Creosalus, Inc (Advanced ChemTech) www.AdvancedChemTech.com SAFETY DATA SHEET

Revision Date 05/11/2020

1. PRO	DUCT AND COMPANY IDENTIFICA	TION			
1.1	Product identifiers				
	Product name	: Z-Phe-OSu			
	Product Number	: ZF2426			
	Brand	: Advanced ChemTech			
	CAS-No.	: 3397-32-8			
1.2	Relevant identified uses of the	substance or mixture and uses advised against			
	Identified uses : Laboratory chemicals, Manufacture of substances				
1.3	Details of the supplier of the sa	afety data sheet			
	Company	: Čreosalus, Inc.			
		5609 Fern Valley Rd, Louisville, KY 40228 USA			
	Telephone	: +1 800-456-1403			
	Fax	: +1 502-968-1000			
1.4	Emergency telephone number	: +1 800-424-9300 Chemtrec			
2. HAZA	ARDS IDENTIFICATION				
2.1	Classification of the substance or mixture: Not a hazardous substance or mixture.				
2.2	GHS Label elements, including precautionary statements: Not a hazardous substance or mixture.				
2.3	Hazards not otherwise classified (HNOC) or not covered by GHS - none				
2 COM	POSITION/INFORMATION ON ING	PEDIENTS			
3. COM 3.1	Substances				
	Synonyms	: Z-Phenylalanine Succinimidyl Ester			
	Formula	: $C_{21}H_{20}N_2O_6$			
	Molecular Weight	: 396.38a/mole			
	CAS-No.	: 3397-32-8			
		ints mentioned in this Section, see Section 16.			
		,			
-	T AID MEASURES				
4.1		Description of first aid measures			
	General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.				
		person into fresh air. If not breathing, give artificial respiration. Consult a physician.			
	In case of skin contact: Wash off with soap and plenty of water. Consult a physician.				
	In case of eye contact: Flush eyes with water as a precaution.				
	If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.				
4.2	Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described				
	labeling (see section 2.2) and/or				
4.3	Indication of any immediate me	edical attention and special treatment needed: No data available			
5. FIRE	FIGHTING MEASURES				
5.1	Extinguishing media				
0.1	Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.				
5.2		he substance or mixture: Carbon oxides, nitrogen oxides (NOx)			
5.3		elf contained breathing apparatus for fire fighting if necessary.			
5.4	Further information: No data av				
	IDENTAL RELEASE MEASURES				
6.1	Personal Precautions, protect	ive equipment, and emergency procedure: Use personal protective equipment. Avoid dust formation			
. .	Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal				
	protection see section 8. Environmental precautions: Do not let product enter drains.				
6.2	Environmental precautions: Do	o not let product enter drains.			
6.3	Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel.				
6.4	Keep in suitable, closed containe Reference to other sections: For				
V .7					
7. HAND	DLING AND STORAGE				
7.1	Precautions for safe handling:	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust			
	ventilation at places where dust i	is formed. Normal measures for preventive fire protection. For precautions, see section 2.2.			
7.2	Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place.				
7.3	Specific end use(s): Apart from	the uses mentioned in section 1.2 no other specific uses are stipulated			
	OSURE CONTROLS/PERSONAL PR	ROTECTION			
о. Елес 8.1	Control parameters				
0.1		ontrol parameters Contains no substances with occupational exposure limit values.			
9.2	Exposure controls	uni or parameters contains no substances with occupational exposure infinit values.			
8.2		ols Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and			
		the manufe in accordance with good mutstrial hygiene and safety practice. Wash natius Delote Dreaks and			
	at the end of workday.				
	Personal protective equipment Eye/face protection Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government				
		Eye/race protection Face sheld and safety glasses use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).			
	Stanuarus such as NIOSH (US) (

Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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Body Protection Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure Do not let product enter drains.

IYSICAL AND CHEMICAL PROPERTIES					
Information on basic physical and chemical properties					
a) Appearance	Form: White to Off-White powder				
b) Odor	no data available				
c) Odor Threshold	no data available				
d) pH	no data available				
 e) Melting point/freezing point 	no data available				
f) Initial boiling point and boiling range	no data available				
g) Flash point	no data available				
 h) Evaporation rate 	no data available				
i) Flammability (solid, gas)	no data available				
 j) Upper/lower flammability or explosive limits 	no data available				
k) Vapor pressure	no data available				
I) Vapor density	no data available				
m) Relative density	no data available				
n) Water solubility	no data available				
 Partition coefficient: n- octanol/water 	no data available				
p) Auto-ignition temperature	no data available				
 q) Decomposition temperature 	no data available				
r) Viscosity	no data available				
 s) Explosive properties 	no data available				
t) Oxidizing properties	no data available				
Other safety information:	no data available				

10. STABILITY AND REACTIVITY

9. PH 9.1

9.2

10.1 Reactivity: No data available

10.2 Chemical stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions: No data available

10.4 Conditions to avoid: No data available

10.5 Incompatible materials: Strong oxidizing agents

10.6 Hazardous decomposition products: Other decomposition products - no data available. In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects 11.1

Acute toxicity: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitization: No data available Germ cell mutagenicity: No data available

Carcinogenicity:

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1

- Toxicity: No data available Persistence and degradability: No data available 12.2
- Bioaccumulative potential: No data available 12.3
- 12.4 Mobility in soil: No data available
- Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted 12.5
- 12.6 Other adverse effects: No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

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Additional Information: RTECS: Not available

14. TRANSPORT INFORMATION DOT (US) Not dangerous goods IMDG Not dangerous goods IATA Not dangerous goods **15. REGULATORY INFORMATION** SARA 302 Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. SARA 313 Components SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. SARA 311/312 Hazards: Acute Health Hazard Massachusetts Right to Know Components: No components are subject to the Massachusetts Right to Know Act. Pennsylvania Right to Know Components Z-Phe-OSu CAS-No. **Revision Date** 3397-32-8 New Jersey Right to Know Components Z-Phe-OSu **Revision Date** CAS-No. 3397-32-8

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

HMIS Rating	
Health hazard:	0
Chronic Health Hazard:	
Flammability:	0
Physical Hazard	0
NFPA Rating	
Health hazard:	0
Fire Hazard:	0
Reactivity Hazard:	0

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. CreoSalus, Inc. shall not be liable for any damage resulting in the handling or from contact with the above product.