Tylose HS 250 YG4 Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 22/12/2017 Version: 5.0

SDS No: 10896-0101



SECTION 1: Identification of the	substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Substance
Substance name	: Tylose HS 250 YG4
Product code	: HEC_R
1.2. Relevant identified uses of the s	substance or mixture and uses advised against
1.2.1. Relevant identified uses Use of the substance/mixture	: Rheological Additive Special applications Coating material Chemical for use in construction
1.2.2. Uses advised against Restrictions on use	: There is no information available on applications that are not advised
1.3. Details of the supplier of the sat	ety data sheet
Manufacturer SE Tylose GmbH & CO. KG Rheingaustr. 190 - 196 65203 Wiesbaden - Germany T + 49 611 962 6309	Informing department Customer Service / Sales

SECTION 2: Hazards identification	
2.1. Classification of the substance or mixtu	re
Classification according to Regulation (EC) No. 12 Not classified	272/2008 [CLP]
Adverse physicochemical, human health and env No additional information available	ironmental effects
2.2. Label elements	
Handle in accordance with good industrial hygiene ar	nd safety practice.
2.3. Other hazards	
Other hazards not contributing to the classification	: Dust may form explosive mixture in air.
PBT	: According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.
vPvB	: According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.
SECTION 3: Composition/information o	n ingredients

3.1. Substances			
Comments	: A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006.		
Name	: Tylose HS 250 YG4		
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Cellulose, 2 - hydroxyethyl ether, retarded	(CAS-No.) 9004-62-0	> 88	Not classified
Glyoxal	(CAS-No.) 107-22-2 (EC-No.) 203-474-9 (EC Index-No.) 605-016-00-7 (REACH-no) 01-2119461733-37	< 0,01	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Muta. 2, H341

STOT SE 3, H335

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 SDS No: 10896-0101 Comments : When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us Full text of H-statements: see section 16 3.2. Mixtures Not applicable SECTION 4: First aid measures 4.1. Description of first aid measures : Remove person to fresh air and keep comfortable for breathing. Call a doctor. First-aid measures after inhalation First-aid measures after skin contact : Wash skin with plenty of water. : Rinse immediately with plenty of water, also under the eyelids. Consult an ophtalmologist if First-aid measures after eye contact irritation persists. First-aid measures after ingestion : Rinse mouth. If symptoms persist, call a physician. 4.2. Most important symptoms and effects, both acute and delayed Symptoms/effects after skin contact : May cause sensitisation of susceptible persons by skin contact. Symptoms/effects after eye contact : May cause eye irritation. 4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically. SECTION 5: Firefighting measures 5.1. Extinguishing media Suitable extinguishing media : Sand. Alcohol resistant foam. Chemical powder. Carbon dioxide. Water spray. Unsuitable extinguishing media : No data available. 5.2. Special hazards arising from the substance or mixture Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO, CO2). 5.3. Advice for firefighters Protection during firefighting : Self-contained breathing apparatus. SECTION 6: Accidental release measures 6.1. Personal precautions, protective equipment and emergency procedures : Avoid dust formation. Do not breathe dust. Forms slippery surfaces with water. General measures 6.1.1. For non-emergency personnel Emergency procedures : Ventilate spillage area. 6.1.2. For emergency responders Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". 6.2. Environmental precautions Large amounts of the product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters. 6.3. Methods and material for containment and cleaning up : Shovel or sweep up and put in a closed container for disposal. Avoid dust formation. Methods for cleaning up Other information : Dispose of materials or solid residues at an authorized site. 6.4. Reference to other sections Refer to protective measures listed in Sections 7 and 8. For further information refer to section 13. SECTION 7: Handling and storage

7.1. Precautions for safe handling		
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. Avoid dust formation. Dust may form explosive mixture in air. Keep away from sources of ignition - No smoking.	
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage conditions	: Material is hygroscopic. Protect from atmospheric moisture and water.	
Information on mixed storage	: No special storage requirements.	
7.3. Specific end use(s)		
Rheological Additive. Special applications. Coating material. Chemical for use in construction.		

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

: Obey TLV for common dust, if applicable

8.2. Exposure controls

Additional information

Appropriate engineering controls:

Ensure good ventilation of the work station. Avoid dust formation.

Hand protection:

Not required for normal conditions of use. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer

Eye protection:

Not required for normal conditions of use

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Device	Filter type	Condition	Standard
Breathing apparatus with filter	Type P1	Short term exposure	

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke when using this product. Wash hands immediately after handling the product. Do not breathe dust.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Physical state	: Solid	
Appearance	: Powder.	
Colour	: whitish	
Odour	: characteristic	
Odour threshold	: No data available	
рН	: 5.5 - 8 10g/l	
Relative evaporation rate (butylacetate=1)	: Not specifically applicable	
Melting point	: Not specifically applicable	
Freezing point	: Not specifically applicable	
Boiling point	: Not specifically applicable	
Flash point	: Not specifically applicable	
Auto-ignition temperature	: > 120 °C	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapour pressure	: Not specifically applicable	
Relative vapour density at 20 °C	: Not specifically applicable	
Relative density	: Not specifically applicable	
Density	: 1.1 - 1.5 g/cm³ 20 °C	
Solubility	: Water: > 10 g/l @ 20°C	
Log Pow	: < 0	
Viscosity, kinematic	: Not specifically applicable	
Viscosity, dynamic	: Not specifically applicable	
Explosive properties	: Product is not explosive. Dust may form explosive mixture in air.	
Oxidising properties	: No data available	
Lower explosive limit (LEL)	: 30 g/m³	
9.2. Other information		
Minimum ignition energy	: > 10 mJ	
Bulk density	: 200 - 600 g/l	

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Conbustion class	: 5
Smoulder temperature	: 280 °C
pmax	: 10 bar
Dust explosion category	: ST1
KSt	: < 200 bar*m/s
Ignition temperature	: > 460 °C

SECTION 10: Stability and reactivity
10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.
10.4. Conditions to avoid
No decomposition if stored normally.
10.5. Incompatible materials
Strong oxidizing agent.
10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological inf	ormation	
11.1. Information on toxicological	effects	
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	
Tylose HS 250 YG4		
LD50 oral rat	> 2000 mg/kg OECD 404	

Glyoxal (107-22-2)	
LD50 oral	200 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	2.44 mg/l/4h
Skin corrosion/irritation	: Not classified
	pH: 5.5 - 8 10g/l
Serious eye damage/irritation	: Not classified
	pH: 5.5 - 8 10g/l
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Other information	: When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

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Tylose HS 250 YG4		
LC50 fish 1	> 500 mg/l (OECD 203 method)	
EC50 other aquatic organisms 1	> 1000 mg/l (OECD 209 method)	
Glyoxal (107-22-2)		
LC50 fish 1	86 mg/l	
12.2. Persistence and degradability		
Tylose HS 250 YG4		
Persistence and degradability	Product is biodegradable. Does not affect the functioning of waste-water treatment plan In case of loss of large quantities, advice local authorities.	
Chemical oxygen demand (COD)	< 1500 mg/g	

12.3. Bioaccumulative potential

Tylose HS 250 YG4	
Log Pow	< 0
Bioaccumulative potential	Not potentially bioaccumulable.

Glyoxal (107-22-2)		
Log Pow	-1.15	
12.4. Mobility in soil		
No additional information available		
12.5. Results of PBT and vPvB assessment		
No additional information available		
12.6. Other adverse effects		
Additional information	: Do not release undiluted or in higher quantities into the groundwater, sewerage or waters	

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
European List of Waste (LoW) code	: 16 03 06 - organic wastes other than those mentioned in 16 03 05

Not applicableNot applicableNot applicableNot applicable4.2. UN proper shipping nameNot applicableNot applicableNot applicableNot applicableNot applicableNot applicableNot applicableNot applicable4.3. Transport hazard class(es)Not applicableNot applicableNot applicableNot applicable4.4. Packing groupNot applicableNot applicableNot applicableNot applicable4.5. Environmental hazardsNot applicableNot applicableNot applicableNot applicable	ADR	IMDG	ΙΑΤΑ	ADN	RID
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	14.5. Environmental ha	zards	•		
No supplementary information available	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
	No supplementary information	on available			

Not applicable

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Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions Tylose HS 250 YG4 is not on the REACH Candidate List Tylose HS 250 YG4 is not on the REACH Annex XIV List Directive 2012/18/EU (SEVESO III)

15.1.2. National regulations

Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on the Canadian DSL (Domestic Substances List) Listed on the AICS (Australian Inventory of Chemical Substances) Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)- Directive 79/831/EEC, sixth Amendment of Directive 67/548/EEC (dangerous substances) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on KECI (Korean Existing Chemicals Inventory) Listed on VECI (Korean Existing Chemicals Inventory) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on the TCSI (Taiwan Chemical Substance Inventory) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
DOT	Department of Transport
TDG	Transportation of Dangerous Goods
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
GHS	Globally Harmonized System of Classification, Labelling and Packaging of Chemicals
IARC	International Agency for Research on Cancer
vPvB	Very Persistent and Very Bioaccumulative
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
CAS	CAS (Chemical Abstracts Service) number
IBC-Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ATE	Acute Toxicity Estimate

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CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
BCF	Bioconcentration factor
MARPOL 73/78	MARPOL 73/78: International Convention for the Prevention of Pollution From Ships
ADG	Transport of Australian Dangerous Goods
Other information	Data of sections 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities. The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge. The delivery specifications are contained in the corresponding product sheet. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Muta. 2	Germ cell mutagenicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product