

Conforms to ANSI Z400.1-2010 Standard - HCS 2012 Protective Clothing General Hazard DOT Consult your supervisor or S.O.P. for special handling Image: Consult your supervisor or S.O.P. for your sup

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier	
Product name :	ACRYLITHANE ACCELERATOR
Product identity :	9905600000, 99011
Product type :	accelerator

1.2 Relevant identified uses of the substance or mixture and uses advised against

Field of application :	used only as part of two- or multi component products.
Ready-for-use mixture :	See base component or separate Product Data Sheet
Identified uses :	Industrial/Professional use
TSCA :	Unless otherwise stated. All components are listed or exempted.

1.3 Details of the supplier of the safety data sheet

Company details :	HEMPEL (USA), Inc.
	2728 Empire Central
	Dallas, TX 75235
	Phone number: 1-214-353-1600
	E-mail: hempel@hempel.com

1.4 Emergency telephone number (with hours of operation)

For Transportation Emergencies : (24 hours)	CHEMTREC: 1-800-424-9300 (Toll-free in the U.S., Canada and the U.S. Virgin Islands) 703-527-3887 For calls originating elsewhere (Collect calls are accepted). Contract number: CCN10384 To preserve the effectiveness of arrangements for providing accurate and timely emergency response information, the basic identifying information (shipper name or contract number) must be included on shipping papers. If the purchaser of this product is going to be shipping this product to other locations, the purchaser must arrange for its own Emergency Information Provider to respond to transport incidents. Hempel's 24 hour response contract does not cover non-Hempel shipments.
For all other information :	In USA toll free calling available: 1-800- 678-6641 or (936)-523-6000
(8 AM - 5 PM CST)	See Section 4 of the safety data sheet (first aid measures).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status :	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
GHS Classification :	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 SKIN SENSITIZATION - Category 1 GERM CELL MUTAGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

2.2 Label elements



SECTION 2: Hazards identification

Hazard pictograms :



Signal word :	Danger
Hazard statements :	 H226 - Flammable liquid and vapor. H302 - Harmful if swallowed. H311 + H331 - Toxic in contact with skin or if inhaled. H317 - May cause an allergic skin reaction. H341 - Suspected of causing genetic defects. H360 - May damage fertility or the unborn child. H370 - Causes damage to organs. H372 - Causes 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. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor, mist or spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.
Response :	IF exposed: Call a POISON CENTER or doctor. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.
Storage :	Store locked up. Store in a well-ventilated place. Keep cool.
Disposal :	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements :	None known.

2.3 Other hazards

Hazards not otherwise classified : None known.

SECTION 3: Composition/information on ingredients

Product definition :	
Physical state :	

Mixture Liquid.

Product/ingredient name	Identifiers	%	GHS Classification
pentane-2,4-dione	123-54-6	≥90	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3
dibutyltin dilaurate	77-58-7	≥5 - <10	EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 GERM CELL MUTAGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

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

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

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



SECTION 4: First aid measures

General :	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by to an unconscious person.	
	If breathing is irregular, drowsiness, loss of consciousness or cramps: Call 911 and give immediate treatment (first aid).	
Eye contact :	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 5 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention.	
Inhalation :	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Give nothing by mouth. If unconscious, place in recovery position and seek medical advice.	
Skin contact :	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.	
Ingestion :	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.	
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.	

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects				
Eye contact :	No known significant effects or critical hazards.			
Inhalation :	Toxic if inhaled. May cause damage to organs following a single exposure if inhaled.			
Skin contact :	Toxic in contact with skin. May cause damage to organs following a single exposure in contact with skin. May cause an allergic skin reaction.			
Ingestion :	Harmful if swallowed. May cause damage to organs following a single exposure if swallowed.			
Over-exposure signs/symptoms				
Eye contact :	No specific data.			
Inhalation :	Adverse symptoms may include the following: 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			

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician :	Not applicable.
Specific treatments :	No specific treatment.



SECTION 5: Firefighting measures

5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO ₂ , powders, water spray. Not to be used: waterjet.	
5.2 Special hazards arising from	the substance or mixture	
Hazards from the substance or mixture :	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. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.	

Hazardous combustion products : Decomposition products may include the following materials: carbon oxides metal oxide/oxides

5.3 Advice for firefighters

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. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. 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

6.1 Personal precautions, protective equipment and emergency procedures

Avoid all direct contact with the spilled material. Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.2 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). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

Stop leak if without risk. Move containers from spill area. 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). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities



SECTION 7: Handling and storage

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Product/ingredient name	Exposure limit values
pentane-2,4-dione	ACGIH TLV (United States, 3/2020). Absorbed through skin.
	TWA: 25 ppm 8 hours.
dibutyltin dilaurate	ACGIH TLV (United States, 3/2020). Absorbed through skin.
	STEL: 0.2 mg/m³, (as Sn) 15 minutes.
	TWA: 0.1 mg/m³, (as Sn) 8 hours.
	NIOSH REL (United States, 10/2016). Absorbed through skin.
	TWA: 0.1 mg/m³, (as Sn) 10 hours.
	OSHA PEL (United States, 5/2018).
	TWA: 0.1 mg/m³, (as Sn) 8 hours.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

8.2 Exposure controls

Appropriate engineering controls

Provide local exhaust and general ventilation systems to maintain airborne concentrations below OSHA, ACGIH, and manufacturer recommended exposure limits. Local exhaust ventilation is preferred because it prevents contaminant dispersion into work areas by controlling it at its source. Use local and general exhaust ventilation to effectively remove and prevent buildup of mists/vapors/fumes generated from the handling of this product.

Note: Local exhaust ventilation is designed to capture an emitted contaminant at or near its source, before the contaminant has a chance to disperse into the workplace air. General exhaust ventilation, also called dilution ventilation, is different from local exhaust ventilation because instead of capturing emissions at their source and removing them from the air, general exhaust ventilation allows the contaminant to be emitted into the workplace air and then dilutes the concentration of the contaminant to an acceptable level (e.g., to the PEL or below).

Individual protection measures

General :	Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.
Hygiene measures :	Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.
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: safety glasses with side-shields.
Hand protection :	Wear chemical-resistant gloves in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.
	Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:
	Recommended: Silver Shield / Barrier / 4H gloves, butyl rubber May be used: Viton®
	Short term exposure: nitrile rubber, neoprene rubber, natural rubber (latex), polyvinyl alcohol (PVA), polyvinyl chloride (PVC)



SECTION 8: Exposure controls/personal protection

 Body protection :
 Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.

 Respiratory protection :
 If working areas have insufficient ventilation, wear half or totally covering mask equipped with gas filter of type Organic Vapor, when grinding use particle filter of type P95, P99 or P100. When spraying use a combined filter (organic vapor / HEPA or organic vapor / P100 type). Be sure to use approved/certified respirator or equivalent. Always wear an air-fed respirator when spraying in a continuous and prolonged work situation (e.g. hood with supply of fresh or compressed air or a full face, powered air purifying filter).

 Protective clothing (pictograms) :
 Consult your supervisor or S.O.P. for special handling

Note: Application of paint products by spraying requires additional safety precautions: Full body suit, Full face respirator with air supplied.

Environmental exposure controls

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

······································	
Physical state :	Liquid.
Color :	Amber.
Odor :	Solvent-like
pH :	Testing not relevant or not possible due to nature of the product.
Melting point/freezing point :	-32.55°C This is based on data for the following ingredient: pentane-2,4-dione
Boiling point/boiling range :	Testing not relevant or not possible due to nature of the product.
Flash point :	Closed cup: 34°C (93.2°F)
Evaporation rate :	Testing not relevant or not possible due to nature of the product.
Flammability :	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
Upper/lower flammability or explosive limits :	2.4 - 11.6 vol %
Vapor pressure :	0.93 kPa This is based on data for the following ingredient: pentane-2,4-dione
Vapor density :	3.45 Air = 1 This is based on data for the following ingredient: pentane-2,4-dione
Relative density :	0.973 g/cm³
Solubility(ies) :	Soluble in the following materials: cold water and hot water.
Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature :	Testing not relevant or not possible due to nature of the product.
Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	Testing not relevant or not possible due to nature of the product.
Explosive properties :	Not available.
Oxidizing properties :	Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight
(Included excempt solvent(s)):95 % (w/w)Water % by weight :Weighted average: 0 %VOC content (Coatings) :7.71 lbs/gal (924.2 g/l)VOC content (Regulatory) :7.71 lbs/gal (924.2 g/l)TOC Content (Volatile) :Weighted average: 554 g/lSolvent Gas :Weighted average: 0.222 m³/l



SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is stable.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 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.

10.5 Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials. Slightly reactive or incompatible with the following materials: reducing materials.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
pentane-2,4-dione	LC50 Inhalation Vapor	Rat	5.1 mg/l	4 hours
	LD50 Dermal	Rat	790 mg/kg	-
	LD50 Oral	Rat	570 mg/kg	-
dibutyltin dilaurate	LD Dermal	Rabbit	>2 g/kg	-
	LD50 Oral	Rat	2071 mg/kg	-

Acute toxicity estimates

Route	ATE value	
	605.83 mg/kg	
Dermal	839.66 mg/kg	
Inhalation (vapors)	5.42 mg/l	

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
pentane-2,4-dione	Eyes - Severe irritant Skin - Moderate irritant	Rabbit Rabbit		20 milligrams 6 hours 33.6 Mililiters Intermittent
dibutyltin dilaurate	Eyes - Moderate irritant Skin - Severe irritant	Rabbit Rabbit		24 hours 100 milligrams 500 milligrams

Specific target organ toxicity (single exposure)



SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
dibutyltin dilaurate	Category 1		

Specific target organ toxicity (repeated exposure)

	Product/ingredient name	Category	Route of exposure	Target organs
C	dibutyltin dilaurate	Category 1	-	-

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

Sensitization : Contains dibutyltin dilaurate. May produce an allergic reaction.

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Toxic to aquatic life with long lasting effects.

When spilled, this product may act as an oil, causing a film, sheen, emulsion, or sludge at or beneath the surface of a body of water. Oils of any kind can cause: (a) drowning of waterfowl due to lack of buoyancy, loss of insulating capacity of feathers, starvation and vulnerability to predators due to lack of mobility; (b) lethal effect on fish by coating gill surfaces, preventing respiration; (c) potential fish kills resulting from alteration in biochemical oxygen demand; (d) asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom; and (e) adverse aesthetic effects of fouled shoreline and beaches.

Product/ingredient name	Result	Species	Exposure
pentane-2,4-dione	Acute LC50 60.1 mg/l	Fish	96 hours
	Acute LC50 104 mg/l	Fish	96 hours
dibutyltin dilaurate	Acute EC50 3.1 mg/l	Fish	96 hours
	Chronic EC10 >0.5 mg/l Fresh water	Algae - Scenedesmus subspicatus	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test		Result	Do	se	Inoculum
pentane-2,4-dione	OECD 301C Ready Biodegradability - Modified MITI Test (I)	>80 % - Read	dily - 28 days	-		-
Product/ingredient name	Aquatic half	f-life	Photolysis		Bi	odegradability
pentane-2,4-dione	-		-		Readily	

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
pentane-2,4-dione	0.68		low
dibutyltin dilaurate	4.44		low

12.4 Mobility in soil

Soil/water partition coefficient No known data avaliable in our database. ($K_{\rm OC}$) :

Mobility :

No known data avaliable in our database.

12.5 Other adverse effects

No known significant effects or critical hazards.



SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7 and Section 8 for additional handling information and protection of employees.

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

Transport may take place according to national regulation or DOT for transport by road and by train, IMDG for transport by sea, IATA for Air shipment. Refer to specific Dangerous Goods Transport requirements under 49CFR, ICAO and IATA.

	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
DOT Code	UN2310	PENTANE-2,4-DIONE. (dibutyltii dilaurate)		111	Yes.	The marine pollutant mark is not required when transported on inland waterways in sizes of 55 L or 56 kg or by road, rail, or inland air in non-bulk sizes.
TDG Code	UN2310	PENTANE-2,4-DIONE. (dibutyltin dilaurate)		111	Yes.	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.26-2.36 (Class 6), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.
SCT Code	UN2310	PENTANE-2,4-DIONE	3 6.1	III	Yes.	-
IMDG Code	UN2310	PENTANE-2,4-DIONE. (dibutylti dilaurate)		111	Yes.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency schedules</u> F-E, S-D
IATA Code	UN2310	PENTANE-2,4-DIONE	³ 6.1	III	Yes.	The environmentally hazardous substance mark may appear if required by other transportation regulations.

Code : Classification

PG* : Packing group

Env.* : Environmental hazards

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments

Not applicable.



SECTION 15: Regulatory information

U.S. Federal regulations :	All components are active or exem	l components are active or exempted.					
	TSCA 5(a)2 proposed significant new use rules: pentane-2,4-dione TSCA 8(a) PAIR: pentane-2,4-dione TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): All components are active or exempted. TSCA 12(b) one-time export: pentane-2,4-dione						
	Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed Clean Air Act Section 602 Class I Substances : Not listed Clean Air Act Section 602 Class II Substances : Not listed DEA List I Chemicals (Precursor Chemicals) : Not listed						
	DEA List II Chemicals (Essential Chemicals) : Not listed						
SARA 311/312 Classification :	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 SKIN SENSITIZATION - Category 1 GERM CELL MUTAGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1						
	Product/ingredient name	%	Classification				
	pentane-2,4-dione dibutyltin dilaurate	≥90 ≥5 - <10	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 3 EYE IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 GERM CELL MUTAGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1				
olale regulations .	e regulations : Connecticut Carcinogen Reporting: None of the components are listed. Connecticut Hazardous Material Survey: None of the components are listed. Illinois Chemical Safety Act: None of the components are listed. Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed. Louisiana Reporting: None of the components are listed. Louisiana Spill: None of the components are listed. Massachusetts Substances: The following components are listed: 2,4-PENTANEDIONE Massachusetts Spill: None of the components are listed. Michigan Critical Material: None of the components are listed. New Jersey Spill: None of the components are listed. New Jersey Toxic Catastrophe Prevention Act: None of the components are listed. New Jersey Hazardous Substances: The following components are listed. New Jersey Hazardous Substances: None of the components are listed. New York Hazardous Substances: None of the components are listed. New York Toxic Chemical Release Reporting: None of the components are listed. New York Toxic Chemical Release Reporting: None of the components are listed. Pennsylvania RTK Hazardous Substances: The following components are listed. Ande Island Hazardous Substances: None of the components are listed. This product does not require a Safe Harbor warning under California Prop. 65.						



SECTION 16: Other information

Remarks :	Note: In USA, consult Code of Federal Regulations, Title 29, Labor, Parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable Federal, State or local regulations that apply to safe practices in coating operations. Warning! If you scrape, sand, or remove old paint, you may release lead dust. LEAD is TOXIC.
Validation :	Validated by US - HSE Products Coordinator on 14 July 2021

GHS Classification

Procedure used to derive the classification.

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (dermal) - Category 3	Calculation method
ACUTE TOXICITY (inhalation) - Category 3	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
GERM CELL MUTAGENICITY - Category 2	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method
Hazardous Material Information System (U.S.A.)	National Fire Protection Association (U.S.A.)
Health * 4	Flammability





OECD = Organisation for Economic Co-operation and Development

EPCRA = Emergency Planning and Community Right to Know Act

DOT = United States Department of Transportation

IMDG = International Maritime Dangerous Goods

SARA = Superfund Amendments Reauthorization Act

IATA = International Air Transport Association

TDG = Transport of Dangerous Goods, Canada SCT = Transportation & Communications Ministry, Mexico

Personal Protective Equipment (PPE) shown in this section is a suggestion. Since conditions vary from one work location to another consult the facility safety & health program. Customer or end user is responsible to evaluate worker exposure conditions at the site of application and determine the appropriate PPE suitable for workers at that particular facility or location.

BCF = Bioconcentration Factor

ERG = Emergency Response Guide

Abbreviations and acronyms :

ANSI = American National Standards Institute HCS = Hazardous Communication System

TSCA = Toxic Substances Control Act

CFR = Code of federal Regulations

GHS = Globally Harmonized System of Classification and Labelling of Chemicals OSHA = United States Occupational Health and Safety Administration

NIOSH = National Institute for Occupational Safety and Health

ACGIH = American Conference of Industrial Hygienists

IARC = International Agency for Research on Cancer.

NTP = National Toxicology Program

ATE = Acute Toxicity Estimate

Notice to reader

Indicates information that has changed from previously issued version.

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.