SAFETY DATA SHEET



Date of issue/Date of revision 1 May 2016 Version 9

Product name : DFT023S DEFT DEFTHANE S/G 450 Product code : 00415111 Other means of : Not available. identification . Product type : Aerosol. Relevant identified uses of the substance or mixture and uses advised against Product use : Industrial applications. Use of the substance/ : Coating. mixture . Uses advised against : Not applicable.	Section 1. Identification				
Other means of identification : Not available. Product type : Aerosol. Relevant identified uses of the substance or mixture and uses advised against Product use : Industrial applications. Use of the substance/ mixture : Coating.					
identification Froduct type : Aerosol. Relevant identified uses of the substance or mixture and uses advised against Product use : Industrial applications. Use of the substance/ mixture : Coating.					
Relevant identified uses of the substance or mixture and uses advised against Product use : Industrial applications. Use of the substance/ mixture : Coating.					
Product use : Industrial applications. Use of the substance/ : Coating. mixture : Coating.					
Use of the substance/ : Coating. mixture					
mixture					
Uses advised against : Not applicable.					
Manufacturer : PPG Industries, Inc. One PPG Place Pittsburgh, PA 15272					
Emergency telephone : (412) 434-4515 (U.S.) number (514) 645-1320 (Canada) 01-800-00-21-400 (Mexico)					

Technical Phone Number : 1-800-441-9695 (8:00 am to 5:00 pm EST)

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 AEROSOLS - Category 1 GASES UNDER PRESSURE - Compressed gas EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS)) - Category 1
	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 29.4%

GHS label elements

Product name DFT023S DEFT DEFTHANE S/G 450

Section 2. Hazards identification

Hazard pictograms	
Signal word	: Danger
Hazard statements	 Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. Suspected of damaging fertility or the unborn child. Suspected of causing cancer. May cause drowsiness or dizziness. Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS))
Precautionary statements	
Prevention	: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Pressurized container: Do not pierce or burn, even after use.
Response	: Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. 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 attention.
Storage	: Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Store in a well-ventilated place.
Disposal	 Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: Contents under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode. Do not puncture or incinerate. Keep away from heat and direct sunlight. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.
Hazards not otherwise classified	: Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture	4	Mixture
Product name	1	DFT023S DEFT DEFTHANE S/G 450

Product name DFT023S DEFT DEFTHANE S/G 450

Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
acetone	≥20 - ≤27	67-64-1
Stoddard solvent	≥10 - ≤20	8052-41-3
propane	≥10 - ≤20	74-98-6
butane	≥10 - ≤20	106-97-8
pentan-2-one	≥5.0 - ≤10	107-87-9
Solvent naphtha (petroleum), light aliph.	≥1.0 - ≤5.0	64742-89-8
4-methylpentan-2-one	≤1.3	108-10-1
2-ethylhexanoic acid, zirconium salt	≤1.0	22464-99-9

SUB codes represent substances without registered CAS Numbers.

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 as hazardous to health or the environment and hence require reporting in this section.

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

Section 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

Eye contact	: Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
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.
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.

ects, acute and delayed
: Causes serious eye irritation.
: Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
: Defatting to the skin. May cause skin dryness and irritation.
: Can cause central nervous system (CNS) depression.
o <u>ms</u>
: Adverse symptoms may include the following: pain or irritation watering redness

Product name DFT023S DEFT DEFTHANE S/G 450

Section 4. First aid measures

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 dryness cracking 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 medical 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.

Product name DFT023S DEFT DEFTHANE S/G 450

Section 5. Fire-fighting measures

Specific hazards arising from the chemical	: Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen 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, protective 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. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. 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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment 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.

Product name DFT023S DEFT DEFTHANE S/G 450

Section 6. Accidental release measures

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). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. 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. Avoid breathing gas. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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. Empty containers retain product residue and can be hazardous.
Special precautions	: Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.
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	: Do not store above the following temperature: 35°C (95°F). Store in accordance with local regulations. Store away 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. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

<u>Control parameters</u> Occupational exposure limits

Product name DFT023S DEFT DEFTHANE S/G 450

Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
acetone	ACGIH TLV (United States, 3/2015).
	STEL: 500 ppm 15 minutes.
	TWA: 250 ppm 8 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 2400 mg/m ³ 8 hours.
	TWA: 1000 ppm 8 hours.
Stoddard solvent	ACGIH TLV (United States, 3/2015).
	TWA: 525 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 2900 mg/m ³ 8 hours.
	TWA: 500 ppm 8 hours.
propane	OSHA PEL (United States, 2/2013).
propano	TWA: 1800 mg/m ³ 8 hours.
	TWA: 1000 ppm 8 hours.
butane	ACGIH TLV (United States, 3/2015).
	STEL: 1000 ppm 15 minutes.
pentan-2-one	OSHA PEL (United States, 2/2013).
	TWA: 700 mg/m ³ 8 hours.
	TWA: 200 ppm 8 hours.
	ACGIH TLV (United States, 3/2015).
	STEL: 150 ppm 15 minutes.
Solvent naphtha (petroleum), light aliph.	None.
4-methylpentan-2-one	ACGIH TLV (United States, 3/2015).
	STEL: 75 ppm 15 minutes.
	TWA: 20 ppm 8 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 410 mg/m ³ 8 hours.
9 other how on a conduction and t	TWA: 100 ppm 8 hours.
2-ethylhexanoic acid, zirconium salt	ACGIH TLV (United States, 3/2015).
	STEL: 10 mg/m^3 , (as Zr) 15 minutes.
	TWA: 5 mg/m ³ , (as Zr) 8 hours.
	OSHA PEL (United States, 2/2013).
	TWA: 5 mg/m ³ , (as Zr) 8 hours.
Key to abbreviation	ns
A = Acceptable Maximum Peak	S = Potential skin absorption
CGIH = American Conference of Governmental Industrial Hygienists.	SR = Respiratory sensitization

ACGIH	 American Conference of Governmental Industrial Hygienists. 	SR	 Respiratory sensitization
С	= Ceiling Limit	SS	 Skin sensitization
F	= Fume	STEL	 Short term Exposure limit values
IPEL	 Internal Permissible Exposure Limit 	TD	= Total dust
OSHA	 Occupational Safety and Health Administration. 	TLV	= Threshold Limit Value
R	= Respirable	TWA	= Time Weighted Average
_			

Ζ = OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances

Consult local authorities for acceptable exposure limits.

procedures

Recommended monitoring : 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.

Product name DFT023S DEFT DEFTHANE S/G 450

Section 8. Exposure controls/personal protection

Appropriate engineering 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.
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.
Individual protection measu	res
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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection <u>Skin protection</u>	: Chemical splash goggles.
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.
Gloves	: For prolonged or repeated handling, use the following type of gloves:
	Recommended: nitrile rubber
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	 Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Product name DFT023S DEFT DEFTHANE S/G 450

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Not available.
Odor	: Characteristic.
Odor threshold	: Not available.
рН	: Not available.
Melting point	: Not available.
Boiling point	: <35°C (<95°F)
Flash point	: Closed cup: -28.89°C (-20°F)
Material supports combustion.	: Yes.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1.45% Upper: 3.5%
Evaporation rate	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.73
Density(lbs / gal)	: 6.09
Solubility	: Insoluble in the following materials: cold water.
Partition coefficient: n- octanol/water	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.21 cm²/s (>21 cSt)
Volatility	: 88% (v/v), 81.913% (w/w)
% Solid. (w/w)	: 18.087
<u>Aerosol product</u>	
Type of aerosol	: Spray
Heat of combustion	: 26.2 kJ/g

Section 10. Stability and reactivity

	United States Page: 9/16
Conditions to avoid	: When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Chemical stability	: The product is stable.
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.

Date of issue 1 May 2016

Product name DFT023S DEFT DEFTHANE S/G 450

Section 10. Stability and reactivity

Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
Hazardous decomposition products	: Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result		\$	Species	Dose	Exposure			
acetone	LC50 Inhal	ation Vapo	r F	Rat	76000 mg/m ³	4 hours			
	LD50 Derm	nal	F	Rabbit	20 g/kg	-			
	LD50 Oral		F	Rat	1.8 g/kg	-			
Stoddard solvent	LD50 Oral		F	Rat	>5 g/kg	-			
butane	LC50 Inhal			Rat	658000 mg/m³	4 hours			
pentan-2-one	LD50 Derm	nal		Rabbit	6500 mg/kg	-			
	LD50 Oral		-	Rat	1600 mg/kg	-			
4-methylpentan-2-one	LC50 Inhal	ation Vapo		Rat	32772 mg/m ³	4 hours			
	LD50 Oral			Rat	2.08 g/kg	-			
2-ethylhexanoic acid,	LD50 Derm	nal	ŀ	Rabbit	>5 g/kg	-			
zirconium salt	LD50 Oral		F	Rat	>5 g/kg	-			
Conclusion/Summary : There are no data available on the mixture itself.									
Irritation/Corrosion									
Conclusion/Summary									
Skin	: There are no data available on the mixture itself.								
Eyes	: There are	There are no data available on the mixture itself.							
Respiratory	: There are	: There are no data available on the mixture itself.							
Sensitization									
Conclusion/Summary									
Skin	: There are no data available on the mixture itself.								
Respiratory	: There are no data available on the mixture itself.								
<u>Mutagenicity</u>									
Conclusion/Summary : There are no data available on the mixture itself.									
Carcinogenicity									
Conclusion/Summary	: There are no data available on the mixture itself.								
<u>Classification</u>									
Product/ingredient name	OSHA	IARC	NTP						

Carcinogen Classification code:

Product name DFT023S DEFT DEFTHANE S/G 450

Section 11. Toxicological information

IARC: 1, 2A, 2B, 3, 4
NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen
OSHA: +
Not listed/not regulated: -

Reproductive toxicity

Conclusion/Summary	\$	There are no data available on the mixture its	elf.
--------------------	----	--	------

Teratogenicity

Conclusion/Summary : There are no data available on the mixture itself.

Specific target organ toxicity (single exposure)

Name	Category
acetone pentan-2-one Solvent naphtha (petroleum), light aliph.	Category 3 Category 3 Category 3 Category 3
4-methylpentan-2-one	Category 3

Specific target organ toxicity (repeated exposure)

Name	Category
Stoddard solvent	Category 1
propane	Category 2
butane	Category 2

Target organs

: Contains material which causes damage to the following organs: brain, central nervous system (CNS).

Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, liver, upper respiratory tract, skin, eye, lens or cornea, testes.

Aspiration hazard

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

Information on the likely routes of exposure

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	 Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	: Defatting to the skin. May cause skin dryness and irritation.
Ingestion	: Can cause central nervous system (CNS) depression.
Over-exposure signs/sy	r <u>mptoms</u>
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness

Product name DFT023S DEFT DEFTHANE S/G 450

Section 11. Toxicological information

Delayed and immediate effects Conclusion/Summary Short term exposure Potential immediate effects	 irritation dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations and also chronic effects from short and long term exposure There are no data available on the mixture itself. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and
Delayed and immediate effects Conclusion/Summary Short term exposure Potential immediate effects Potential delayed effects	 reduced fetal weight increase in fetal deaths skeletal malformations s and also chronic effects from short and long term exposure There are no data available on the mixture itself. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic
Conclusion/Summary Short term exposure Potential immediate effects Potential delayed effects	: There are no data available on the mixture itself. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic
Short term exposure Potential immediate effects Potential delayed effects	concentrations in excess of the stated occupational exposure limit 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. There is some evidence that repeated exposure to organic solvent vapors in combination with constant loud noise can cause greater hearing loss than expected from exposure to noise alone. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic
Potential immediate effects Potential delayed effects	dermal routes of exposure and eye contact.
effects Potential delayed effects	
-	: There are no data available on the mixture itself.
LUNG LENN CAPUSUIC	: There are no data available on the mixture itself.
	: There are no data available on the mixture itself.
Potential delayed effects	: There are no data available on the mixture itself.
Potential chronic health effect	
General	: Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity	: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	: No known significant effects or critical hazards.

Product name DFT023S DEFT DEFTHANE S/G 450

Section 11. Toxicological information

- **Teratogenicity Developmental effects**
- : Suspected of damaging the unborn child.
- : No known significant effects or critical hazards.
 - **Fertility effects** : Suspected of damaging fertility.

Numerical measures of toxicity Acute toxicity estimates

Route	ATE value
Oral Inhalation (gases) Inhalation (vapors)	2507.7 mg/kg 294349.6 ppm 719.5 mg/l
Inhalation (dusts and mists)	98.12 mg/l

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
acetone	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
cetone	-0.24	3	low
Stoddard solvent	3.16 to 7.06	-	high
propane	2.36	-	low
butane	2.89	-	low
pentan-2-one	0.91	-	low
4-methylpentan-2-one	1.31	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

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

> **United States** Page: 13/16

Product name DFT023S DEFT DEFTHANE S/G 450

Section 13. Disposal considerations

safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	IMDG	ΙΑΤΑ	
UN number	UN1950	UN1950	UN1950	
UN proper shipping name	AEROSOLS	AEROSOLS	Aerosols, flammable	
Transport hazard class (es)	2.1	2.1	2.1	
Packing group	-	-	-	
Environmental hazards	No.	No.	No.	
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.	
Product RQ (lbs)	22422.5	Not applicable.	Not applicable.	
RQ substances	(acetone, xylene)	Not applicable.	Not applicable.	

Additional information

DOT	 Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
IMDG	: The marine pollutant mark is not required when transported in sizes of ≤ 5 L or ≤ 5 kg.
ΙΑΤΑ	The environmentally hazardous substance mark may appear if required by other transportation regulations.

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.

Section 15. Regulatory information

United States

United States inventory (TSCA 8b) : All components are listed or exempted.

SARA 302/304

SARA 304 RQ : Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Product name DFT023S DEFT DEFTHANE S/G 450

Section 15. Regulatory information

Classification

: Fire hazard

Sudden release of pressure Immediate (acute) health hazard Delayed (chronic) health hazard

Composition/information on ingredients

Name	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
acetone	Yes.	No.	No.	Yes.	No.
Stoddard solvent	Yes.	No.	No.	Yes.	Yes.
propane	Yes.	Yes.	No.	No.	Yes.
butane	Yes.	Yes.	No.	No.	Yes.
pentan-2-one	Yes.	No.	No.	Yes.	No.
Solvent naphtha (petroleum), light aliph.	No.	No.	No.	Yes.	No.
4-methylpentan-2-one	Yes.	No.	No.	Yes.	Yes.
2-ethylhexanoic acid, zirconium salt	Yes.	No.	No.	No.	Yes.

<u>SARA 313</u>

<u>Chemical name</u>

: 4-methylpentan-2-one

CAS number 108-10-1 Concentration 0.5 - 1.5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

Additional environmental information is contained on the Environmental Data Sheet for this product, which can be obtained from your PPG representative.

California Prop. 65

Supplier notification

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

Section 16. Other information

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

Health : 2 * Flammability : 4 Physical hazards : 0 (*) - Chronic effects

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 are not required on MSDSs 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 mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)Health : 2Flammability : 4Instability : 0Date of previous issue: 1/28/2016Organization that prepared: EHSthe MSDS

Date of issue 1 May 2016

Product name DFT023S DEFT DEFTHANE S/G 450

Section 16. Other information

Key to abbreviations	: ATE = Acute Toxicity Estimate
	BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	IATA = International Air Transport Association
	IBC = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships, 1973
	as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
_	

Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.