Product name	STARDUR HE	3/HS 470 GRAY 5GY 6/1 г а	Code	15341870	ШЕ	
Last revision:	17.02.2020		Page: 1 of 13			
1. PRODUCT AND COMPANY IDENTIFICATION						
Product name	:	STARDUR HB/HS 470 GRA	Y 5GY 6/1 CON	/IPONENT A		
Code	:	15341870				
Main recommende	ed uses :	Coating for maintenance se	ector			
Address	:	Rodovia BR 280 - km 50 CEP 89270-000, Guaramirii	m - SC			
Telephone	:	+55 47 3276-4000				
Emergency telepho number	one :	0800 720 8000				
E-mail / site	:	tintas@weg.net www.we	eg.net			

2. HAZARD IDENTIFICATION

Mixture classification Flammable liquids	:	Category 3			
Acute toxicity (Inhalation)	:	Category 5			
Acute toxicity (Dermal)	:	Category 5			
Skin Corrosion/irritation	:	Category 2			
Classification according to NBR 14725-2/2019					

Labelling Elements



Warning phrase : Warning

	IVIAIERIA	AL SAFETT DATA SHEET - IVIS	5		
Product name	STARDUR HB/	/HS 470 GRAY 5GY 6/1	Code	15341870	ШЕ
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Hazard phrases	:	H226 Flammable liquid and v H333 May be harmful if inhal H313 May be harmful in cont H315 Causes skin irritation.	ed.		
Caution Phrases	:				
		Prevention: P210 Keep away from heat, and other ignition sources. N		s, sparks, open flan	nes
		P233 Keep container tightly of	closed.		
		P240 Ground/bond container	and receivi	ng equipment.	
		Reaction: P303+P361+P353 IF ON Sk all contaminated clothing. Rir			tely
		P304+P312 IF INHALED: doctor/physician if you feel u		OISON CENTER	or
		P312 Call a POISON CENTE	R/ doctor/if	you feel unwell.	
		P362+P364 Take off contam reuse.	inated cloth	ing and wash it bef	ore
		P370+P378 In case of fire extinguish.	: Use as cl	hapter 5 of MSDS	to
		Storage: P403+P235 Store in a well ve	entilated place	ce. Keep cool.	
		Treatmentand disposal of v P501 Dispose of contents/ MSDS.		is chapter 13 of	the
Other hazard	:	When heated above its flas toxic vapors and flames, and to an ignition source.			

3. COMPOSITION AND INFORMATION ABOUT THE INGRENDIENTS

Product type:

: Mixture

Ingrendients that contribute to danger:

Product name	name CAS No.		Concentration [%]
SOLVENT XYLENE (S)	1330-20-7	Flammable liquids , Category 3 Acute toxicity Dermal, Category 4 Acute toxicity Inhalation, Category 4	>= 20 - < 30

Product name STARDUR HB/HS 470 GRAY 5GY 6/1 Code 15341870 COMPONENT A Last revision: 17.02.2020 Page: 3 of 13 Skin Corrosion/irritation , Category 2

		Category 2	
CYCLOHEXANONE SOLVENT	108-94-1	Flammable liquids , Category 3 Acute toxicity Inhalation, Category 4	>= 1 - < 5

	4. FIRST AID MEASURES	
Inhalation	Take the victim to fresh air, keeping them rested and w breathing is irregular or has stopped, apply a respiration. Do not give anything orally. Seek m assistance immediately, bringing the product label who possible.	rtificial nedical
Contact with the skin	Remove the product with vegetal oil (cooking oil) and wash the skin thoroughly with plenty of water. Do n solvents or thinners. Seek medical attention in case irritation or other symptoms.	ot use
Contact with the eyes	Remove contact lenses, if wearing any. Flush the eye running water for at least 15 minutes, holding the e apart. Seek medical assistance immediately, bringin product label with you.	eyelids
Ingestion	Do not provoke vomiting. Consult with a doctor immedia	tely.
Most important symptoms and effects, both acute and delayed	Headaches, dizziness, fatigue and in extreme cases, l consciousness.	loss of
Notes for the doctor	Treat symptomatically. Do not induce vomiting because of aspiration of gastric contents into the lungs. Gastric is recommended when the patient ingests large qua more than 5ml of the substance in its pure form. The potential of the quantity consumed must be evalua relation to the risk of aspiration during gastric la Activated coal in solution could be useful. However, in cases the coal induces vomiting.	lavage ntities, e toxic ated in avage.

5. FIRE-FIGHTING MEASURES

Extinguishing methods not : Direct water jet.



	MATERI	IAL SAFETY DATA SHEET -	MSDS	
Product name	STARDUR HE	3/HS 470 GRAY 5GY 6/1	Code	15341870
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recommended				
Specific dangers		Flammable liquid and vap heat or ignition source. Ex rupture due to the increas subsequent explosion. Th and spread close to the g source and provoke fire of accumulation of vapours manholes, basement etc. finely divided (spray) may In case of burning of the p compounds. The inhalation damage to health.	posed packagi ed pressure wi round and it can r backspace of n depressions The vapours an form explosive product, it forms	ng to the fire may th risk of a navier than the air n move to the ignition the flames. Avoid the on the ground, nd/or the particles mixtures with the air. s carbon and nitrogen
Protective measu fire fighting team		The personnel involved contained breathing appa protection clothes.		
Specific methods		Evacuate and isolate the your back. Fight the fire to packaging of the product with safety. Chill sideway closed packaging near th from fire fighting reaches contain this water and elin regulations.	o a secure dista from the fire are s with water in f e fire. Avoid tha drains or water	nce. Remove the ea if this can be made form of fog all the t the resulting water ways. Use dikes to

6. SPILL / LEAK CONTROL PROCEDURES

Personal precautions, protective equipment and emergency procedures

For the emergency service staff	:	If specialized clothing is needed to combat the leak/spillage, Section 8 should be consulted. All precautions described in the following section must be followed.
For staff who are not part of the emergency services	:	No action should be taken that may generate danger to people without adequate training and qualifications.Understand the dangers of leaked/spilled products. Use appropriate personal protective equipment - see section 8. Evacuate surrounding areas. Isolate area and keep onlookers away. Do not touch or walk through spilled material. Eliminate all sources of ignition.Avoid breathing vapor or mist. Provide adequate ventilation if possible. Wear appropriate respiratory mask when ventilation is inadequate.In accordance with characteristics of the location and/or area and in relation to the amount of spilled/leaked product, additional emergency measures may be taken under the supervision of a trained professional.

Product name	MATERIAL SAFETY DATA SHEET - MSDS Product name STARDUR HB/HS 470 GRAY 5GY 6/1 Code 15341870					
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Environmental precautions :		Prevent the product or the water used in the service reaches waterways, channels, drains, or galleries. In case of significant spill, retain spi lled liquid with inert material such as sand or earth. In				
		approprieate, use absorbent materials such	as rags, ve	ermiculites, etc.		
Methods and mate	erials for conta	ainment and cleaning				
Large spills / leał	(s :	Understand the dangers Approaching the site with the this can be done safely. Conf the leak point for later disposa the spills site. Preferably use product. All equipment used be electrically grounded. Soa (sand, vermiculite) placing the later disposal - see chapter 13	wind from ine the spil al. Remove anti sparkli when hand ak up with same in a	Il in a dike away from local packaging from ng tools to collect the ling the product must an inert dry material	f I I I	
Small spills / leaks :		Stop the leak if this can be do tarp to prevent the spread by tools and explosion-proof equ collect the product. Place the and properly identified contain so removing them from the sp Remove the packaging from the disposal need refer to chapter	wind or rain ipment prop material co hers. Cap th ill site. Avo he spill site	 Use antifaiscantes berly grounded to llected in dry, clean he container loosened id formation of dust. 		
		Contain and collect the materi materials and non-combustible vermiculite, calcined diatomite accordance with local regulation	e, such as s e, etc. in a v	sand, earth,		

7. HANDLING AND STORAGE

Precautions for safe handling

Instructions for safe : treatment	Use individual protective equipment. Emergency showers and eye wash basins must be installed in locations of use and storage.
Precautions for safe : handling	Use appropriate personal protective equipment - see section 8; The product handling should occur in places with good natural ventilation or with the presence of local exhaust ventilation; The electrical installations must comply with the International Electrical Commission Standards (IEC), ABNT Standards (Brazilian Association of Technical Standards), taking into account the results of the classification area study for the local and/or product instalation. Use anti-sparking tools when handling the product; In transfer operations, metal containers must be used and all containers

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Product name		/HS 470 GRAY 5GY 6/1 Code 15341870		
	COMPONENT 17.02.2020	A Page: 6 of 13		
Last revision: 1	17.02.2020	Page: 6 or 13 must be properly grounded to avoid sparkling by the accumulation of static energy; Handle and use away from hot surfaces, sparks, open flames, and other sources of ignition. Do not smoke;Do not ingest. Avoid inhalation of vapors or smoke as well as avoid contact with eyes, skin and clothing; Eating and drinking should be prohibited in the area where the material is handled, stored and processed. Workers should wash their hands before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering food areas; After use keep the product in its original packaging, sealed; Empty containers may be hazardous and should be disposed of properly. Do not reuse the packaging;Emergency showers and eye washer should be installed in the use and storage places. Do not handle the product until you have read and understood all safety precautions contained in this document.		
Fire protection	:	Only use in well-ventilated locations, to prevent accumulation of vapors in explosive concentrations.All conductive elements of the system, in contact with the product, must be electrically grounded Keep away from heat and sources of ignition.Tools that do not produce sparks should be used.Do not smoke.		
Storage conditions				
Substances to be av	void :	Keep away from oxidising agents, strong acid solutions and strong alkaline solutions.		
Storage conditions	s :	The electrical installation must comply with NEC(National Electrical Code) or IEC (International Electrical Commission) standards and/or those of the ABNT (Brazilian Association of Technical Standards). The floor of the storage area must be impermeable, non-combustible and must have ditches that allow run off into the containment reservoir. Storage tanks must be surrounded by embankments and have drains in case of leakage.		
Appropriate storag conditions	e :	Store the material in covered, dry, well ventilated and identified areasKeep out of direct sunlight.Store in a closed container.		
Inappropriate stora conditions	age :	Exposed to elevated temperatures, sun and rain.Close to oxidizing agents.Close to food.Close to sources of heat and ignition.		
Materials to avoid	:	Do not store with explosive materials, flammableand/or toxic gases, oxidizing, corrosive substances, or materials that may generate spontaneous combustion.		
Secure packaging n	naterials			
Recommended pac materials	ckaging :	Amber type glass. Metal packaging		
Packaging materia avoided	Is to be :	Certain plastic materials		

8. EXPOSURE CONTROL – PERSONAL PROTECTION

The information in this chapter contain general guidelines. Chapter 1 should be consulted for any information on the recommended use of this product in different scenarios of exposure.

Engineering control measures	 Preferably use the product in adequate application cabin. In case it is not possible, provide exhaustion/ventilation enough to keep the concentration of the agents indicated
	in this section under the limits of tolerance (L.T.),
	otherwise, use adequate respiratory protection equipment.
	The engineering controls should keep the concentrations
	of gas/vapour under the limit of LEL - Lower Explosive
	Limit (see section 9). Use equipment explosion proof.

Control parameters

Occupational Exposure Limits

Name	CAS No.	TLV/TWA	TLV/STEL	TLV/TETO	Source
SOLVENT XYLENE (S)	1330-20-7	78 ppm340 mg/m ³ 100 ppm	150 ppm		NR15ACGIH
CYCLOHEXANONE SOLVENT	108-94-1	25 ppm			ACGIH

*PPM - parts of vapour or gas per million of parts of contaminated air

**MG/m³ - miligrams per cubic meter of air.

Personal protective equipmer Respiratory protection		equired In case of the concentrations are above the indicated tolerance limits, the use of appropriated mask is necessary for this goal (half-face mask or full face mask with filter to organic vapors and acid gases).
Eye protection	:	Use hermetic goggles to protect against liquid splashes.
Body and skin protection	:	It is recommended the use of apron barber type to protecting upper limbs, trunk and lower limbs in case of splash. In case of risk of static electricity generation the cloth should be antistatic, includin the apron.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Form	:	Liquid	1 466. 0 0		_
	•				
State of matter	:	Liquid			
Color	:	Gray			
Odour	:	Distinctive			
Odour limit	:	Not applicable			
рН	:	Not applicable			
Melting point	:	Data not available.			
Boiling point	:	Data not available.			
Flash Point (Open	cup) :	28 °C			
Evaporation rate	:	Data not available.			
Inflammation point	t :	Method: Data not available.			
Upper explosive li	mit :				
	•.	Data not available.			
Lower explosive li	mit :	Data not available.			
Vapor pressure		Data not available.			
Density		1,55 - 1,65 g/cm ³			
Density	•	1,00 - 1,00 g/cm			
Solubility(ies)	:	Water-insoluble			
N-octano /water pa coefficient	artition :	Data not available.			
Auto flammability	:	Data not available.			
Cinematic viscosit	y (25°C) ∶	115 - 125 UK (A+B)			
Vapor density	:	Data not available.			
Decomposition ten	nperature :				

10. STABILITY AND REACTIVITY

Reactivity	:	Presents no reactivity at room temperature and under normal conditions of use.
Chemical stability	:	Stable at room temperature and under normal conditions of use. Unstable at temperatures above the flash point.
Possibility of dangerous reactions	:	Presents no reactivity at room temperature and under normal conditions of use. None when the product is stored, applied and processed

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			correctly.			
Need to add add inhibitors	litives and	:	Not necessary.			
Conditions to av	void	:	Extreme heat and open flam	e.		
Incompatible ma	aterials	:	Do not store with explosive gases, oxidizing, corrosive s generate spontaneous comb Plastic materials soluble in X	substances, pustion.		
Dangerous prod decomposition	lucts of	:	Produces noxious gases s carbon dioxide (CO2) and ni			,

11. TOXICOLOGICAL INFORMATION

Components

SOLVENT XYLENE (S)		
Acute toxicity by oral use	: Test species DL50 Observations	Rat 4.300 mg/kg
Acute toxicity by inhalation	: Test species DL50 Observations	Rat 21,7 mg/l4 h
Acute toxicity by cutaneous use	: Test species DL50 Observations	Rabbit > 1.700 mg/kg Data not available.
Acute toxicity (other methods of administration)	: Test species DL50 LC50 Non-standard unit value	Data not available.
Corrosion/irritation of skin	: Category 2	
Serious eye damage/eye irritation	: Data not available.	
Respiratory or dermal sensitivity	: Category 1	
Mutageneses	: Data not available.	
Carcinogenicity	: Data not available.	
Toxic effects for reproduction	: Category 1C	
Specific target organ toxicity (STOT) - single exposure	: Data not available.	

	MATERI	AL	SAFETY DATA SHEET - MS	DS		
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Specific targ toxicity (STO exposure		:	Data not available.			_
Aspiration haz	zard	:	Data not available.			
CYCLOHEXA	NONE SOLVE	EN'	г			
Acute toxicit use	y by oral	:	Test species DL50 Observations	Rat 1.530 m	ng/kg	
Acute toxicit	y by	:	Test species DL50 Observations	Rat 32,1 mg	g/I	
Acute toxicit cutaneous us		:	Test species DL50 Observations	Rabbit 947 mg	/kg	
Acute toxicit methods of administratic		:	Test species DL50 LC50 Non-standard unit value	Data no	ot available.	
Corrosion/irr skin	itation of	:	Data not available.			
Serious eye of irritation	damage/eye	:	Data not available.			
Respiratory o sensitivity	or dermal	:	Data not available.			
Mutageneses	5	:	Data not available.			
Carcinogenio	ity	:	Data not available.			
Toxic effects reproduction	-	:	Data not available.			
Specific targ toxicity (STO exposure		:	Data not available.			
Specific targ toxicity (STO exposure		:	Data not available.			
Aspiration haz	zard	:	Data not available.			

12. ECOLOGICAL INFORMATION

Stability in soil

: The product easily infiltrates into the soil

Product name	STARE	STARDUR HB/HS 470 GRAY 5GY 6/1 COMPONENT A 17.02.2020			15341870	Uer
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Other toxicolog	gical	:	Data not available.			
Ecotoxicity		:	Contaminates the ground wate Detrimental to the fauna Detrimental to the flora.	∍r.		

13. DIOSPOSAL AND TREATMENT CONSIDERATIONS

Recommended methods for final disposal

Product	 Class I Waste - Dispose of in industrial landfill or a facility authorized for recycling in accordance with federal, stateor local regulations
Waste	Class I Waste - Dispose of in industrial landfill or a facility authorized for recycling in accordance with federal, stateor local regulations
Used packaging :	Clean packaging should be sent for recycling. Packaging with class I waste should be disposed of in industrial landfill or a facility authorized for recycling in accordance with federal, state or local regulations.

14. TRANSPORTATION INFORMATION

fLand		
ONU	:	1263
Class of risk	:	3
Risk number	:	30
Packaging group	:	III
Name		Paint (including coats, lacquers, enamels, colorant, gum- lacquers, varnishes, polishes, liquid fillers and liquid lacquers)
Shipping ONU	:	1263
Class of risk	:	3
Packaging group	:	III
EmS		F-E
MFAG		310
Appropriate name for dispatch		Paint (including coats, lacquers, enamels, colorant, gum- lacquers, varnishes, polishes, liquid fillers and liquid lacquers)

	MATERI	AL	. SAFETY DATA SHEET - MS	DS		
Product name	STARDUR HE	3/⊦	IS 470 GRAY 5GY 6/1	Code	15341870	Ш
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Air transport ONU			1263			
		·	1205			
Class of risk		:	3			
Packaging g	roup	:	III			
Appropriate dispatch	name for		Paint (including coats, lacqu lacquers, varnishes, polishe			s)

15. REGULATORY INFORMATION

This MSDS (Material Safety Data Sheet) was generated according to the criteria of NBR 14725/2014. (Brazilian standard that defines the GHS).

Specific Regulations for the	Federal Decree No. 2657, July 3rd, 1998.
Chemical Product.	Ordinance No. 229, May 24th, 2011 - Changes to Regulatory Standard No. 26.
	ABNT NBR 14725: 2014 - valid from 19/12/2014 -
	Amendment 1 (19/11/2014).
	Law No. 12305, August 2nd 2010 (Solid Waste National Policy).
	Decree No. 7404, December 23rd , 2010.
	Resolution ANTT N° 5.232, December 14th 2016.

16. ADDITIONAL INFORMATION

Acronyms Used:

Legenda:

CAS	Chemical Abstract Service
VO	Organic Vapors
NEC	National Eletrical code/Código Nacional de Eletricidade
IEC:	International Eletrical Commision
ABNT	Brazilian Association of Technical Standards
ACGIH	American Conference of Governmental Industrial Hygienists

PAUMAR S.A. INDÚSTRIA E COMÉRCIO – GRUPO WEG

	MATERIAL SAFETY DATA SHEET - I	VI2D2	
Product nam	ne STARDUR HB/HS 470 GRAY 5GY 6/1	Code	15341870
	COMPONENT A		
Last revision	: 17.02.2020	Page: 13	6 of 13
TLV	Threshold Limit Values		
TLV/TWA	Time Weighted Average		
TLV/STEL	Short Term Exposure Limit		
TLC/C:	Tolerance Limit - Ceiling Value		
EPI:	Individual Protective Equipment		
CA	Approval Certificate		
PPRA	Environmental Risk Prevention Program		
NR	Regulatory Standard		
NFPA	National Fire Protection Agency		
mmHg	Millimeters of mercury - pressure unit		
DL50	Lethal Dose average		
CL50	Lethal Concentration average		
ppm	Parts per million		
N.d	Not available		
A+B	Viscosity of the mixture of component A + com	ponent B	

Important information, but not specifically described in the previous sections: This MSDS was prepared based on current knowledge about the handling of the product under normal conditions of use, according to the application specified on the packaging and recommended usage in Section 1 of this MSDS. Any other use of the product involving its combination with other materials, as well as forms of use different from those indicated, are the user's responsibility. The company advises that the handling of any chemical substance requires prior knowledge of its hazards by the user. In the workplace it is responsibility of the company user of the product to provide training of its employees and contractors about the possible risks arising from exposure to the chemical.

We reserve the right to change the information contained in this document without prior notice, due to the improvement and continuous evolution of the product and technical knowledge.

References

: Data not available.

Vertical lines in the left hand margin indicate changes from the current version