

1. Identification

GHS product identifier	LUMIFLON LF200F
SDS number	AGC-420
Version No.	01
Issue date	16-December-2020
CAS #	Mixture
Recommended use	Raw material for industry
Recommended Restrictions	Not available.
Manufacturer	
Company name	AGC Inc. Chemicals Company Coating Business Group
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Emergency telephone number	Verisk 3E (Access Code 335170)
	Europe: +0-800-680-0425
	Asia Pacific: +1-760-476-3960,+66-21056177, +81-368908677
	Middle East & Africa: +1-760-476-3959
	US, Canada,Mexico: +1-866-519-4752
	Other countries: +1-760-476-3971

2. Hazards identification

GHS classification

Physical hazards	Flammable solids	Not classified
	Pyrophoric solids	Not classified
Health hazards	Acute toxicity, oral	Not classified
	Sensitization, skin	Not classified
	Reproductive toxicity	Category 1B
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3
	Hazardous to the ozone layer	Classification not possible

GHS label elements

Signal word Danger



Hazard statement

H360	May damage fertility or the unborn child.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P308 + P313	IF exposed or concerned: Get medical advice/attention.
P332 + P311	If skin irritation occurs, obtain medical attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Storage

P233	Keep container tightly closed.
P235	Keep cool.
P402	Store in a dry place.
P405	Store locked up.
P410	Protect from sunlight.

Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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Other hazards which do not result in classification

Small amounts of carbonyl fluoride and hydrogen fluoride (HF) and perfluoro isobutylene (PFIB) may be evolved when the product is overheated or burned.
Inhalation of fumes from overheating the product may cause eye, nose, throat and lung irritation.
Lung effects may be delayed for several hours.

Supplemental information

None.

3. Composition/information on ingredients

Components	CAS #	Percent
Fluoro resin	Trade Secret	>=98
Xylene	1330-20-7	<1
Ethylbenzene	100-41-4	<1
light stabilizer	Trade Secret	<1

4. First aid measures

First aid procedures

Inhalation

If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

Skin

Wipe up with absorbent material (e.g. cloth, fleece).
Wash off with soap and water.
Do not use solvents and thinner for wipe up.

Eye

Get medical attention if irritation develops and persists.
Get medical attention immediately.
Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses.

Ingestion

Drink 1 or 2 glasses of water.
Do not induce vomiting without advice from poison control center.
Do not swallow vomit.
Call a physician or poison control centre immediately.

Most important symptoms and effects, both acute and delayed

Direct contact with eyes may cause temporary irritation.

Notes to physician

Provide general supportive measures and treat symptomatically.

General advice

IF exposed or concerned: Get medical advice/attention.
If you feel unwell, seek medical advice (show the label where possible).
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media

Foam. Dry sand. Carbon dioxide (CO2).

Specific hazards arising from the chemical

In the event of a fire, toxic gases such as hydrogen chloride, hydrogen fluoride, halocarbonyl, and carbon monoxide may be generated.

Protective equipment and precautions for firefighters

When thermally decomposed by a fire, highly toxic gas such as hydrogen fluoride is generated.
Wear for fire fighting.

Protection of fire-fighters

Use water spray to cool unopened containers.
Fight fire from upwind area.

General fire hazards

No unusual fire or explosion hazards noted.

Specific methods

Remove flammable materials from the environment
Use designated extinguishing media.
Cool closed containers exposed to high temperatures with water.

6. Accidental release measures

Personal precautions

Keep unnecessary personnel away.

Prepare a suitable fire extinguisher in case of ignition.

Environmental precautions	Do not discharge to rivers. Be careful not to cause environmental impact Adherents, waste, etc. are treated based on relevant laws and regulations.
Methods for containment	Stop the flow of material, if this is without risk.
Methods for cleaning up	Ventilate the contaminated area. Wear appropriate protective equipment and clothing during clean-up. Prevent product from entering drains. Do not allow material to contaminate ground water system. Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Handling	Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Avoid release to the environment. Observe good industrial hygiene practices. Use personal protection recommended in Section 8 of the SDS. Seal the container each time. In the past, people who are experiencing allergy symptoms should not handle it. Soak used waste, paint residue, spray dust, etc. in water until they are discarded.
Storage	Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls / personal protection

Control parameters

US. ACGIH Threshold Limit Values

Components	Type	Value
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
Xylene (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Ethylbenzene (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
Xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

* - For sampling details, please see the source document.

Recommended monitoring procedures	Follow standard monitoring procedures.
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Engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Do not handle unless using sealed equipment, equipment or local exhaust. Attach emergency shower and eye washing equipment to work area and clearly display its position . Take precautions against electrostatic discharge. Use explosion-proof handling equipment and do not use bare light bulbs When handling indoors, seal the source, or install a local exhaust system. In case of indoor work, use auto application equipment or local ventilation equipment to prevent a worker from directly being exposed
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Personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	Use of an impervious apron is recommended.
Respiratory protection	Chemical respirator with organic vapour cartridge. Dust Mask.
Hand protection	Wear appropriate chemical resistant gloves.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Colour	Light yellow.
Form	Not available.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Boiling point	138 - 144 °C (280.4 - 291.2 °F) [Xylene]
Flash point	27.0 °C (80.6 °F) [Xylene]
Evaporation rate	Not available.
Flammability (solid, gas)	incombustibility
Flammability limits in air, lower, % by volume	Not available.
Flammability limits in air, upper, % by volume	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Softening point	115 - 125 °C (239 - 257 °F) Tube method
Density	1.40 g/cm ³ (25°C)

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Not available.
Conditions to avoid	Keep away from heat, sparks and open flame. Contact with incompatible materials. Overheating and cooling
Incompatible materials	Strong oxidising agents. Strong reducing agents. Strong bases
Hazardous decomposition products	Not available. In a fire situation, hydrogen fluoride, carbonyl fluoride, carbon monoxide and carbon dioxide may liberate.

11. Toxicological information

Toxicological data

Product	Species	Test Results
LUMIFLON LF200F		
Acute		
LD50	Rat	> 2000 mg/kg
Components	Species	Test Results
Ethylbenzene (CAS 100-41-4)		
Acute		
Dermal		
LD50	Rabbit	15400 mg/kg
Inhalation		
LC50	Rat	4000 ppm, 4 hr

Components	Species	Test Results
Oral		
LD50	Rat	3500 mg/kg
Xylene (CAS 1330-20-7)		
Acute		
Dermal		
LD50	Rabbit	> 4350 mg/kg
Inhalation		
LC50	Rat	29.08 mg/l, 4 Hours
Oral		
LD50	Rat	3500 mg/kg
Routes of exposure	Inhalation.	
Toxicological information	Occupational exposure to the substance or mixture may cause adverse effects.	
Acute toxicity		
Skin corrosion/irritation	Not available.	
Serious eye damage/eye irritation	Not available.	
Irritation Corrosion - Eye		
Xylene		Category2
Ethylbenzene		Category2A
Skin sensitisation	Based on available data, the classification criteria are not met.	
Skin Sensitisation		
LUMIFLON LF200F		OECD TG429 Result: Negative
Mutagenicity		
Germ cell mutagenicity: Ames test		
LUMIFLON LF200F		OECD 471 Result: Negative
Ethylbenzene		Result: Negative
Xylene		Result: Negative
Germ cell mutagenicity: Chromosome aberration		
Ethylbenzene		Result: Negative
Xylene		Result: Negative
Germ Cell Mutagenicity: In Vitro Mammalian Cell Gene Mutation Tests		
Ethylbenzene		Result: There are both negative and positive reports.
Xylene		Result: There are both negative and positive reports.
Germ Cell Mutagenicity: Micronucleus		
Ethylbenzene		Result: Negative
Xylene		Result: Negative
Carcinogenicity		
Ethylbenzene		Category2
ACGIH Carcinogens		
Ethylbenzene (CAS 100-41-4)		A3 Confirmed animal carcinogen with unknown relevance to humans.
Xylene (CAS 1330-20-7)		A4 Not classifiable as a human carcinogen.
IARC Monographs. Overall Evaluation of Carcinogenicity		
Ethylbenzene (CAS 100-41-4)		2B Possibly carcinogenic to humans.
Xylene (CAS 1330-20-7)		3 Not classifiable as to carcinogenicity to humans.
Reproductive toxicity	Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. May damage fertility or the unborn child. (Xylene)	
Reproductivity		
Ethylbenzene		Category1B
Xylene		Category1B
Specific target organ toxicity - single exposure		
Xylene		Cat.1(Central nervous system,Respiratory,Liver,Kidney), Cat.3(Narcotic)
Ethylbenzene		Cat.3 (Respiratory irritation, Narcotic effect)

Specific target organ toxicity - repeated exposure

Xylene	Cat.1 (Nervous system,Respiratory organs)
Ethylbenzene	Category2(Hearing organs)

Aspiration hazard Not applicable.

Xylene	Category1
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Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.**Teratogenicity** Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals.**Symptoms** Direct contact with eyes may cause temporary irritation.**12. Ecological information****Ecotoxicological data**

Components		Species	Test Results
Ethylbenzene (CAS 100-41-4)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	1.37 - 4.4 mg/l, 48 hours
Fish	LC50	Atlantic silverside (Menidia menidia)	4.4 - 5.7 mg/l, 96 hours
light stabilizer			
Aquatic			
<i>Acute</i>			
Algae	EC50	Algae	1.68 mg/l, 72 h
Crustacea	EC50	Daphnia magna	20 mg/l, 24 h
Fish	LC50	Bluegill (Lepomis macrochirus)	0.97 mg/l, 96 h
		Fish	0.9 mg/l, 96 h
		Oncorhynchus mykiss	7.9 mg/l, 96 h
<i>Chronic</i>			
Crustacea		Daphnia magna	1 mg/l, 21 days
Xylene (CAS 1330-20-7)			
Aquatic			
<i>Acute</i>			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	3.3 mg/l, 96 hours

Ecotoxicity Harmful to aquatic life with long lasting effects. In case of leakage, disposal etc., there is a risk of influencing the environment, so handle with care. Especially when products and washing water. Take measures not to flow directly to the ground, river or drainage.

Fish Toxicity : TLm48 Carp 56ppm, TLm3 Daphnia 32ppm (Xylene).

Environmental effects Harmful to aquatic life with long lasting effects. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.**Persistence and degradability** When the temperature exceeds 230 ° C, decomposition begins gradually and halogen-containing decomposition products are produced.**Bioaccumulation****Bioaccumulative potential****Octanol/water partition coefficient log Kow**

Ethylbenzene 3.15

Aquatic toxicity Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.**Mobility** Not available.

13. Disposal considerations

Disposal methods	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Waste generated by wastewater treatment, incineration, etc. shall be processed or consigned according to Waste Management and Public Cleansing Act. and the related laws. Do not flush wastewater cleaned in containers, equipment, etc. to the ground or drain. Since waste generates hydrogen chloride and hydrogen fluoride when incinerated, it is incinerated in an incinerator equipped with neutralization facility and the incinerated residue is land filled in legally right place. Do not incinerate in the case of exceeding fluorine emission standards. When incinerating, harmful gases may be generated, so incinerate in an equipment that can handle exhaust gas.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner. The remaining products (residual waste) should be discarded according to the law concerning waste disposal and cleaning and the prefectural / municipal regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

ADR	Not regulated as dangerous goods.
RID	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.
Transport in bulk according to IMO instruments	Not applicable.
General information	In case of falling under the Fire Service Law, Occupational Safety and Health Law, Poisonous and Deleterious Substances Control Law, follow the transportation method prescribed by each applicable law. To comply with the provisions of the ship safety law. Follow the aviation laws. When transporting, keep the container at 40 ° C or below, taking care not to fall over, fall, or damage.

15. Regulatory information

Regulatory information	Ensure this materials in compliance with federal requirements and ensure conformity to local regulation.	
International Inventories		
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Disclaimer

AGC Inc. Chemicals Company Coating Business Group

SDS is a document for business operators. Not all materials and literature have been investigated, so there may be information leaks. In addition, the content will change due to the announcement of new knowledge and correction of the existing theory. When used for important decisions, it is recommended to examine the sources carefully and to confirm by examination. No guarantee is made for the data or evaluation described. In addition, the items described are intended for normal handling. Therefore, when handling specially, be sure to implement safety measures suitable for new applications and usages before handling. Attach this SDS when transferring this product. This product is an industrial product, it is not the thing which developed / manufactured assuming the medical use.