SAFETY DATA SHEET

F93N2028

Section 1. Identification

Product name	: MIL-PRF-85285E Type I, Class H, Coating: Polyurethane, Aircraft & Support Equip. Brown 30279
Product code	: F93N2028
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of t	he substance or mixture and uses advised against
Paint or paint related material.	
Manufacturer	: THE SHERWIN-WILLIAMS COMPANY 101 W. Prospect Avenue Cleveland, OH 44115
Emergency telephone number of the company	: US / Canada: (800) 424-9300 Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year
Product Information Telephone Number	: US / Canada: 888-888-5593 Mexico: Not Available
Regulatory Information Telephone Number	: US / Canada: (216) 566-2902 Mexico: Not Available
Transportation Emergency Telephone Number	: US / Canada: (800) 424-9300 Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 6% (dermal), 6% (inhalation)

GHS label elements

Section 2. Hazards identification

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Flammable liquid and vapor. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. May cause cancer. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.
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 and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response	: IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or 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 or attention.
Storage	: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure. Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containary for storage.
Hazards not otherwise classified	transfer contents to other containers for storage. None known.

Section 3. Composition/information on ingredients

Substance/mixture

- : Mixture
- Other means of identification
- : Not available.

CAS number/other identifiers

Ingredient name	% by weight	CAS number
Methyl n-Amyl Ketone	≥25 - ≤33	110-43-0
Titanium Dioxide	≥10 - ≤25	13463-67-7
Amorphous Silica	≥10 - ≤25	7631-86-9
p-Chlorobenzotrifluoride	≤10	98-56-6
2,4-Pentanedione	≤5	123-54-6
Unsaturated Fatty Acids	<1	85711-46-2
Xylene, mixed isomers	<1	1330-20-7
Dibutyltin Dilaurate	≤0.3	77-58-7
Ethylbenzene	≤0.3	100-41-4
Crystalline Silica, respirable powder	≤0.3	14808-60-7
Carbon Black	≤0.3	1333-86-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

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Section 4. First aid measures

Potential acute health effe	<u>cts</u>
Eye contact	: Causes serious eye irritation.
Inhalation	 Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.
Skin contact	: Causes skin irritation. May cause an allergic skin reaction.
Ingestion	: Can cause central nervous system (CNS) depression.
Over-exposure signs/sym	<u>otoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.

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Section 5. Fire-fighting measures

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Specific hazards arising from the chemical	: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides metal oxide/oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protect	tive equipment and emergency procedures
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for co	ntainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling	
Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

Ingredient name	CAS #	Exposure limits
Methyl n-Amyl Ketone	110-43-0	ACGIH TLV (United States, 1/2021). TWA: 50 ppm 8 hours. TWA: 233 mg/m ³ 8 hours. NIOSH REL (United States, 10/2020). TWA: 100 ppm 10 hours. TWA: 465 mg/m ³ 10 hours. OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours. TWA: 465 mg/m ³ 8 hours.
Titanium Dioxide	13463-67-7	ACGIH TLV (United States, 1/2021). TWA: 10 mg/m ³ 8 hours. OSHA PEL (United States, 5/2018). TWA: 15 mg/m ³ 8 hours. Form: Total dust
Amorphous Silica	7631-86-9	NIOSH REL (United States, 10/2020). TWA: 6 mg/m ³ 10 hours.
p-Chlorobenzotrifluoride	98-56-6	None.
2,4-Pentanedione	123-54-6	ACGIH TLV (United States, 1/2021). Absorbed through skin. TWA: 25 ppm 8 hours.
Unsaturated Fatty Acids	85711-46-2	None.
Xylene, mixed isomers	1330-20-7	ACGIH TLV (United States, 1/2021). TWA: 100 ppm 8 hours.
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	percentar proc	
		TWA: 434 mg/m ³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m ³ 15 minutes. OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours. TWA: 435 mg/m ³ 8 hours.
Dibutyltin Dilaurate	77-58-7	ACGIH TLV (United States, 1/2021). Absorbed through skin. TWA: 0.1 mg/m ³ , (as Sn) 8 hours. STEL: 0.2 mg/m ³ , (as Sn) 15 minutes. NIOSH REL (United States, 10/2020). Absorbed through skin. TWA: 0.1 mg/m ³ , (as Sn) 10 hours. OSHA PEL (United States, 5/2018). TWA: 0.1 mg/m ³ , (as Sn) 8 hours.
Ethylbenzene	100-41-4	ACGIH TLV (United States, 1/2021). TWA: 20 ppm 8 hours. NIOSH REL (United States, 10/2020). TWA: 100 ppm 10 hours. TWA: 435 mg/m ³ 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m ³ 15 minutes. OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours. TWA: 435 mg/m ³ 8 hours.
Crystalline Silica, respirable powder	14808-60-7	 OSHA PEL Z3 (United States, 6/2016). TWA: 250 mppcf / (%SiO2+5) 8 hours. Form: Respirable TWA: 10 mg/m³ / (%SiO2+2) 8 hours. Form: Respirable OSHA PEL (United States, 5/2018). TWA: 50 μg/m³ 8 hours. Form: Respirable dust ACGIH TLV (United States, 1/2021). TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2020). TWA: 0.05 mg/m³ 10 hours. Form: respirable dust
Carbon Black	1333-86-4	ACGIH TLV (United States, 1/2021). TWA: 3 mg/m ³ 8 hours. Form: Inhalable fraction NIOSH REL (United States, 10/2020). TWA: 3.5 mg/m ³ 10 hours. TWA: 0.1 mg of PAHs/cm ³ 10 hours. OSHA PEL (United States, 5/2018). TWA: 3.5 mg/m ³ 8 hours.

Occupational exposure limits (Canada)

Ingredient name	CAS #	Exposure limits
Methyl n-amyl ketone	110-43-0	 CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 233 mg/m³ 8 hours. 8 hrs OEL: 50 ppm 8 hours. CA British Columbia Provincial (Canada, 1/2021). TWA: 50 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). TWA: 25 ppm 8 hours. TWA: 115 mg/m³ 8 hours. CA Quebec Provincial (Canada, 7/2019). TWAEV: 50 ppm 8 hours. TWAEV: 50 ppm 8 hours. TWAEV: 233 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 60 ppm 15 minutes. TWA: 50 ppm 8 hours.
Titanium dioxide	13463-67-7	 CA British Columbia Provincial (Canada, 1/2021). TWA: 10 mg/m³ 8 hours. Form: Total dust TWA: 3 mg/m³ 8 hours. Form: respirable fraction CA Quebec Provincial (Canada, 7/2019). TWAEV: 10 mg/m³ 8 hours. Form: Total dust CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m³ 8 hours. CA Ontario Provincial (Canada, 6/2019). TWA: 10 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m³ 15 minutes. TWA: 10 mg/m³ 8 hours.
pentane-2,4-dione	123-54-6	CA Ontario Provincial (Canada, 6/2019). Absorbed through skin. TWA: 25 ppm 8 hours. CA British Columbia Provincial (Canada, 1/2021). Absorbed through skin.
Xylene	1330-20-7	 CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 100 ppm 8 hours. 15 min OEL: 651 mg/m³ 15 minutes. 15 min OEL: 150 ppm 15 minutes. 8 hrs OEL: 434 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 1/2021). TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes. CA Quebec Provincial (Canada, 7/2019). TWAEV: 100 ppm 8 hours. STEV: 150 ppm 15 minutes. CA Quebec Provincial (Canada, 7/2019). TWAEV: 434 mg/m³ 8 hours. STEV: 150 ppm 15 minutes. STEV: 651 mg/m³ 15 minutes. CA Ontario Provincial (Canada, 6/2019). STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013).

Ethylbenzene	100-41-4	 STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 100 ppm 8 hours. 8 hrs OEL: 434 mg/m³ 8 hours. 15 min OEL: 543 mg/m³ 15 minutes. 15 min OEL: 125 ppm 15 minutes. CA British Columbia Provincial (Canada, 1/2021). TWA: 20 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). TWA: 20 ppm 8 hours. CA Quebec Provincial (Canada, 7/2019). TWAEV: 100 ppm 8 hours. STEV: 125 ppm 15 minutes. STEV: 125 ppm 15 minutes. STEV: 543 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.
Quartz	14808-60-7	CA British Columbia Provincial (Canada, 1/2021). TWA: 0.025 mg/m ³ 8 hours. Form: Respirable CA Quebec Provincial (Canada, 7/2019). TWAEV: 0.1 mg/m ³ 8 hours. Form: Respirable dust. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 0.025 mg/m ³ 8 hours. Form: Respirable particulate CA Ontario Provincial (Canada, 6/2019). TWA: 0.1 mg/m ³ 8 hours. Form: Respirable particulate matter. CA Saskatchewan Provincial (Canada, 7/2013). TWA: 0.05 mg/m ³ 8 hours. Form: respirable fraction
Carbon black	1333-86-4	CA British Columbia Provincial (Canada, 1/2021). TWA: 3 mg/m ³ 8 hours. Form: Inhalable CA Ontario Provincial (Canada, 6/2019). TWA: 3 mg/m ³ 8 hours. Form: Inhalable particulate matter. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 3.5 mg/m ³ 8 hours. CA Quebec Provincial (Canada, 7/2019). TWAEV: 3.5 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 7 mg/m ³ 15 minutes. TWA: 3.5 mg/m ³ 8 hours.

Occupational exposure limits (Mexico)

	CAS #	Exposure limits
Methyl n-Amyl Ketone	110-43-0	NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 50 ppm 8 hours.
pentane-2,4-dione	123-54-6	NOM-010-STPS-2014 (Mexico, 4/2016). Absorbed through skin. TWA: 20 ppm 8 hours.
Dibutyltin Dilaurate	77-58-7	NOM-010-STPS-2014 (Mexico, 4/2016). Absorbed through skin.
Ethylbenzene	100-41-4	TWA: 0.1 mg/m ³ , (as Sn) 8 hours. STEL: 0.2 mg/m ³ , (as Sn) 15 minutes. NOM-010-STPS-2014 (Mexico, 4/2016).
		TWA: 20 ppm 8 hours.

Appropriate engineering controls Environmental exposure controls	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	
Individual protection measu		
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.	
Eye/face protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.	
Skin protection		
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.	
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.	
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.	
Respiratory protection	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.	

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Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

<u>Appearance</u>		
Physical state	Liquid.	
Color	Not available.	
Odor	Not available.	
Odor threshold	Not available.	
рН	Not applicable.	
Melting point/freezing point	Not available.	
Boiling point, initial boiling point, and boiling range	138°C (280.4°F)	
Flash point	Closed cup: 39°C (102.2°F) [Pensky-Martens Closed Cup]	
Evaporation rate	0.75 (butyl acetate = 1)	
Flammability	Not available.	
Lower and upper explosion limit/flammability limit	Lower: 0.9% Upper: 11.4%	
Vapor pressure	0.93 kPa (7 mm Hg)	
Relative vapor density	3.5 [Air = 1]	
Relative density	1.18	
Solubility	Not available.	
Partition coefficient: n- octanol/water	Not applicable.	
Auto-ignition temperature	Not available.	
Decomposition temperature	Not available.	
Viscosity	Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt)	
Molecular weight	Not applicable.	
Aerosol product		
Heat of combustion	20.328 kJ/g	

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result		Species		Dose		Exposure	Exposure	
Methyl n-Amyl Ketone	LD50 Oral	F	Rat		1600 mg/kg		-		
p-Chlorobenzotrifluoride	LD50 Oral	F	Rat		13 g/	kg	-		
2,4-Pentanedione	LD50 Oral	F	Rat		55 m	g/kg	-		
Xylene, mixed isomers	LC50 Inhalation Gas.	F	Rat		6700		4 hours		
	LD50 Oral	F	Rat			mg/kg	-		
Dibutyltin Dilaurate	LD50 Oral	F	Rat		2071	mg/kg	-		
Ethylbenzene	LD50 Dermal	F	Rabbit		>500	0 mg/kg	-		
-	LD50 Oral	F	Rat		3500	mg/kg	-		
Carbon Black	LD50 Oral		Rat		>15400 mg/kg		-		
Irritation/Corrosion							•		
Product/ingredient name	Result	Specie	s	Score		Exposure	Observa	tion	

Product/ingredient name	Result	Species	Score	Exposure	Observation
Methyl n-Amyl Ketone	Skin - Mild irritant	Rabbit	-	24 hours 14	-
				mg	
Titanium Dioxide	Skin - Mild irritant	Human	-	72 hours 300	-
				ug l	
Amorphous Silica	Eyes - Mild irritant	Rabbit	-	24 hours 25	-
				mg	
2,4-Pentanedione	Eyes - Severe irritant	Rabbit	-	20 mg	-
	Skin - Mild irritant	Rabbit	-	488 mg	-
	Skin - Mild irritant	Rabbit	-	6 hours 11.2	-
				MH	
	Skin - Moderate irritant	Rabbit	-	48 hours 11.2	-
				MII	
	Skin - Moderate irritant	Rabbit	-	6 hours 33.6	-
		_		MII	
Xylene, mixed isomers	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5	-
		Det		mg	
	Skin - Mild irritant	Rat	-	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
	Skin Mederate irritent	Dabbit		mg 100 %	
Dibutytin Dilourate	Skin - Moderate irritant	Rabbit	-		-
Dibutyltin Dilaurate	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
	Skin - Severe irritant	Rabbit		mg 500 mg	
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	
	Skin - Mild irritant	Rabbit		24 hours 15	
			-		-
				mg	

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
Titanium Dioxide	-	2B	-
Amorphous Silica	-	3	-
p-Chlorobenzotrifluoride	-	2B	-
Xylene, mixed isomers	-	3	-
Ethylbenzene	-	2B	-
Crystalline Silica, respirable powder	-	1	Known to be a human carcinogen.
Carbon Black	-	2B	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Methyl n-Amyl Ketone	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
p-Chlorobenzotrifluoride	Category 3	-	Respiratory tract irritation
2,4-Pentanedione	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
Xylene, mixed isomers	Category 3	-	Respiratory tract irritation
Dibutyltin Dilaurate	Category 1	-	-
Ethylbenzene	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Methyl n-Amyl Ketone	Category 2	-	-
2,4-Pentanedione	Category 2	-	-
Xylene, mixed isomers	Category 2	-	-
Dibutyltin Dilaurate	Category 1	oral	-
Ethylbenzene	Category 2	-	-
Crystalline Silica, respirable powder	Category 1	inhalation	-

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely : Not available.

routes of exposure

Potential acute health effects

Eye contact

: Causes serious eye irritation.

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation.

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Section 11. Toxicological information Skin contact : Causes skin irritation. May cause an allergic skin reaction.

Ingestion : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms related to the	nysical, chemical and toxicological characteristics	
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness	
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced fetal weight increase in fetal deaths skeletal malformations	
Skin contact	: Adverse symptoms may include the following: irritation redness reduced fetal weight increase in fetal deaths skeletal malformations	
Ingestion	: Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations	
Delayed and immediate ef Short term exposure	ects and also chronic effects from short and long term exposure	
Potential immediate effects	: Not available.	
Potential delayed effects Long term exposure	: Not available.	
Potential immediate effects	: Not available.	
Potential delayed effects	: Not available.	
Potential chronic health e	iects	
Not available.		
General	: May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very lov levels.	W
Carcinogenicity	: May cause cancer. Risk of cancer depends on duration and level of exposure.	
Mutagenicity	: No known significant effects or critical hazards.	
Teratogenicity	: May damage the unborn child.	
Description of the local states of the state		

- **Developmental effects** : No known significant effects or critical hazards.
- **Fertility effects** : May damage fertility.

Numerical measures of toxicity

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Acute toxicity estimates		
Route	ATE value	
Oral	3871.5 mg/kg	
Dermal	6581.5 mg/kg	
Inhalation (gases)	15356.82 ppm	
Inhalation (vapors)	25.31 mg/l	

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
Methyl n-Amyl Ketone	Acute LC50 131000 µg/l Fresh water	Fish - Pimephales promelas	96 hours 🥄
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
2,4-Pentanedione	Acute EC50 75000 μg/l Fresh water	Crustaceans - Ceriodaphnia reticulata - Larvae	48 hours
	Acute LC50 47600 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 60100 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
Xylene, mixed isomers	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Dibutyltin Dilaurate	Chronic EC10 >2 mg/l Fresh water	Algae - Desmodesmus subspicatus	96 hours
Ethylbenzene	Acute EC50 4900 µg/l Marine water	Algae - Skeletonema costatum	72 hours
	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 6.53 mg/l Marine water	Crustaceans - Artemia sp Nauplii	48 hours
	Acute EC50 2.93 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Methyl n-Amyl Ketone	-	-	Readily 🥄
Xylene, mixed isomers	-	-	Readily
Ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Xylene, mixed isomers	-	8.1 to 25.9	low
Dibutyltin Dilaurate		2.91	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

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Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ΙΑΤΑ	IMDG
UN number	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	PAINT	PAINT	PAINT	PAINT	PAINT
Transport hazard class(es)	3	3	3	3	3
Packing group	III	111	ш		111
Environmental hazards	No.	No.	No.	No.	No.
Additional information	This product may be re-classified as "Combustible Liquid," unless transported by vessel or aircraft. Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3).	-		<u>Emergency</u> <u>schedules</u> F-E, S E
	ERG No.	ERG No.	ERG No.		
	128	128	128		

Section 14. Trans	port information
Special precautions for user	consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.
Fransport in bulk according to IMO instruments	: Not available.
	Proper shipping name : Not available.

Section 15. Regulatory information

TSCA 5(a)2 proposed significant new use rules: 2,4-Pentanedione; 1-Methyl-2-Pyrrolidone

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

International regulations

International lists	 Australia inventory (AIIC): Not determined. China inventory (IECSC): Not determined. Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined. Korea inventory (KECI): Not determined. New Zealand Inventory of Chemicals (NZIoC): Not determined. Philippines inventory (PICCS): Not determined. Taiwan Chemical Substances Inventory (TCSI): Not determined. Thailand inventory: Not determined. Turkey inventory: Not determined. Vietnam inventory: Not determined.
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Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

	Justification		
FLAMMABLE LIQUIDS - C	On basis of test data		
ACUTE TOXICITY (inhalat		Calculation method	
SKIN CORROSION/IRRIT/		Calculation method	
SERIOUS EYE DAMAGE/	EYE IRRITATION - Category 2A	Calculation method	
SKIN SENSITIZATION - C	ategory 1	Calculation method	
CARCINOGENICITY - Cate	Calculation method		
TOXIC TO REPRODUCTION		Calculation method	
SPECIFIC TARGET ORGA	Calculation method		
irritation) - Category 3			
SPECIFIC TARGET ORGA	Calculation method		
Category 3			
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2		Calculation method	
<u>History</u>			
Date of printing	: 9/18/2021		
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revision			
Date of previous issue	: 4/19/2021		
Version	: 11		
Key to abbreviations	: ATE = Acute Toxicity Estimate		

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

✓ Indicates information that has changed from previously issued version.

N/A = Not available SGG = Segregation Group UN = United Nations

BCF = Bioconcentration Factor

IBC = Intermediate Bulk Container

IATA = International Air Transport Association

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs

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Section 16. Other information

obtained from any other source.

: 4/19/2021