloves such as natural rubber, neoprene, buna N or nitrile.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

In ouldoor or open areas use (NIOSH/MSHA approved) mechanical filter respirator to remove solid airborne particles of over spray during spray application. In restricted ventilation areas use (NIOSH/MSHA approved) chemical-mechanical filters designed to remove a combination of particulate and gas and vapor. In confined areas use (NIOSH/MSHA approved) air line type respirators or hoods. Respiratory protection may also be necessary in any later manufacturing operations in which the product may become airborne in the form of vapor or dust.

Appropriate Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	NIOSH TWA (ppm)	NIOSH TWA (nig/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA TWA (ppm)
CARBON BLACK		3 (I)				3.5a			1	1		
ETHYLENE GLYCOL MONOBUTYL ETHER	20	97			5	24		- 		1		50
Chemical Name	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Skin designation								
CARBON BLACK	3.5											
ETHYLENE GLYCOL MONOBUTYL ETHER	240			1								
(I) - Inhalable fracti	on											

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Phy	vsical and Chemical Properties	
	% Solids by Vol	38.16670%
	% HAPS	0.00000%
	Density	8.63210 lb/gal
	% Solids By Weight	40.74160%
	Density VOC	0.19074 lb/gal
	% VOC	2.20960%
	VOC Actual	0.19074 lb/gal
	Density VOC Less H2O and Exempts	0.51273 lb/gal

Appearance	
Odor Threshold	
Odor Description	
pH	
Water Solubility	
Flammability	
Flash Point Symbol	
Flash Point	998
Viscosity	
Lower Explosion Level	
Upper Explosion Level	
Vapor Pressure	24.2435 mmHg (Calculated @ 20 C/68 F)
Vapor Density	
Freezing Point	
Melting Point	
Low Boiling Point	
High Boiling Point	
Auto Ignition Temp	

SECTION 10) STABILITY AND REACTIVITY

Stability:

Material is stable at standard temperature and pressure.

Conditions to Avoid:

Avoid exposure to sparks, open flame, hot surfaces, and all sources of heat and ignition. May produce hazardous fumes when heated to decomposition as in welding. Fumes may contain carbon monoxide, carbon dioxide, and oxides of nitrogen.

Hazardous Reactions/Polymerization:

Will not occur.

Incompatible Materials:

Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products:

Not available.

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion of this product will cause irritation of the gastrointestinal tract and may cause effects resembling those from inhalation of vapor.

Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Aspiration Hazard:

No Data Available

Carcinogenicity:

Suspected of causing cancer.

Germ Cell Mutagenicity:

No Data Available

Reproductive Toxicity:

No Data Available

Respiratory/Skin Sensitization:

No Data Available

Serious Eye Damage/Irritation:

Causes eye irritation

Skin Corrosion/Irritation:

Causes mild skin irritation

Specific Target Organ Toxicity - Repeated Exposure:

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain nervous system damage.

Specific Target Organ Toxicity - Single Exposure:

Ingestion may cause possible kidney damage. Ingestion may cause possible liver damage.

0001333-86-4 CARBON BLACK

LC50 (rat): 6750 mg/m3 (4-hour exposure); cited as 27000 mg/m3 (27 mg/L) (1-hour exposure) (3)

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

LC50 (female ral): 450 ppm (4-hour exposure) (2)

LC50 (male rat): 486 ppm (4-hour exposure) (2)

LD50 (oral, male weanling rat): 3000 mg/kg (1)

LD50 (oral, 6-week old male ral): 2400 mg/kg (1)

LD50 (oral, yearling male rat): 560 mg/kg (1)

LD50 (oral, female rat): 530 mg/kg; 2500 mg/kg (1)LD50 (oral, male mouse): 1230 mg/kg (1)

LD50 (oral, rabbit): 320 mg/kg (1)

LD50 (dermal, male rabbit): 406 mg/kg (cited as 0.45 mL/kg) (1)

Potential Health Effects - Miscellaneous 0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can be absorbed through the skin in harmful amounts. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

0001333-86-4 CARBON BLACK

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease. WARNING: This chemical is known to the State of California to cause cancer.

Chronic Exposure

0001333-86-4 CARBON BLACK

CARCINOGENIC EFFECTS: In 1996, the IARC reevaluated Carbon Black as a Group 2B carcinogen. This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence.

Prolonged inhalation of Carbon black can result in lung disease. Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity:

No Data Available

Persistence and Degradability:

No data available.

Bio-accumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

Bio-accumulative Potential

0001333-86-4 CARBON BLACK

A relevant bioaccumulation potential of carbon black is not expected based on its insolubility in organic solvents and in water. Furthermore, since the aggregate diameter of carbon black varies between 80 nm and 810 nm, bioaccumulation of particulate carbon black is not likely oweing to the large diameter of the solid aggregate particles.

Persistence and Degradability

0001333-86-4 CARBON BLACK

Carbon Black's insolubility in water results in it not being biodegradable in any medium or by biota. It is considered persistent in the natural environment.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal:

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information:

Non-Hazardous water-based paint

IMDG Information:

Non-Hazardous water-based paint

IATA Information:

Non-Hazardous water-based paint

CAS	Chemical Name	% By Weight	Regulation List
0007732-18-5	WATER	35.91%	TSCA
0000111-76-2	ETHYLENE GLYCOL MONOBUTYL ETHER	1.65%	CERCLA, SARA312, SARA313, TSCA
0068441-17-8	OXIDIZED ETHENE HOMOPOLYMER	1.62%	SARA312,TSCA
0001333-86-4	CARBON BLACK	0.60%	SARA312,TSCA,CA_Prop65 - California Proposition 65
0001336-21-6	AMMONIUM HYDROXIDE	0.05%	CERCLA,SARA312,SARA313,TSCA
0007664-41-7	AMMONIA	0.03%	CERCLA,SARA312,SARA313,TSCA
0025265-71-8	DIPROPYLENE GLYCOL	0.01%	SARA312,TSCA
0064742-65-0	MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT- DEWAXED HEAVY PARAFFINIC	0.00%	SARA312,TSCA
0000067-56-1	METHANOL	0.00%	CERCLA,SARA312,SARA313,TSCA,RCRA.CA_Prop65 - California Proposition 65
0000100-41-4	ETHYLBENZENE	0.00%	CERCLA, SARA312, SARA313, TSCA, CA_Prop65 · California Proposition 65
0000107-13-1	ACRYLONITRILE	0.00%	CERCLA, SARA312, SARA313, TSCA, RCRA, CA_Prop65 - California Proposition 65

SECTION 16) OTHER INFORMATION

Glossary:

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDGCanadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- ESE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPANational Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act; Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ - Texic Substances Control Act Public Law 94-469; TWA - Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

Version 2.0:

Revision Date: Apr 18, 2016

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.



SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID:	P50512				
Product Name:	SAHARA TAN				
Revision Date:	Oct 19, 2016	Date Printed:	Oct 19, 2016		
Version:	1.0	Supersedes Date:	N.A.		
Manufacturer's Name:	Panel Processing Inc. (PPI Coatings Division)				
Address:	696 Race Street Coldwater, , MI, US, 49036				
Emergency Phone:	517-279-8051				
Information Phone Numb	er:517-279-8051				
Fax:					

SECTION 2) HAZARDS IDENTIFICATION

Classification:

Skin Irritation - Category 3

Carcinogenicity - Category 2

Pictograms:



Signal Word:

Warning

Hazardous Statements - Health:

Causes mild skin irritation

Suspected of causing cancer.

Precautionary Statements - General:

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Precautionary Statements - Prevention:

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response:

If skin irritation occurs: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage:

Store locked up.

Precautionary Statements - Disposal:

Dispose of contents/container to disposal recycling center. Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Acute toxicity of 25.67% of the mixture is unknown

SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS				
CAS	Chemical Name	% By Weight		
0007732-18-5	WATER	37.62%		
NA-ERAEnviro	Non Hazardous Solid	23.18%		
0000111-76-2	ETHYLENE GLYCOL MONOBUTYL ETHER	2.35%		
0001333-86-4	CARBON BLACK	0.30%		

Specific chemical identify and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality

SECTION 4) FIRST-AID MEASURES

Inhalation:

Remove source of exposure or move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor.

IF exposed or concerned: Get medical advice/attention.

Skin Contact:

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before re-use.

IF exposed or concerned: Get medical advice/attention.

Eye Contact:

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

Ingestion:

Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Give exposed individual 6 to 8 ounces of liquid.

SECTION 5) FIRE-FIGHTING MEASURES

Unusual Fire and Explosion Hazards::

Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed container may explode when exposed to extreme heat. Do not apply to hot surfaces. Never use welding or cutting torch on or near container (even when empty), because product (even residue), may ignite explosively.

Suitable Extinguishing Media:

Use dry chemical,CO2,water spray (fog) or foam.

Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Unsuitable Extinguishing Media:

Not available

Fire-fighting Procedures:

Water spray may be ineffective on fire but can protect firefighters and cool containers. Use fog nozzle if water is used. Water may be used to cool closed containers to prevent buildup and possible auto-ignition or explosion when exposed to extreme heat.

Specific Hazards in Case of Fire:

Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup, which could result in container rupture.

Special Protective Actions:

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Care should always be exercised in dust/mist areas.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure:

Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Stay upwind; keep out of low areas.

Flammable/combustible material.

ELIMINATE all ignition sources (no smokes, flares, sparks or flames in immediate area).

Cover with inert material to reduce fumes. Prevent from spreading by making a barrier with sand, earth or other containment material. Collect with absorbent, non-combustible, inert material and place in appropriate closed containers.

Use only non-sparking tools for clean-up.

Ventilate area of spill.

Recommended Equipment:

Positive pressure, full-face piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

Personal Precautions:

Avoid breathing vapor. Avoid contact with skin, eye or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Methods and Materials for Containment and Cleaning up:

Dike around spilled material, apply absorbent material and shovel into container. Remove container to safe area and seat.

Environmental Precautions:

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

SECTION 7) HANDLING AND STORAGE

General:

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Eyewash stations and showers should be available in areas where this material is used and stored.

Ventilation Requirements:

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

Use explosion-proof ventilation equipment.

Storage Room Requirements:

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container retain residue and may be dangerous.

Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them. Ground all structures, transfer containers and equipment to conform to the national electrical code. Use procedures that prevent static electrical sparks. Static electricity may accumulate and create a fire hazard.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection:

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection:

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Depending on conditions of use, additional protection may be required such as apron, arm covers, or full body suit. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated before rewearing.

Respiratory Protection:

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

In outdoor or open areas use (NIOSH/MSHA approved) mechanical filter respirator to remove solid airborne particles of over spray during spray application. In restricted ventilation areas use (NIOSH/MSHA approved) air line type respirators or hoods. Respiratory protection may also be necessary in any later manufacturing operations in which the product may become airborne in the form of vapor or dust.

Appropriate Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	NIOSH TWA (ppm)	NIOSH TWA (mg/m3)	NIOSH STEL (ppm)	NIOSH STEL (mg/m3)	NIOSH Carcinogen	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA TWA (ppm)
CARBON BLACK		3 (I)		-		3.5a			1	1		
ETHYLENE GLYCOL MONOBUTYL ETHER	20	97			5	24				1		50

Chemical Name	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Skin designation
CARBON BLACK	3.5			
ETHYLENE GLYCOL MONOBUTYL ETHER	240			1

(I) - Inhalable fraction

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Ph	ysical and Chemical Properties	
	Density	10.79102 lb/gal
	% Solids By Weight	51.16950%
	Density VOC	0.29646 lb/gal
	% VOC	2.74728%
	VOC Actual	0.29646 lb/gal
	% Solids by Vol	36.40870%
	% HAPS	0.00000%
	Density VOC Less H2O and Exempts	0.81776 lb/gal
,	Appearance	
	Odor Threshold	
	Odor Description	
	pН	
	Water Solubility	
	Flammability	
	Flash Point Symbol	
	Flash Point	
	Viscosity	
	Lower Explosion Level	
	Upper Explosion Level	

Vapor Pressure Vapor Density Freezing Point Melting Point Low Boiling Point High Boiling Point Auto Ignition Temp Decomposition Pt Evaporation Rate

SECTION 10) STABILITY AND REACTIVITY

Stability:

Material is stable at standard temperature and pressure.

Conditions to Avold:

Avoid exposure to sparks, open flame, hot surfaces, and all sources of heat and ignition. May produce hazardous fumes when heated to decomposition as in welding. Furnes may contain carbon monoxide, carbon dioxide, and oxides of nitrogen.

Hazardous Reactions/Polymerization:

Will not occur.

Incompatible Materials:

Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products:

Not available.

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation: Excessive overexposure may be harmful or fatal.

Ingestion of this product will cause irritation of the gastrointestinal tract and may cause effects resembling those from inhalation of vapor. Ingestion may cause possible kidney and liver damage.

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain nervous system damage.

Aspiration Hazard:

No Data Available

Carcinogenicity:

Suspected of causing cancer.

Germ Cell Mutagenicity:

No Data Available

Reproductive Toxicity:

No Data Available

Respiratory/Skin Sensitization:

No Data Available

Serious Eye Damage/Irritation:

No Data Available

Skin Corrosion/Irritation:

Causes mild skin irritation

Specific Target Organ Toxicity - Repeated Exposure:

No Data Available

Specific Target Organ Toxicity - Single Exposure:

No Data Available

0001333-86-4 CARBON BLACK

LC50 (ral): 6750 mg/m3 (4-hour exposure); cited as 27000 mg/m3 (27 mg/L) (1-hour exposure) (3)

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

LC50 (female ral): 450 ppm (4-hour exposure) (2)

LC50 (male rat): 486 ppm (4-hour exposure) (2)

LD50 (oral, male weanling rat): 3000 mg/kg (1) LD50 (oral, 6-week old male rat): 2400 mg/kg (1)

LD50 (oral, vearling male rat): 560 mg/kg (1)

LD50 (oral, female rat): 530 mg/kg; 2500 mg/kg (1)LD50 (oral, male mouse): 1230 mg/kg (1)

LD50 (oral, rabbit): 320 mg/kg (1)

LD50 (dermal, male rabbit): 406 mg/kg (cited as 0.45 mL/kg) (1)

Potential Health Effects - Miscellaneous

0000111-76-2 ETHYLENE GLYCOL MONOBUTYL ETHER

Can be absorbed through the skin in harmful amounts. May cause injury to the kidneys, liver, blood and/or bone marrow. Repeated overexposure may result in damage to the blood. Eye contact may cause corneal injury. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother.

0001333-86-4 CARBON BLACK

Is an IARC, NTP or OSHA carcinogen. Has shown carcinogenic activity in laboratory animals at high doses. Significance to man is unknown. The following medical conditions may be aggravated by exposure: asthma, respiratory disease. WARNING: This chemical is known to the State of California to cause cancer.

Chronic Exposure

0001333-86-4 CARBON BLACK

CARCINOGENIC EFFECTS: In 1996, the IARC reevaluated Carbon Black as a Group 2B carcinogen. This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence.

Prolonged inhalation of Carbon black can result in lung disease. Symptoms include coughing, shortness of breath, wheezing and reduced pulmonary function.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity:

No Data Available

Persistence and Degradability:

No data available

Bio-accumulative Potential:

No data available.

Mobility in Soil:

No data available.

Other Adverse Effects:

No data available.

Bio-accumulative Potential

0001333-86-4 CARBON BLACK

A relevant bioaccumulation potential of carbon black is not expected based on its insolubility in organic solvents and in water. Furthermore, since the aggregate diameter of carbon black varies between 80 nm and 810 nm, bioaccumulation of particulate carbon black is not likely oweing to the large diameter of the solid aggregate particles.

Persistence and Degradability

0001333-86-4 CARBON BLACK

Carbon Black's insolubility in water results in it not being biodegradable in any medium or by biota. It is considered persistent in the natural environment.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal:

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

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SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information:

Non-Hazardous water-based paint

IMDG Information:

Non-Hazardous water-based paint

IATA Information:

Non-Hazardous water-based paint

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0007732-18-5	WATER	37.62%	TSCA
NA-ERAEnviro	Non Hazardous Solid	23.18%	SARA312
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0001333-86-4	CARBON BLACK	0.30%	SARA312,TSCA,CA_Prop65 - California Proposition 65
0001336-21-6	AMMONIUM HYDROXIDE	0.04%	SARA313, CERCLA, SARA312, TSCA

SECTION 16) OTHER INFORMATION

Glossary:

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDGCanadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- ESE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL-Effects screening levels; HMIS- Hazardous Material Information service; LC- Lethal Concentration; LD- Lethal Dose; NFPANational Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ - Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA - Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

#Error

Revision Date:

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