Safety Data Sheet

Product name:

Sofnofil

Document N°: LB01-00408 Issue: 3 Revision date: 03 July 2023



According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

SECTION I	IDENTIFICATION OF SU	JBSTANCE / PREPARATION AND OF THE COMPANY					
1.1	Product identifier	Sofnofil (impregnated activated alumina)					
1.1	UFI no.	333-POFR-G004-GVRE					
1.2	Relevant identified uses of the substance or mixture and uses advised against	Relevant identified uses: An odour absorbent for industrial air purification (e.g., in paper mills, sewage treatment) Sectors of use, industrial uses: Uses of substances as such or in preparations at industrial sites. Product category: PC3 Air care products Process Category: PROC 26 Handling of solid inorganic substance at ambient temperature PROC 9 Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14 Tabletting, compression, extrusion, pelletisation, granulation PROC 5 Mixing or blending in batch processes for formulation of preparations and articles (Multistage and/or significant contact) Uses advised against: None Known Reason why uses advised against: no data					
1.3	Details of the supplier of the safety data sheet	Molecular Products Ltd, Parkway, Harlow Business Park, Harlow, Essex, CM19 5FR, UK +44 (0)1279 445111 (1) sds@molprod.com (1) Only available during office hours 0900 – 1700 GMT					
1.4	Emergency telephone number	+44 (0) 1279 445111 (office hours) +44 (0)1865 407333 (out of hours, English speaking) China (NRCC): +86 532 8388 9090Mexico: +52 555 004 8763, Chile: +56 225 829 336, Brasil: +55 11 3197 5891					

SECTION 2	HAZARDS IDE	NTIFICATION						
2.1	Classification of the substance or mixture							
2.1.1	Classification ac	Classification according to Regulation (EC) No 1272/2008 (CLP)						
2.1.2	See section 16 f	See section 16 for full text of H statements						
2.2	Labelling elemer	its						
2.2.1	Labelling in acco	ordance with EC Regulation No 1272/2008 (CLP/GHS)						
	Pictogram		Signal word	DANGER				
	Hazard statements	H315: Causes skin irritation H318: Causes serious eye damage H361d: Suspected of damaging fertility or the unborn child H373: May cause damage to organs through pro-longed or repeated exp H411: Toxic to aquatic life with long lasting effects	posure					
	Precautionary statements	P260: Do not breathe dust/fume/gas/mist/vapours/spray. P264: Wash hands thoroughly after handling. Precautionary P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing						
2.3	Other hazards			<u>.</u>				
		tance potassium permanganate. irritation of skin and eyes. Sofnofil	LB01-00408 / Issue 3	/ Page of 8				

This mixture/ product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3	COMPOSITION / INFORMATION ON INGREDIENTS					
	Chemical characterisation					
	Chemical name	CAS-No	EC no.	Classification	Concentration	
	Aluminium oxide	1344-28-1	215-619-6	Not classified	> 80%	
	Potassium permanganate	7722-64-7	231-760-3	Ox. Sol. 2 H272 Acute Tox. 4 H302 Skin Corr. IC, H314 Repr. 2 H361d STOT RE 2 H373 Aquatic Acute 1 H400 Aquatic Chronic 1 H410	< 6%	
	Sodium carbonate	497-19-8	207-838-8	Eye Irrit. 2, H319	<5%	

SECTION 4	FIRST AID MEASURES				
4.1	Description of measure	S			
	General information	In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.			
	Inhalation	Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.			
	Skin contact	Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners. If skin irritation occurs: Get medical advice/attention.			
	Eye contact	If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.			
	Ingestion	If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.			
4.2	Most important effects/symptoms	The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.			
4.3	Immediate/special treatment	IF exposed or concerned: Get immediate medical advice/attention. Information to medics: Bring this safety data sheet or the label from this product.			

SECTION 5	FIRE FIGHTING MEASU	RES
5.1	Extinguishing media	Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.
5.2	Special hazards	Product releases oxygen when heated strongly which can intensify a fire. Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire extinguishing water to enter the sewage system and nearby surface waters. If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are: Carbon oxides (CO / CO2) Some metal oxides.
5.3	Advice for fire fighters	Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice. Remove product away from fire, if possible. Use water to keep fire exposed containers cool. Remove remnants of extinguishing agents in accordance with the law.

SECTION 6	ACCIDENTAL RELEASE MEASURES				
6.1	Personal precautions, protective equipment and emergency procedures	Avoid contact with the product. Wear protective equipment. Do not breathe dust.			
6.2	Environmental precautions	Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.			
6.3	Methods and material for containment and cleaning up	Collect mechanically and dispose in suitable containers. Dispose contaminated material as waste according to section 13. Ensure adequate ventilation. When released in larger quantiles occurs, inform appropriate authorities.			
6.4	Reference to other sections	See section 7 for information on safe handling. See section 13 "Disposal considerations" on handling of waste. See section 8 "Exposure controls/personal protection" for protective measures.			

SECTION 7	HANDLING AND STORAGE				
7.1	Precautions for safe handling	Prevent formation of dust. Any deposit of dust which cannot be avoided must be removed regularly. During work, do not eat, drink or smoke. Do not breathe dust. Use PPE specified in section 8. Maintain good personal hygiene. Follow valid regulations on health and safety.			
7.2	Conditions for safe storage, including any	Must be stored in a cool and well-ventilated area, away from possible sources of ignition. Recommended storage material: Keep only in original packaging.			

	incompatibilities	Storage temperature: Dry, cool and well-ventilated Incompatible materials: Water Keep away from heat, sparks and open flames
7.3	Specific end use(s)	This product should only be used for applications quoted in section 1.2.

SECTION 8	EXPOSURE CONTROLS / PERSONAL PROTECTION									
8.1	Workplace	Exposure Lin	nits (WELs) ha	ave been assign	ed by the	e HSE	(EH40/2020)			
	LTEL (8-ho	ur TWA)	10	mg/m³				Data for inh	Data for inhalable aluminium oxide dust	
	LTEL (8-ho	ur TWA)	4 r					Data for res	pirable aluminium	oxide dust
	LTEL (8-ho	ur TWA)	0.5					Data for Mai compounds	nganese and its ind (as Mn) dust	organic
		carcinogenic					suspected of cau kic for reproducti		cial Affairs and En	nployment
	Mixture									
	DNELs									
	Sofnofil		W	orkers				General J	oopulation	
	Route of exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic		Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic
			Not	lot required		No data	No data	No data	0.02 mg/kg bw/day (Human)	
	Inhalation	No data	No data	No data	No d	lata	No data	No data	0.03 mg/kg bw/day (Human)	No data
	Dermal	No data	No data	0.03 mg/kg bw/day (Human)	I.25 mg/kg bw/day (Human)		No data	No data	0.03 mg/kg bw/day (Human)	0.2 mg/kg bw/day (Human)
	PNECs									
	Environmer	ntal protectio	n target			PNEC				
	Aqua (Frest	n water)				0.00006 mg/L (STP= 1.64 mg/L)				
	Aqua (inter	mittent relea	se)			0.0006 mg/L				
	Freshwater	sediments				No d	No data			
	Marine wat	er				No d	lata			
	Marine sedi	iments				No d	lata			
	Food chain					Nop	ootential for bioad	cumulation		
	Microorgan	isms in sewag	ge treatment			No data				
	Soil (agricul	ture)				No data				
	Air					No d	lata			

Substance name		Potassium perm	anganate	nganate					
EC number		231-760-3		CAS number	7722-64-7				
DNELs									
		Wo	rkers			Cons	umers		
Route of exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic	
Oral		Not re	equired		No data	No data	No data	No data	
Inhalation	Low hazard (No threshold derived)	Low hazard (No threshold derived)	Low hazard (No threshold derived)	0.2 mg/m ³	Medium hazard (No threshold derived)	Low hazard (No threshold derived)	Medium hazard (No threshold derived)	0.039 mg/m ³	
Dermal	No data	No data	No data	No data	Medium hazard (No threshold derived)	No data	Medium hazard (No threshold derived)	No data	
PNECs									
Environme	ntal protection	target		PNEC	PNEC				
Fresh wate	r, single exposu	re		60 ng/L	60 ng/L				
Intermitten	t release (fresh	water), single exp	osure	600 ng/L	600 ng/L				
Freshwater	sediments			No exposure	No exposure expected				
Marine water				No data	No data				
Marine sed	iments			No exposure	No exposure expected				

	Food chain		No	data		
	Microorganisms in sew	age treatment	1.64	mg/L		
	Soil (agriculture)		No	exposure of soil expected		
	Air		No	hazard identified		
	Substance name	Sodium Carbonate				
	EC number	207-838-8		CAS number 497-19-8		
	DNELs			· · · ·		
		Workers		General population		
	Route of exposure	Long term-local effects		Long term-local effects		
	Inhalation	10 mg/m ³		5 mg/m ³		
8.2	Exposure controls					
	Appropriate engineering controls	Structural measures to prevent exp Organisational measures to preven Technical measures to prevent exp	oosure: t expo osure:	Local exhaust ventilation.		
	Personal protection equipment	Observe normal hygiene standards for handling chemicals Wash hands before breaks and after work Avoid raising dust. Wear personal protective equipment appropriate to the task (see below) Use only CE marked protective equipment				
	Eye and face			elds conforming to EN166 Use equipment for eye protection tested		
	protection	and approved under appropriate go				
	Skin protection	 Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (withouching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Nitrile glove protective gloves thickness 0.4mm, breakthrough time (min.) >480 needs to satisfy the specifications of Regulation (EU) 2016/425 and the standards EN 374. Body protection, impervious clothing. Take off contaminated clothing and wash it before reuse. The typ protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 				
	Respiratory protection			ory protection ABEK-P2 (EU EN 143) respirator cartridges. Use pproved under appropriate government standards such as CEN		
	Thermal hazards	reduce the temperature.		n become hot and heat water to boiling point. Flood with water to		
	Environmental exposure controls	Measures to avoid environmental exposure: Keep damming materials near the workplace. If possible, collect spillage during work. Appropriate technical measures: Do not recirculate outlet air that contains the substances.				
8.1.3	Exposure limits at intended use	Not available.				
8.2	Exposure controls			d food. Take off immediately all contaminated clothing. Was sh hands during breaks and at end of work. Avoid contact with the		

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES							
9.1	Basic physical and chemical properties							
	Physical form	Solid	Colour	Purple (brown after use)				
	Odour	Odourless	рН	Not determined				
	Boiling pt/range	Not determined	Melting pt/range	Not determined				
	Flash point	Not applicable-inorganic material	Relative density	3.3 g/cm ³				
	Water solubility	Slight. Potassium permanganate will leach out to give purple/brown colour	Odour threshold	Not applicable				
	Evaporation rate	Not applicable	Flammability	The material is not combustible				
	Explosion limits	Not applicable	Vapour pressure	23hPa (20°C)				
	Vapour density	Not applicable	Partition coeff. Log Poct/water	Not applicable-mixture of inorganic substances				
	Auto-ignition temperature	Not applicable-based on structure	Viscosity	Not applicable				
	Explosive properties	Not determined	Oxidising properties	Not determined				
	Decomposition temperature	Not determined	Particle characteristics/size	2.0-5.0 mm porous pellet				
9.2	Other information	Oxidizing properties: Product is not oxidising-test according to UN Handbook Test and Criteria Division 5.1 section 34.4.1						

SECTION 10	STABILITY AND REACTIVITY	
10.1	Reactivity	No decomposition if used according to specifications. The content of potassium permanganate is not sufficient to classify the product as an oxidising (test according to UN handbook Test Criteria Division 5.1 section 34.4.1).
10.2	Chemical stability	The product is stable under standard conditions (20 $^\circ\text{C}$, 101.3 kPa. Note section 7 "Handling and

		storage".
10.3	Hazardous reactions	In case of contact with acids, decomposition possible with carbon dioxide gas being formed.
10.4	Conditions to avoid	Contact with oxidisable material and temperatures > 190°C
10.5	Incompatible material	Oxidisable materials, water, heat, sparks and open flames
10.6	Hazardous decomposition products	The product is not degraded when used and stored as specified in section 1.

SECTION 11	TOXICOLOGICAL INF	ORMATION					
11.1	Information on hazard cl	Information on hazard classes as defined in Regulation (EC) No 1272/2008					
	Information for potassiur	Information for potassium permanganate as aluminium oxide is not classified					
	Hazard class	Method	Species	Route of exposure	Effective dose	Exposure time	Results
	Acute toxicity	LD ₅₀	Rat (female)	oral	No data	No data	>2000 mg/kg bw
		LD ₅₀	Rat (male/female)	dermal	No data	No data	>2000 mg/kg bw
	Skin corrosion/irritation	Classified as skin irritant. According to study: "Jasorb P-10: The corrositex Assay" (method OECD 43) test item was considered to be non-corrosive. Sofnofil contains less of the hazardous components and therefore also considered to be non-corrosive. Skin irritation was not tested by this method, so the mixture is classified Causes skin irritation.				us components and are	
	Serious eye damage/irritation Classified as causing serious eye damage						
Respiratory or skin sensitisation Not classified as a cont			fied as a contact allerg	en			
	Germ cell mutagenicity	Not classified as a mutagen					
	Carcinogenicity	Not classified as carcinogenic.					
	Reproductive toxicity	Suspected of damaging fertility or the unborn child.					
	Summary of evaluation of the CMR properties	Potassium permanganate is not classified as carcinogenic or mutagenic, but it is classified reprotoxic. Th study shows that overall, by weight of evidence a Repro 2 for development is proposed as self- classification for KMnO₄- also approved by the RAC and supported by ANSES CoRAP evaluation repo				osed as self-	
	STOT-single exposure	Not classi	fied				
	STOT-repeated exposure	Based on the read-across with other manganese compounds such as MnCl ₂ and MnSO ₄ , the Lead registrants proposed to change their self-classification to STOT RE 2 – H373 (brain; inhalation) considering the brain as the primary known target for manganese toxicity. This classification is based on weight of evidence - several studies on human and animals reporting neurotoxic effects upon inhalation at varying level of exposure.					
	Aspiration hazard	Not classi	fied as an Aspiration h	azard			
11.2	Information on other hazards						
	Long term effects: Reproductive toxicity: This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders. This product contains reprotoxic substances, which may harm the reproductive capacity. Adverse effects include: sterility, effects on the sexual function, lowered effective fertility and dysfunctional menstrual cy The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on eye / serious eye damage. Endocrine disrupting properties: Not applicable			lisorders, delayed the reproductive ttional menstrual cycle.			

SECTION 12	ECOLOGICAL INFORMATION						
Results are for p	Results are for potassium permanganate						
12.1	Toxicity to aquatic algae	E _r C50 0.8 mg/L	Test method: EU C.3 Compartment: Freshwater Duration: 48 hours				
	Toxicity to bacteria	EC50 164 mg/L	ASRIT				
	Toxicity to Daphnia	EC ₅₀ 0.06 mg/L	Test method: EU C.2 Compartment: Freshwater Duration: 48 hours				
	Toxicity to fish	EC ₅₀ 0.47 mg/L	Test method: EU C.1 Compartment: Freshwater Duration: 72 hours				
12.2	Persistence and degradability	Using lab conditions, the half-life times of hydrolysis at pH 4, pH7 and pH9 was estimated as higher than 1 year at 25°C. It should be noted that potassium permanganate is well known as a strong oxidizing agent. Its stability would be probably considerably	Hydrolysis				

		shorter in contact with oxidizable substances as it could be the case of in real environmental conditions. The experiment with the phthalate buffer illustrates this.		
12.3	Bio- accumulative potential	Not applicable, Log Pow of the mixture not available. The study does not need to be conducted if the substance is inorganic. BCF mixture-not available		
12.4	Mobility in soil	Unlikely. Partition coefficient n- octanol/water is not available.		
12.5	PBT/vPvB assessment	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.		
12.6	Other adverse effects	This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms. This product contains substances, which may cause adverse long-term effects to the aquatic environment.		

SECTION 13	DISPOSAL CONSIDE	RATIONS
13.1	Product/ Packaging disposal	If possible, recycle to supplier or approved recycling company. If not (e.g., designated as waste), dispose of in accordance with national and local authority regulations, e.g. The Hazardous Waste (England & Wales) Regulations 2005. Material is a special waste under UK legislation. Treat empty containers in the same way as the product. If possible, wash out thoroughly and recycle
	Waste treatment- relevant information	Product is covered by the regulations on hazardous waste. HP 5 - Specific Target Organ Toxicity (STOT)/Aspiration Toxicity HP 8 – Corrosive HP 10 – Toxic for reproduction HP 14 – Ecotoxic. Dispose of contents/container to an approved waste disposal plant. Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste. Fresh product-Irritant-HP 4, ecotoxic -HP14. Spent product- Once product is spent, all of the KMnO ₄ is converted to MnO ₂ .
	EWC code	IS 00 00 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED IS 02 03 Absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in IS 02 02 IS 02 02* Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances IS 01 I0* Packaging containing residues of or contaminated by dangerous substances
	Sewage disposal- relevant information	See above
	Other disposal recommendations	Packaging containing residues of the product must be disposed of similarly to the product. Fresh product- Irritant-HP4, Ecotoxic-HP14

SECTION 14	TRANSPORT INFORMAT	ION			
14.1	United Nations number (ADR, IMDG, IATA)	UN 3077	14.2	Proper shipping name (ADR, IMDG, IATA)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (POTASSIUM PERMANGANATE)
14.3	Transport class(s) (ADR, IMDG, IATA)	9	14.4	Packing group (ADR, IMDG, IATA)	Ш
14.5	Environmental hazards (ADR, IMDG, IATA)	The product should not be marked as a marine pollutant	14.6	Special procedures (ADR, IMDG, IATA)	
14.7	Transport in bulk	Not applicable	14.8	Classification code M7	Ems F-A, S-F
Additional information	These substances when carried in single or combination packaging's containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR/IMDG/IATA provided the packaging's meet the general provisions of 4.1.1.1, 4.1.1.2, 4.1.1.4 - 4.1.1.8 (ADR, IMDG) / 5.0.2.4.1, 5.0.2.6.1.1, 5.0.2.8 (IATA) ADR / See Table A, Section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport. IMDG / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport. This product is within scope of the regulations of transport of dangerous goods.				

SECTION 15	REGULATORY INFORMATION		
15.1	Safety, health and environmental regulations/legislat environmental regulations/legislat		
		Sofnofil LB01-00408 / Issue 3 / Page 6 of 8	

	ion specific for the substance or mixture	Demands for specific education: No specific requirements. SEVESO - Categories / dangerous substances: E2 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 200 tonnes / (upper tier): 500 tonnes
		Regulation on drug precursors: potassium permanganate is included (Subcategory 2B) Sources: Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work. Working Conditions Act 1998 and latest Working Conditions Decree of 01-01-2021. Major Accident Hazards Decree 2015. Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste. Council Regulation (EC) No 273/2004 on drug precursors. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).
		Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
15.2	Chemical safety assessment	No

SECTION 16	OTHER INFORMATIO	ON		
	Further information	The SDS has been revised in ac	cordance with EC Regu	lation 1272/2008 (CLP)
		Complies with COSHH Regular	tions	
	Hazard statements ref	erred to in sections 2-15		
	H272	May intensify fire; oxidiser	H373	May cause damage to the brain through prolonged or repeated exposure by inhalation.
	H302	Harmful if swallowed	H400	Very toxic to aquatic life
	H314	Causes severe skin burns and eye damage	H410	Toxic to aquatic life with long lasting effects.
	H361d	Suspected of damaging the unborn child	H319	Causes severe eye irritation
	The full text of identified uses as mentioned in section I	Handling of solid inorganic subs preparation into small containe compression, extrusion, pelletis	tances at ambient temp rs (dedicated filling line, sation, granulation PRO	or in preparations at industrial sites PROC 26 = erature PROC 9 = Transfer of substance or including weighing) PROC 14 = Tabletting, C 5 = Mixing or blending in batch processes for d/or significant contact) PC 3 = Air care products.
	Abbreviations and acronyms	ADR = The European Agreeme Acute Toxicity Estimate BCF = Européenne (European conform No. 1272/2008] CSA = Chemic Effect Level EINECS = European Inventory statement = CLP-specific Hazar System of Classification and Lak (IARC) IATA = International A International Maritime Dangero MARPOL = International Conv Protocol of 1978. ("Marpol" = 1 Development PBT = Persistent The Regulations concerning the Registration Number SCL = A RE = Specific Target Organ Tox Exposure TWA = Time weight	ent concerning the Inter Bioconcentration Facto nity) CLP = Classificatio cal Safety Assessment C of Existing Commercial d statement EWC = Eu belling of Chemicals IAR ir Transport Association us Goods LogPow = Io ention for the Preventio marine pollution) OECE biological Carriage specific concentration Ii kicity - Repeated Expose ed average UN = United of biological materials V	nal Carriage of Dangerous Goods by Inland Waterway national Carriage of Dangerous Goods by Road ATE = or CAS = Chemical Abstracts Service CE = Conformité in, Labelling and Packaging Regulation [Regulation (EC) SR = Chemical Safety Report DMEL = Derived Minimal chemical Substances ES = Exposure Scenario EUH ropean Waste Catalogue GHS = Globally Harmonized C = International Agency for Research on Cancer n IBC = Intermediate Bulk Container IMDG = garithm of the octanol/water partition coefficient on of Pollution From Ships, 1973 as modified by the D = Organisation for Economic Co-operation and oxic PNEC = Predicted No Effect Concentration RID = of Dangerous Goods by Rail RRN = REACH mit SVHC = Substances of Very High Concern STOT- ure STOT-SE = Specific Target Organ Toxicity - Single d Nations UVBC = Unknown or variable composition, OC = Volatile Organic Compound vPvB = Very
	Additional information	given by Regulation (EC) No. 12 environmental hazards are in ad 1272/2008 (CLP). According to irreversible effects on the eye ad by OECD on the eye and dange OECD method 435 (In vitro M the test it was evaluated as a no therefore the risks are evaluated 2.14 Oxidising solids Properties section 34.4.1-not classified. 3.1 Acute Toxicity Calculation 3.2 Skin Irritation According to was considered to be NON-CC considered to be non-corrosive an irritant. 3.3 Serious eye damage/Eye irrit 4.1 Hazardous to the aquatic en	272/2008 (CLP). The cla coordance with the calcu- Annex I CLP Regulation and dangerous for the en- erous for the environme embrane Barrier Test M on-corrosive. By this me d according to the calcu- s of the mixture-test acco- method (generic concer- study "Jasorb P-10: The DRROSIVE. Sofnofil con- e. Skin irritation was not- tation Calculation meth- nvironment Summation	tards is in accordance with the calculation methods assification of the substance/mixture in regard of ulation methods given by Regulation (EC) No. on is a mixture classified as a skin irritant, with nivronment. The mixture was tested on skin corrosion by nethod for Skin Corrosion), according to the results of ethod skin irritation and the effects on the eyes and ulation method (Annex I, section 3.2 and 3.3). cording to UN Handbook Test Criteria Division 5.1 intration limits). e Corrositex Assay" (method OECD 435) the test item tains less hazardous components and are therefore t tested by this method, so the mixture is classified as od (generic concentration limits). method: Table 4.1.2: Classification of a mixture for long rations of classified components (M X 10X Chronic I)

	+ Chronic 2>= 25% = Chronic 2.	
Other Inform	tion The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products. It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification. Key literature references and sources of data REACH Regulation (consolidated version 1.6. 2015) CLP regulation (consolidated version 1. 6. 2015) ECHA Dissemination portal Safety Data Sheets of suppliers of ingredients	
Prepared by	Dr Patricia Wormald, Cambridge Environmental Assessments; patricia,wormald@cea-res.co.uk	
Date of issue	28 June 2023	
	This information is based on our present state of knowledge and is intended to describe our products from the point of view of the safety requirements. It should not be construed as guaranteeing specific problems	