

Safety Data Sheet

referring to Regulation (EC) Nr. 1907/2006 (REACH)

Name: SEDAPAC-...CL / SEDAFILL-...CL

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Modified: 05. March 2020
Print Date: 05. March 2020

SDB-Nr. 159_20200305
Version: 3.0.0

SEDAPAC-...CL / SEDAFILL-...CL

1. Identification of the substance/mixture and of the company/undertaking

1.1	Product identifier REACH Registration No.	SEDAPAC-...CL / SEDAFILL-...CL A registration number for this product is not present, because the product or its use according to Regulation (EG) Nr. 1907/2006 (REACH), Article 2 excluded from the registration, or the annual tonnage does not require a registration or the registration is scheduled for a later date
1.2	Relevant identified uses of the substance or mixture, and uses advised against	The product is used for the catalytic conversion of carbon monoxide into carbon dioxide (under the influence of oxygen) in compressed breathing air, respirators, escape mask and in cryogenic gas purification
1.3	Details of the supplier of the Safety Data Sheet	FST GmbH Im Teelbruch 106 45219 Essen Deutschland ☎ +49(0)2054-8735-0 Fax: +49(0)2054-8735-100 sds@fstweb.de
1.4	Emergency telephone number	+49(0)2054-8735-0 Office time Mo-Fr 08:00 – 17:00

2. Hazards identification

2.1	Classification according to Directive (EC) Nr. 1999/45 Classification according to Regulation (EC) Nr. 1272/2008, appendix VII	H331 + H301 H320 + H335 + H315
2.2	Labelling according to Regulation (EC) Nr. 1272/2008 Signal word Hazards statements Precautionary statements	The product is not subject to labelling according to EC-Regulation Inapplicable H331 + H 301 Harmful by inhalation and if swallowed H319 + H 335 + H315 Irritating to eyes, respiratory system and skin None
2.3	Other Hazards	The product is very adsorbent and may have a drying effect on skin

3. Composition/Information on ingredients

3.1	Substances	This product is a mixture		
3.2	Mixture	<u>Ingredient declaration according to Regulation (EC) Nr. 1272/2008:</u>		
	Dangerous substance	EG-Number	CAS No.	Weight % content
	Manganese Oxide	215-202-6	1313-13-9	70
	Copper Oxide	215-269-1	1317-38-0	30
				Classification
				H331 + H301
				H331 + H301 + H319 + H335 +

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				H315
Substance without classification can be have country-specific workplace exposure limits				
<u>Ingredient declaration according to Directive (EC) Nr. 1999/45 :</u>				
Manganese Oxide	215-202-6	1313-13-9	70	Xn- Harmful; H331 + H301
Copper Oxide	215-269-1	1317-38-0	30	Xn- Harmful; H331 + H301 Xi- Irritating; H319 + H335 + H315
Substance without classification can be have country-specific workplace exposure limits				
For full text R+S-phrases or H+P-statements see section 16				

4. First aid measures											
4.1 Description of first aid measures	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 2px;">Generell notes</td> <td style="padding: 2px;">Dust or fine powder may further irritate mucous membranes or open wounds</td> </tr> <tr> <td style="padding: 2px;">Following inhalation</td> <td style="padding: 2px;">Remove to fresh air; if breathing is difficult, administer oxygen; if symptoms persist, get medical attention</td> </tr> <tr> <td style="padding: 2px;">Following skin contact</td> <td style="padding: 2px;">Wash with water; remove contaminated clothing; wash clothing before reuse</td> </tr> <tr> <td style="padding: 2px;">Following eye contact</td> <td style="padding: 2px;">Rinse cautiously with water or eye-cleaning solution for several minutes; keeping lids wide open; if symptoms persist, get medical attention</td> </tr> <tr> <td style="padding: 2px;">Following ingestion</td> <td style="padding: 2px;">Give large quantities of water; do not induce vomiting; if symptoms persist, get medical attention</td> </tr> </table>	Generell notes	Dust or fine powder may further irritate mucous membranes or open wounds	Following inhalation	Remove to fresh air; if breathing is difficult, administer oxygen; if symptoms persist, get medical attention	Following skin contact	Wash with water; remove contaminated clothing; wash clothing before reuse	Following eye contact	Rinse cautiously with water or eye-cleaning solution for several minutes; keeping lids wide open; if symptoms persist, get medical attention	Following ingestion	Give large quantities of water; do not induce vomiting; if symptoms persist, get medical attention
Generell notes	Dust or fine powder may further irritate mucous membranes or open wounds										
Following inhalation	Remove to fresh air; if breathing is difficult, administer oxygen; if symptoms persist, get medical attention										
Following skin contact	Wash with water; remove contaminated clothing; wash clothing before reuse										
Following eye contact	Rinse cautiously with water or eye-cleaning solution for several minutes; keeping lids wide open; if symptoms persist, get medical attention										
Following ingestion	Give large quantities of water; do not induce vomiting; if symptoms persist, get medical attention										
4.2 Most important symptoms and effects, both acute and delayed	None known										
4.3 Indication of any immediate medical attention and special treatment needed	See description of first aid measures										

5. Firefighting measures					
5.1 Extinguishing media	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 2px;">Suitable extinguishing media</td> <td style="padding: 2px;">Use fire extinguishing methods suitable to surrounding conditions</td> </tr> <tr> <td style="padding: 2px;">Unsuitable extinguishing media</td> <td style="padding: 2px;">None known</td> </tr> </table>	Suitable extinguishing media	Use fire extinguishing methods suitable to surrounding conditions	Unsuitable extinguishing media	None known
Suitable extinguishing media	Use fire extinguishing methods suitable to surrounding conditions				
Unsuitable extinguishing media	None known				
5.2 Special hazards arising from the substance or mixture	None known				
5.3 Advice for firefighters	Fire residues and contaminated firefighting water must be disposed in according with official regulations				

6. Accidental release measures	
6.1 Personal precautions, protective equipment and emergency procedures	Wearing Protective clothing
6.2 Environmental precautions	Avoid release to the environment
6.3 Methods and material for containment and cleaning up	Sweep the spill area; flush contaminated floors with abundant quantities of water
6.4 Reference to other sections	Notes see section 7, 8 and 13

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7. Handling and storage		
7.1	Precautions for safe handling	Keep container tightly closed;
7.2	Conditions for safe storage, including any incompatibilities	Segregate from easily oxidizable materials, peroxides, chlorates and acids; keep container tightly closed; store in a cool and dry area; Precautions against fire and explosion: follow the general rules of industrial fire protection
7.3	Specific end use(s)	None

8. Exposure controls/personal protection			
8.1 Control parameters			
	Ingredients	Type	mg/m ³ Category
	Manganese Oxide	OEL	0,3
	Copper Oxide	OEL	0,1
		OEL	0,3 Temporary
8.2 Exposure controls			
	Appropriate engineering controls	Good dust removal	Provide sufficient mechanical and/or local exhaust
	Eye and face protection	Safety glasses	Safety glasses according to EC 166:2001
	Skin protection	Protective gloves	Wear gloves for protection against chemical hazards according to EN 388; the selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer; recommended: Nitrile rubber NBR or Butyl rubber BR, thickness $\geq 0,11$ mm; Penetration time of glove material: EN 420 – Minimum requirements for efficiency level 1 for all groups, 480 minutes penetration time according to EN 374, Part 3: Level 6; check the condition of the gloves prior to each use; preventive skin protection by use of skin-protecting agents is recommended; after use of gloves apply skin-cleaning agents and skin cosmetics
		Other protective measures	Body protection: protective work clothing
	Respiratory protection	Particulate filters P2 / FFP2	In case where high dust exposure may exist
	Thermal Hazards	Inapplicable	
	General protective and hygienic measures	The usual precautions in handling with chemicals should be comply	

9. Physical and chemical properties	
9.1 Information on basic physical and chemical properties	
Appearance (physical state, colour)	Solid, Granulate, Dark brown/Black
Odor	Odorless

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Odour threshold	Not applicable
pH	Experimental not determined
Melting point/Freezing point	Experimental not determined
Initial boiling point and boiling range	Inapplicable
Flash point	Product is not flammable
Evaporation rate	Inapplicable
Flammability (solid, gas)	Product is not flammable
Upper/lower flammability or explosive limits	Inpplicable
Vapour pressure	Inpplicable
Vapour density	Inpplicable
Relative density	Bulk density 700-800 Kg/m ³
Solubility(ies)	Insoluble
Partition coefficient: n-octanl/water	Inapplicable
Auto-ignition temperature	Product is not auto-igniting
Decomposition temperature	Starts to decompose at 530°C
Viscosity	Experimental not determined
Explosive properties	Product does is not explosive
Oxidising properties	Experimental not determined
9.2 Other information	Other physical and chemical parameters have not been determined

10. Stability and Reactivity	
10.1 Reactivity	None known
10.2 Chemical stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	None known
10.4 Conditions to avoid	Avoid contact with incompatible materials or heat (704°C)
10.5 Incompatible materials	Contact with peroxides and chlorates may cause violent reaction under certain conditions, such as elevated temperature or friction; may ignite organic material, especially organic solvents; may initiate polymerization of monomers; may form unstable acetylides in contact with acetylene
10.6 Hazerdous decomposition products	None known

11. Toxicological information			
11.1 Information on toxicological effects for mixtures			
Acute toxicity			
Manganese Oxide	Orally	LD 50	>3478 mg/kg (Rat)
	Endodermis	LD 50	422 mg/kg (Mouse)
	Intramusculary	LDL 0	45 mg/kg (Rabbit)
Copper Oxide	Orally	LD 50	278 mg/kg (Rat)
	Irritation		
		May cause skin and eye irritation	

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Corrosivity	None known
Sensitisation	None known
Repeated dose toxicity	Prolonged inhalation of manganese compounds above the TLV-TWA may cause lung irritation or central nervous system disorders; the symptoms simulate Parkinson's disease
Carcinogenicity	Experimentel not determined
Mutagenicity	Experimentel not determined
Toxicity for reproduction	Experimentel not determined
Other toxicity information	None

12. Ecological information

12.1 Toxicity			
Manganese Oxide	Fish toxicity		No data available
Copper Oxide			
	Water flea toxicity		No data available
	Algae toxicity		No data available
	Bacterial toxicity		No data available
12.2 Persistence and degradability	Experimentel not determined		
12.3 Bioaccumulative potential	Experimentel not determined		
12.4 Mobility in soil	Experimentel not determined		
12.5 Results of PBT and vPvB assessment	The mixture does not contain any substances that are assessed to be a PBT or a vPvB		
12.6 Other adverse effects	Generally not hazardous for water		

13. Disposal considerations

13.1 Waste treatment methods	The product should be disposed in line with regional, national and European legislation, and possible adaption to local conditions
Waste codes (EWC/EAK)	The disposal must be done in accordance with the waste management legislation; EWC waste codes are industry and process specific, therefore waste classification has to be done by the waste producer
Packaging	Disposal must be made according to official regulations

14. Transport information

14.1 UN-Number	Not dangerous according to EC-Regulation
14.2 UN proper shipping name	Inapplicable
14.3 Transport hazard class(es)	Inapplicable
Hazard label	Inapplicable
14.4 Packing group	Inapplicable
14.5 Environmental hazards	Inapplicable
14.6 Special precautions for user	See section 6-8
14.7 Transport in bulk according to Annex II	Inapplicable

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of MARPOL 73/78 and the IBC Code

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Hazard pictograms



Signal word

Caution

Contains

Manganese Oxide, Copper Oxide

Hazards statements

H331 + H 301 Harmful by inhalation and if swallowed
H319 + H 335 + H315 Irritating to eyes, respiratory system and skin

Precautionary statements

None

National regulations
(Germany)

WGK = nwg (VwVws Appendix I from 30.07.2005): generally not hazardous for water

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier

16. Other information

Full text of Hazard Information, Hazard Statements and Precautionary Statements, referred to the section 2 and 3

Xn Harmful
Xi Irritating
H331 Toxic if inhaled
H301 Toxic if swallowed
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H315 Causes skin irritation

Training advice

Provide adequate information, instruction and training of users

Literature references and source for data

More product information: product data sheets under www.fstweb.de

More Information

The highlighted chapter number in bold indicate chapter changes compared to the previous version.
This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
Because data, safety standards and government regulations can be changed and the use and handling provisions are beyond our control we can't guarantee the completeness or continuing accuracy of the information.
All conditions relating to storage, handling and use of the product are beyond our control. Holder and user of this product are solely responsible for these circumstances.

Abbreviations and acronyms

67/548/EWG (DSD) - Dangerous Substances Directive / Richtlinie gefährliche Stoffe; Aufgehoben durch EG Nr. 1272/2008 **1999/45/EG (DPD)** - Dangerous Preparations Directive / Richtlinie gefährliche Zubereitungen; Aufgehoben durch EG Nr. 1272/2008 **ADR** - Accord européen sur le transport des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road) / Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße **AGW** - Arbeitsplatzgrenzwert / Occupational Exposure Limit Value **AGS** - Ausschuss für Gefahrstoffe / Committee for Hazardous substances **Allg. Staubg** - Allgemeiner Staubgrenzwert / General dust limit **Alveo** - Alveolengängige Fraktion / Respirable fraction **AND** - Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) / Verordnung über die internationale Beförderung gefährlicher Güter im Schiffsverkehr **a.n.g.** - anderweitig nicht genannt / not elsewhere defined **AVV** - Abfallverzeichnis-Verordnung (Verordnung über das Europäische Abfallverzeichnis) / Waste Catalogue Ordinance **BAW** - Betriebsanweisung / Working instruction **CAS** - Chemical Abstracts Service / Internationaler Bezeichnungsstandard für chemische Stoffe **DNEL** - Derived No Effect Level / Abgeleitetes Null-Effekt-Niveau **EC50** - mittlere akute effektive Konzentration / Median acute effective concentration **EG**

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Nr. 648/2004/EG - Regulation on Detergents / Verordnung über Detergenzien / **EG Nr. 790/2009** - Regulation on Classification, Labelling, and Packaging of Substances and Mixtures / Verordnung über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen und zur Änderung der Richtlinie EG Nr. 1272/2008 **EG Nr. 1272/2008 (CLP)** - Regulation on Classification, Labelling, and Packaging of Substances and Mixtures / Verordnung über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen und zur Änderung der Richtlinie EG Nr. 1907/2006 auch **GHS** Verordnung - Globally Harmonized System of Classification and Labeling of Chemicals genannt **EG Nr. 1907/2006 (REACH)** - Registration, Evaluation, Authorisation of Chemicals / Registrierung, Bewertung und Zulassung von Chemikalien **EINECS** - European Inventory of Existing Commercial Chemical Substances / Europäisches Verzeichnis der im Handel erhältlichen Stoffe (Altstoffe) **ELINCS** - European List of Notified Chemical Substances / Europäisches Verzeichnis der auf dem Markt vorhandenen chemischen Stoffe (Neustoffe) **EN 166:2001** - Persönlicher Augenschutz / Personal eye protection **EN 374** - Schutzhandschuhe gegen Chemikalien und Mikroorganismen / Protective gloves against chemicals and microorganisms **EN 388** - Schutzhandschuhe gegen mechanische Risiken / Protective gloves against mechanical risks **EN 420** - Schutzhandschuhe – Allgemeine Anforderungen und Prüfverfahren / Protective gloves – General requirements and test methods **ESIS** - European chemical substances information system / Europäisches Informationssystem für chemische Stoffe **EAK/EWC** - Europäischer Abfallkatalog / European Waste Catalogue **Erzeugnis** - Gegenstand, der bei der Herstellung eine spezifische Form, Oberfläche oder Gestalt erhält, die in größerem Maße als die chemische Zusammensetzung seine Funktion bestimmt / article - means an object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition **FFP1 / P1** - Einweg / Atemschutzmasken für feste gesundheitsschädliche fibrogene Partikel und flüssige Aerosole bis zum 4-fachen der maximalen Arbeitsplatzkonzentration / Disposable / Respirator for solid harmful fibrogenic particles and liquid aerosols up to 4-fold maximum Occupational Exposure Limit Value **FFP2 / P2** - Einweg / Atemschutzmasken für feste und rauchförmige, mindergiftige Partikel sowie flüssige Aerosole bis zum 10-fachen der maximalen Arbeitsplatzkonzentration / Disposable / Respirator for solid and smoke-like, less toxic particles and liquid aerosols up to 10-fold maximum Occupational Exposure Limit Value **FFP3 / P3** - Einweg / Atemschutzmasken für feste, giftige Partikel sowie flüssige Aerosole bis zum 30-fachen der maximalen Arbeitsplatzkonzentration / Disposable / Respirator for solid, toxic particles and liquid aerosols up to 30-fold maximum Occupational Exposure Limit Value **GHS** – siehe EG Nr. 1272/2008 / see EG Nr. 1272/2008 **GefStoffV** - Gefahrstoffverordnung / Ordinance on Hazardous Substances, Germany **Gemisch** - Gemenge, Gemische oder Lösungen, die aus zwei oder mehr Stoffen bestehen / mixture - means a mixture or solution composed of two or more substances **HZVA** – Herstellung, Zubereitung, Vertrieb, Anwendung / production, preparation, distribution, usage **IMDG** - International Maritime Code for Dangerous Goods / Gefahrgutkennzeichnung für gefährliche Güter im Schiffsverkehr **IARC** – International Agency for Research on Cancer / Internationale Agentur für Krebsforschung **IBC** - International Bulk Chemical Code (Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk) / Vorgaben für die Beförderung gefährlicher Chemikalien und gesundheitsschädlicher Flüssigkeiten als Massengut in der Seeschifffahrt **IUCLID** - International Uniform Chemical Information Database / International einheitliche Datenbank für Informationen über chemische Stoffe **LC50** - mittlerer letale Konzentration / Lethal Concentration to 50% of a test population **LD50** - mittlere letale Dosis / Lethal Dose to 50% of a test population **MAK** - maximale Arbeitsplatzkonzentration / Maximum Occupational Exposure Limit Value **MARPOL 73/78** - Annex II of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto / Internationales Übereinkommen zur Verhütung der Meeresverschmutzung durch Schiffe **NOEC** - no observed effects concentration / höchste Konzentration eines Stoffes **NOEL** - no observed effects level / höchste Dosis eines Stoffes **OECD** - Organisation for Economic Co-operation and Development / Organisation für wirtschaftliche Zusammenarbeit und Entwicklung **OSHA** – Occupational Safety and Health Administration / Arbeitsschutzbehörde des Vereinigten Staaten **PBT** - potentially persistent, bioaccumulative and toxic / persistent, bioakkumulierend und toxisch **PEC** – predicted environmental concentration / Vorausgesagte wahrscheinliche Konzentration **PEL** – (OSHA) Permissible Exposure Limit / Zulässige Kontaktgrenze der OSHA **PNEC** – predicted no-effect concentration / Vorausgesagte auswirkungslose Konzentration **ppm** - parts per million / Teile von einer Million **RID** - Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) / Verordnung über die internationale Eisenbahnbeförderung gefährlicher Güter **SDB** – Sicherheitsdatenblatt / **SDS** – Safety Data Sheet **Stoff** - chemisches Element und seine Verbindungen in natürlicher Form oder gewonnen durch ein Herstellungsverfahren / substance - means a chemical element and its compounds in the natural state or obtained by any manufacturing process **TG (401)** - Test Guideline (401) / Test Richtlinie (4019) **TLV-TWA** - Threshold Limit Values-Time Weighted Average (American Conference of Governmental Hygienists, 1999) / die zeitgewichtige Durchschnittskonzentration für einen normalen 8-Stunden-Tag und eine 40-Stunden-Woche, der fast alle Arbeiter wiederholt, Tag für Tag, ausgesetzt sein dürfen, ohne negative Auswirkungen zu erleiden / the time-weight average concentration for a normal 8-hour workday and a 40-hour week, which almost all workers repeatedly, day after day, may be exposed without suffering adverse effects) **TRGS 900** - Technische Regel für Gefahrstoffe (Arbeitsplatzgrenzwerte) / Technical rules for hazardous substances (Occupational Exposure Limit Value) **TRGS 510** – Lagerung von Gefahrstoffen in ortsbeweglichen Behältern / Storage of hazardous substances in nonstationary containers **vPvB** - potentially very persistent and very bioaccumulative / besonders persistent und bioakkumulierend **VwVwvs** - Allgemeine Verwaltungsvorschrift zur Änderung der Verwaltungsvorschrift wassergefährdender Stoffe / General administrative regulation to amend the administrative regulation of water endangering substances **WEL** - Workplace Exposure Limits **WHG** – Wasserhaushaltsgesetz / Federal Water Act **WGK** - Wassergefährdungsklasse / Water Hazard Class

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