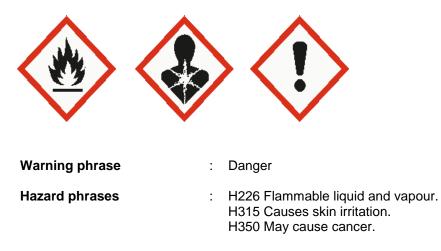
Product name	STARDUR DF A	475 GRAY N6,5 COMPONENT	Code	12241903
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	1. PROD	UCT AND COMPANY IDENTIFIC	ATION	
Product name	:	STARDUR DF 475 GRAY N6,5	COMPONE	NT A
Code	:	12241903		
Main recommende	ed uses :	Coating for maintenance sec	tor	
Address	:	Rodovia BR 280 - km 50 CEP 89270-000, Guaramirim	- SC	
Telephone	:	+55 47 3276-4000		
Emergency telepho number	one :	0800 720 8000		
E-mail / site	:	tintas@weg.net www.weg.	net	

2. HAZARD IDENTIFICATION

:	Category 3
:	Category 2
:	Category 1B
	:

Classification according to NBR 14725-2/2009

Labelling Elements



			/5			
Product name	STARDUR DF	475 GRAY N6,5 COMPONENT	Code	12241903	ШЕ	
	А					
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Caution Phrases	:	Prevention: P201 Obtain special instructio	ons before us	Se.		
		P202 Do not handle until all s and understood.	afety precau	utions have been read		
		P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.				
		P233 Keep container tightly closed.				
		P240 Ground/bond container	and receivin	g equipment.		
		Reaction: P303+P361+P353 IF ON SK all contaminated clothing. Rins				
		P308+P313 IF exposed or con	ncerned: Ca	ll a doctor.		
		P362+P364 Take off contami reuse.	nated clothi	ng and wash it before		
		P370+P378 In case of fire: extinguish.	Use as ch	apter 5 of MSDS to		
		Storage: P403+P235 Store in a well ve	ntilated plac	e. Keep cool.		
		Treatmentand disposal of w P501 Dispose of contents/o MSDS.		s chapter 13 of the		
Other hazard	:	When heated above its flash 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	CAS No.	Risck classification	Concentration [%]
SOLVENT ALKYLBENZENE	64742-95-6	Flammable liquids , Category 3 Aspiration hazard , Category 1 Specific target organ toxicity - Single exposure , Category 3 Skin Corrosion/irritation ,	>= 0,1 - < 1

STARDUR DF 475 GRAY N6,5 COMPONENT Code

Product name



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A	
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	Category 3 Germ cell mutagenicity , Category 2 Carcinogenicity , Category 1B Hazardous to the aquatic environment - Acute , Category 2 Acute toxicity Ingestion, Category 5 Specific target organ toxicity - Repeated exposure , Category 2 Aspiration hazard , Category 1

4. FIRST AID MEASURES

Inhalation :	Take the victim to fresh air, keeping them rested and warm. If breathing is irregular or has stopped, apply artificial respiration. Do not give anything orally. Seek medical assistance immediately, bringing the product label whenever possible.
Contact with the skin :	Remove the product with vegetal oil (cooking oil) and then wash the skin thoroughly with plenty of water. Do not use solvents or thinners. Seek medical attention in case of any irritation or other symptoms.
Contact with the eyes :	Remove contact lenses, if wearing any. Flush the eyes with running water for at least 15 minutes, holding the eyelids apart. Seek medical assistance immediately, bringing the product label with you.
Ingestion :	Do not provoke vomiting. Consult with a doctor immediately.
Most important symptoms : and effects, both acute and delayed	Headaches, dizziness, fatigue and in extreme cases, loss of consciousness.
2	Treat symptomatically. Do not induce vomiting because of risk of aspiration of gastric contents into the lungs. Gastric lavage is recommended when the patient ingests large quantities, more than 5ml of the substance in its pure form. The toxic potential of the quantity consumed must be evaluated in relation to the risk of aspiration during gastric lavage. Activated coal in solution could be useful. However, in some cases the coal induces vomiting.

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		5. FIRE-FIGHTING MEASURES		
Suitable extingui methods	ishing :	Water in mist form Carbon dioxide (CO2) Foam alcohol resistent Dry chemical powder		
Extinguishing more the second	ethods not :	Direct water jet.		
Specific dangers	; :	Flammable liquid and vapour. heat or ignition source. Expos rupture due to the increased p subsequent explosion. The va and spread close to the groun source and provoke fire or bac accumulation of vapours in de manholes, basement etc. The finely divided (spray) may form In case of burning of the produc compounds. The inhalation of damage to health.	ed packagin pressure with pours are ha d and it can ckspace of th pressions of vapours and n explosive r uct, it forms	g to the fire may n risk of a avier than the air move to the ignition he flames. Avoid the n the ground, d/or the particles mixtures with the air. carbon and nitrogen
Protective measu fire fighting team		The personnel involved in contained breathing apparatu protection clothes.		
Specific methods	S :	Evacuate and isolate the area your back. Fight the fire to a s packaging of the product from with safety. Chill sideways wit closed packaging near the fire from fire fighting reaches drain contain this water and elimina regulations.	ecure distant the fire areat h water in fo a. Avoid that hs or waterw	ce. Remove the a if this can be made rm of fog all the the resulting water vays. 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 -

STARDUR DF 475 GRAY N6,5 COMPONENT

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		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.			
Environmental p	recautions	 Prevent the product or the waterways, channels, drains, or galleries. spi lled liquid with inert material s approprieate, use absorbent materials such etc. 	In case of s uch as sand	significant spill, retain d or earth. In	

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Methods and materials for containment and cleaning

- Large spills / leaks : Understand the dangers leaked/spilled of products.Approaching the site with the wind from behind.Stop leak if this can be done safely. Prevent from entering holes / depressions in the floor. If this happens to provide ventilation. Confine the spill in a dike away from the leak point for later disposal. Remove local packaging from the spills site. Use anti sparkling tools and explosion-proof equipment to collect the product. All equipment used when handling the product must be electrically grounded. Soak up with an inert dry material (sand, vermiculite) placing the same in a suitable container for later disposal - see chapter 13.
- Small spills / leaks
 Stop the leak if this can be done safely.Cover up spillage in a tarp to prevent the spread by wind or rain. Use antifaiscantes tools and explosion-proof equipment properly grounded to collect the product. Place the material collected in dry, clean and properly identified containers. Cap the container loosened so removing them from the spill site. Avoid formation of dust. Remove the packaging from the spill site. If there is product disposal need refer to chapter 13

Contain and collect the material of the leak with absorbent materials and non-combustible, such as sand, earth, vermiculite, calcined diatomite, etc. in a waste container in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Instructions for safe

: Use individual protective equipment. Emergency showers and



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treatment		eye wash basins must be installed in locations of use and storage.
Precautions for handling	safe :	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 installation. Use anti-sparking tools when handling the product; In transfer operations, metal containers must be used and all containers 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 condition	ons	
Substances to b	e avoid :	Keep away from oxidising agents, strong acid solutions and strong alkaline solutions.
Storage conditi	ions :	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 sto conditions	brage :	Store the material in covered, dry, well ventilated and identified areasKeep out of direct sunlight.Store in a closed container.
Inappropriate s conditions	torage :	Exposed to elevated temperatures, sun and rain.Close to oxidizing agents.Close to food.Close to sources of heat and ignition.

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Materials to avo	id :	Do not store with explosive gases, oxidizing, corrosive s generate spontaneous combi	ubstances,		
Secure packagin	g materials				
Recommended materials	packaging :	Amber type glass. Metal packaging			
Packaging mate avoided	rials 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	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	64742-95-6	50 ppm			ACGIH
ALKYLBENZENE					

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

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

Personal protective equipment Respiratory protection	required 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).
Hand protection :	Use nitrilic gloves associated with the use of the adequate protection cream

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Eye protection	:	Use hermetic goggles to protect against liquid splashes.	
Body and skin p	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

Form	:	Liquid
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	:	Method: Data not available.
Upper explosive limit	:	Data not available.
Lower explosive limit	:	Data not available.
Vapor pressure	:	Data not available.
Density	:	1,52 - 1,62 g/cm ³
Solubility(ies)	:	Water-insoluble
N-octano /water partition coefficient	:	Data not available.
Auto flammability	:	Data not available.
Cinematic viscosity (25°C) Vapor density	:	0 - 100 UK (A+B) Data not available.

10. STABILITY AND REACTIVITY

Product name		DF 4	475 GRAY N6,5 COMPONENT	Code	12241903
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Reactivity		:	Presents no reactivity at roon conditions of use.	n temperatu	re and under normal
Chemical stabilit	у	:	Stable at room temperature use. Unstable at temperatures		
Possibility of dar reactions	ngerous	:	Presents no reactivity at roon conditions of use. None when the product is correctly.		
Need to add addi inhibitors	tives and	:	Not necessary.		
Conditions to ave	oid	:	Extreme heat and open flame		
Incompatible mat	terials	:	Do not store with explosive r gases, oxidizing, corrosive su generate spontaneous combu Plastic materials soluble in Xy	ibstances, o stion.	
Dangerous produdecomposition	ucts of	:	Produces noxious gases su carbon dioxide (CO2) and nitr		

11. TOXICOLOGICAL INFORMATION

Components SOLVENT ALKYLBENZENE

Acute toxicity by oral use	:	Test species DL50 Observations	Rat 2.908,7 mg/kg
Acute toxicity by inhalation	:	Test species DL50 Observations	Rat Data not available.
Acute toxicity by cutaneous use	:	Test species DL50 Observations	Rabbit 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 3	
Serious eye damage/eye irritation	:	Data not available.	
Respiratory or dermal sensitivity	:	Data not available.	
Mutageneses	:	Chemicals considered to induc	e heritable mutations in human

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			germ cells		
Carcinogenie	city	:	Presumed to have carcinoge	enic potenti	al for humans.
Toxic effects reproduction		:	Suspected of causing reproc development	luctive toxic	city or human
Specific targ toxicity (STC exposure		:	Passengers effects on orgar alter human function for a sh	•	
Specific targ toxicity (STC exposure	-	:	Substance based on evidence animals can probably preser human health on repeated e	nt a potentia	•

Not classified in terms of toxicity based on the data available.

12. ECOLOGICAL INFORMATION

Stability in soil	:	The product easily infiltrates into the soil
Other toxicological observations	:	Data not available.
Ecotoxicity	:	Contaminates the ground water. Detrimental to the fauna Detrimental to the flora.

13. DIOSPOSAL AND TREATMENT CONSIDERATIONS

Recommended methods for final disposal	Recommended	methods	for fi	inal	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.

MATERIAL SAFETY DATA SHEET - MSDS STARDUR DF 475 GRAY N6,5 COMPONENT Product name Code 12241903 А Last revision: 31.08.2017 Page: 11 of 13 **14. TRANSPORTATION INFORMATION** Land ONU : 1263 3 **Class of risk** : **Risk number** : 30 Packaging group : 111 Name Tinta Shipping ONU : 1263 **Class of risk** : 3 Packaging group : 111 EmS F-E MFAG 310 Appropriate name for Tinta dispatch Air transport ONU : 1263

15. REGULATORY INFORMATION

: 3

: 111

Tinta

Class of risk

dispatch

Packaging group

Appropriate name for

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

	Federal Decree No. 2657, July 3rd , 1998.
Chemical Product.	Law No. 12305, August 2nd 2010 (Solid Waste National Policy).
	Decree No. 7404, December 23rd , 2010.
	Ordinance No. 229, May 24th, 2011 - Changes to Regulatory Standard No. 26.
	ABNT NBR 14725: 2014.

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16. ADDITIONAL INFORMATION

Acronyms Used:

Product name

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
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 + component 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.

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

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