

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard Rule - 29 CFR 1910.1200 and the Canadian Hazardous Products Act



L5300b LITHOSTAR ULTRA FINISHER

SUBID:000001010737

Version 3

Print Date 12-13-2013

Revision Date 12-12-2013

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance or mixture:

Product name : L5300b LITHOSTAR ULTRA FINISHER
MSDS Number : 000001010737

1.2 Use of the substance/mixture:

Use of the Substance/Preparation : Offset plate finisher solution
Business group : GS

1.3 Company/undertaking identification

Agfa Corporation
611 River Drive
Center 3
Elmwood Park, NJ 07407
U.S.A.

Transport Emergency

Non-transportation

Call CHEMTREC : +1 800 4249300
International : +1 703 5273887

Health Emergency Phone : +1 303 6235716
Agfa Information Phone : +1 201 4402500

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GHS (Globally Harmonized System of Classification and Labelling of Chemicals)

Based on available data, the classification criteria are not met.

2.2 Label elements:

This product is non hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture related information:

Aqueous offset plate finisher solution, mainly consisting of:

3.2 Hazard ingredients:

The hazard and labelling information in this section is that of the individual ingredients. The corresponding information relative to this product as supplied is given in section 2.1.

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Hazardous components

- Potassium citrate Concentration [%] : 1.0 - 5.0
CAS-No. : 866-84-2
- Sodium nitrate Concentration [%] : 1.0 - 5.0
CAS-No. : 7631-99-4
Hazard classes : Oxidizing solids Acute toxicity Oral Serious eye irritation, Acute toxicity Oral, Serious eye irritation
Hazard categories : Category 3, Category 4, Category 2
Hazard statements : H272, H302, H319

Components with a community workplace exposure limit

This product does not contain components with a community exposure limit.

3.3 Remark:

Full text of each relevant H-phrase is listed in section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures:

- Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
- Skin contact : Wash immediately with plenty of water and soap. If symptoms persist, seek medical advice.
- Ingestion : Rinse mouth with plenty of water. Seek medical advice.
- Inhalation : Take person to fresh air. Seek medical advice.

4.2 Most important symptoms and effects:

4.3 Indication of immediate medical attention and special treatment needed:

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : All extinguishing media are suitable.

5.2 Special hazards arising from the substance or mixture:

Further information : Product is not combustible.

5.3 Advice for fire-fighters:

Special protective equipment : Firefighters should be equipped with self-contained breathing

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Air limit values (US)

We are not aware of any national exposure limit.

Air limit values (CA)

We are not aware of any national exposure limit.

Biological limit values (US)

We are not aware of any national exposure limit.

Biological limit values (CA)

We are not aware of any national exposure limit.

8.1.1.2 Additional exposure limits under the conditions of use:

8.2 Exposure controls:

Occupational exposure controls:

➤ Instruction measures to prevent exposure:

Employees should wash their hands and face before eating, drinking, or using tobacco products.

➤ Technical measures to prevent exposure:

Ensure adequate ventilation.

➤ Personal measures to prevent exposure:

Respiratory protection : Under normal conditions of use, respirator protection is not required. If respirators are used, institute a program in accordance with OSHA standard 29CFR1910.134 or Canada CSA Standard Z94.4-02.

Hand protection : Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness \geq 0.36 mm, breakthrough time $>$ 480 min), nitrile rubber (thickness \geq 0.38 mm, breakthrough time $>$ 480 min) or neoprene (thickness \geq 0.65 mm, breakthrough time $>$ 240 min). For intermittent splash protection corresponding gloves with breakthrough times $>$ 60 min can be used. Avoid gloves made of: natural latex.

Eye protection : Safety glasses.

Body Protection : Safety clothes.

Personal protective equipment : Observe normal precautions when handling chemicals.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Basic physical and chemical properties:

9.1.1 Appearance:

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State of matter : Liquid
Form : Liquid.
Color : Colourless.
Odor : Nearly odourless
Odor threshold : No data available

9.1.2 Important health, safety and environmental information:

pH (25 °C) : 6.0
Melting point/range : < 0 °C
Boiling point/range : > 100 °C
Flash point : Not combustible.
Autoignition temperature : does not ignite
Vapour pressure (20 °C) : 23.00 hPa
Relative vapour density : aqueous solution
Relative density (20 °C) : 1.050
Solubility/qualitative : Miscible with water at all ratios.
Partition coefficient (n-octanol/water) : No data available
Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Lower explosion limit : Not applicable
Upper explosion limit : Not applicable
Evaporation rate : No data available
Flammability (solid, gas) : Product is not combustible.

9.2 Other information:

VOC content : 56.6 g/l
VOC content excluding water
Ignition temperature : Not applicable

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:

Reactivity : Reacts with strong alkalis.Reacts vigorously with oxidizing agents.

10.2 Chemical stability:

Stability : The product is stable under normal conditions of storage and use.

10.3 Possibility of hazardous reactions:

Hazardous reactions : Strong oxidizing agents ,Strong bases.The product is stable under normal conditions of storage and use.

10.4 Conditions to avoid:

Conditions to avoid : Avoid temperatures above 60°C (140°F), direct sunlight and contact

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with sources of heat.

10.5 Materials to avoid:

Materials to avoid : oxidizing agents ,alkaline

10.6 Hazardous decomposition products:

Hazardous decomposition products : None

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicity data specific for individual ingredients in their pure state:

Toxicokinetics, metabolism and distribution:

- Sodium nitrate
No data available

Acute effects (toxicity tests):

➤ Acute Toxicity

- Potassium citrate

	Effect dose	Species	Value	Method
Acute oral toxicity	LD50	rat	> 2,000 mg/kg	

- Sodium nitrate

	Effect dose	Species	Value	Method
Acute oral toxicity	LD50	rat	1,267 mg/kg	Literature.
Acute oral toxicity	LD50	rat	3,500 mg/kg	OECD Test Guideline 401
Acute oral toxicity	LD50		Based on available data, the classification criteria are not met. 3,200 mg/kg	OECD Test Guideline 401
Acute oral toxicity	LD50		Based on available data, the classification criteria are not met. 3,430 mg/kg	OECD Test Guideline 401
Acute dermal toxicity	LD50	rat	> 5,000 mg/kg	OECD Test Guideline 402
Acute inhalation toxicity			Based on available data, the classification criteria are not met.	
			No data available	

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> Specific target organ toxicity (STOT):

- Sodium nitrate

Specific effects	Affected organs
Product dust may be irritating to eyes, skin and respiratory system.	

> Irritant and corrosive effects:

- Sodium nitrate

	Exposure time	Species	Evaluation	Method
Primary irritation to the skin		rabbit	No skin irritation	OECD Test Guideline 404
Irritation to eyes		rabbit	Severe eye irritation.	OECD Test Guideline 405

> Irritation to the respiratory tract:

- Sodium nitrate

No data available

> Sensitisation:

- Sodium nitrate

Species	Evaluation	Method
mouse	Non-sensitizer	Mouse local lymphoma assay.

> Aspiration hazard:

- Sodium nitrate

No data available

Sub-acute, sub-chronic and chronic toxicity

> Repeated dose toxicity:

- Potassium citrate
- Sodium nitrate

	Effect dose	Value	Exposure time	Species
				rat
Method: Literature. Based on available data, the classification criteria are not met.				

> Specific target organ toxicity (STOT):

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- Potassium citrate
 - Sodium nitrate
- No information available.

➤ **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

- **Carcinogenicity**

- Potassium citrate
- Sodium nitrate

Route of exposure	Species	Exposure time
	Method: Literature. Based on available data, the classification criteria are not met.	

- **Mutagenicity**

- Sodium nitrate
- Based on available data, the classification criteria are not met.

- **Genetic toxicity in vitro**

- Potassium citrate
- Sodium nitrate

Type	Test system	Concentration	Result
Ames test	Method: OECD Test Guideline 471.		negative

- **Genetic toxicity in vivo**

- Potassium citrate
- Sodium nitrate

Route of exposure	Species	Exposure time	Result
	mouse		negative
	Method: Literature. Based on available data, the classification criteria are not met.		

- **Teratogenicity**

- Potassium citrate
- Sodium nitrate

Route of exposure	Species	Exposure time
	rat	
	Method: Literature.	

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Based on available data, the classification criteria are not met.

- Toxicity to reproduction

- Potassium citrate
- Sodium nitrate

No data available

> Summarised evaluation of the CMR properties:

- Sodium nitrate
 - Carcinogenicity : Based on available data, the classification criteria are not met.
 - Mutagenicity : Based on available data, the classification criteria are not met.
 - Teratogenicity : Based on available data, the classification criteria are not met.
 - Toxicity to reproduction : No data available

Experiences made in practice:

- Sodium nitrate
Components of the product create formation of methaemoglobin.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

- Sodium nitrate

	Effect dose	Exposure time	Species	Value
Toxicity to fish	LC50	96 h	Pisces (fish)	2,000 mg/l
	Method: Literature. Based on available data, the classification criteria are not met.			
Toxicity to daphnia		24 h	Daphnia magna	6,000 mg/l
	Method: Literature. Based on available data, the classification criteria are not met.			
Toxicity to algae	EC50	240 h	Algae	> 1,700 mg/l
	Based on available data, the classification criteria are not met.			
Toxicity to bacteria	EC50			> 1,000 mg/l
	Method: OECD-Guideline No.209; 88/302/EEC C.11 Based on available data, the classification criteria are not met.			

12.2 Persistence and degradability:

Physico-chemical removability

- Potassium citrate
- Sodium nitrate

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No data available

Chemical Oxygen Demand (COD)

- Potassium citrate
- Sodium nitrate

No data available

Adsorbed organic bound halogens (AOX)

- Potassium citrate
- Sodium nitrate

Product does not contain any organic halogens.

Biodegradation

- Potassium citrate
- Sodium nitrate

No data available

Biochemical Oxygen Demand (BOD)

- Potassium citrate
- Sodium nitrate

No data available

12.3 Bioaccumulative potential:

Partition coefficient (n-octanol/water)

No data available

Bioconcentration factor (BCF)

- Potassium citrate
- Sodium nitrate

Value	Species	Method
	Bioaccumulation is unlikely.	Literature.

12.4 Mobility in soil:

- Sodium nitrate
- Soluble in water.

Henry's constant

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- Sodium nitrate

Value	Temperature	Method
		No information available.

Transport between environmental compartments

- Potassium citrate
- Sodium nitrate

No data available

12.5 Results of PBT and vPvB assessment:

- Potassium citrate
- Sodium nitrate

This product does not meet the criteria concerning PBT or vPvB substances as described in Annex XIII of the REACH regulation (1907/2006 EC)

12.6 Other adverse effects:

- Sodium nitrate

This substance is not in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Waste disposal should be in accordance with existing federal, state and local environmental control laws. Recover nonusable free liquid and/or contaminated water, and dispose of in an approved and permitted treatment system. Discharge to sewer may require approval of permitting authority and may require pretreatment.

Empty containers.

Recondition or dispose of empty container in accordance with governmental regulations.

US. RCRA Hazardous Waste Classification (40 CFR 261)

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

SECTION 14. TRANSPORT INFORMATION

Not regulated according to IMO/IMDG.
Not regulated according to ICAO/IATA aircraft only.

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Not regulated according to ICAO/IATA passenger and cargo aircraft.
Not Regulated according to US Department of Transportation (DOT) 49 CFR
Not regulated according to Transport of Dangerous Goods (TDG)

SECTION 15. REGULATORY INFORMATION

US. Toxic Substances Control Act (TSCA)

All of the components of this product are listed on the TSCA Inventory.

US. OSHA Classification

This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

US. SARA 311/312 Hazard Categories

Immediate Health Hazard.

US. California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

State Right-to-Know Information

The following chemicals are specifically listed by individual states. Other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

	<u>CAS-No.</u>	<u>Concentration</u> [%]
• Sodium nitrate	7631-99-4	>= 1.0 - <= 5.0

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

	<u>CAS-No.</u>	<u>Concentration</u> [%]
• Sodium nitrate	7631-99-4	>= 1.0 - <= 5.0

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

	<u>CAS-No.</u>	<u>Concentration</u> [%]
• Sodium nitrate	7631-99-4	>= 1.0 - <= 5.0

US. Rhode Island Hazardous Substances Right-to-Know Act (R.I. Gen. Laws Section 28-21-1 et. seq.)

	<u>CAS-No.</u>	<u>Concentration</u> [%]
• Sodium nitrate	7631-99-4	>= 1.0 - <= 5.0

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US. Massachusetts, New Jersey, Pennsylvania or Rhode Island Right to Know Substance Lists :
See Section 2.

Canadian WHMIS Classification

D2B : Toxic Material Causing Other Toxic Effects

Canadian Environmental Protection Act (CEPA)

All components of this product are on the Canadian DSL list.

SECTION 16. OTHER INFORMATION

Text of H-phrases referred to under headings 2 and 3:

H272	May intensify fire; oxidizer.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.

|| This MSDS is replacing Agfa MSDS number **461G**

This information is furnished without warranty, expressed or implied, and is believed to be accurate to the best knowledge of Agfa Corporation. The data on this SDS relates only to the specific material designated herein. Agfa Corporation assumes no legal responsibility for use or reliance upon these data. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.