SAFETY DATA SHEET

1. Identification

GHS product identifier	**LUMIFLON LF916F**
SDS number	AGC-R-1736
Version No.	01
Issue date	20-January-2021
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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2. Hazards identification

GHS classification

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

GHS label elements

Signal word

Danger

Hazard statement

H360	May damage fertility or the unborn child.

Precautionary statement

Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P308 + P313	IF exposed or concerned: Get medical advice/attention.

Storage

P405	Store locked up.

Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards which do not result in classification	None known.
Supplemental information	None.

3. Composition/information on ingredients

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

4. First aid measures

First aid procedures

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If not breathing, give artificial respiration.
Call a poison centre or doctor/physician if you feel unwell.

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.
Get medical attention if irritation develops and persists.

Eye
Call a physician or poison control centre immediately.
Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses.
Rinse immediately with plenty of water, also under the eyelids.

Ingestion
Get medical attention as soon as possible.
Do not induce vomiting without advice from poison control center.
If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Do not swallow vomit.

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. Keep victim under observation.
Symptoms may be delayed.

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
Use fire-extinguishing media appropriate for surrounding materials.
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media
Not available.

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
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Protection of fire-fighters
Use water spray to cool unopened containers.

General fire hazards
No unusual fire or explosion hazards noted.

Specific methods
Use designated extinguishing media.
Remove flammable materials from the environment

6. Accidental release measures

Personal precautions
Keep unnecessary personnel away.
Keep people away from and upwind of spill/leak.
Wear appropriate protective equipment and clothing during clean-up.
Ensure adequate ventilation.
Local authorities should be advised if significant spillages cannot be contained.
Sweep up or vacuum up spillage and collect in suitable container for disposal.
Prepare a suitable fire extinguisher in case of ignition.
For personal protection, see section 8 of the SDS.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

Methods for containment
Take precautionary measures against static discharge.
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.
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

Work in an enclosed area with adequate local exhaust and appropriate protective equipment.
Prohibit the use of fire, sparks and high temperature materials in the vicinity the product.

Work in an enclosed area with adequate local exhaust and appropriate protective equipment.
Provide adequate ventilation.
Use electrically conductive materials for piping circuits and equipment.
Do not breathe gas.
Do not breathe vapours or spray mist.
Provide appropriate exhaust ventilation at places where dust is formed.
Do not handle or store near an open flame, heat or other sources of ignition.
Do not handle until all safety precautions have been read and understood.
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.
Provide adequate ventilation.
Wear appropriate personal protective equipment.
Observe good industrial hygiene practices.

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.

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. When handling indoors, seal the source, or install a local exhaust system.
Attach emergency shower and eye washing equipment to work area and clearly display its position.

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.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection

Wear appropriate chemical resistant gloves.

9. Physical and chemical properties

Appearance

Physical state

Solid.

Colour	Light yellow.
Form	Solid.
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	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
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	90 - 100 °C (194 - 212 °F) Tube method
Density	1.40 g/cm3 (25°C)
Other data	
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Toxicological data

Components	Species	Test Results
Ethylbenzene (CAS 100-41-4)		
Acute		
Dermal		
LD50	Rabbit	15400 mg/kg
Inhalation		
LC50	Rat	4000 ppm, 4 hr
Oral		
LD50	Rat	3500 mg/kg
Xylene (CAS 1330-20-7)		
Acute		
Dermal		
LD50	Rabbit	> 4350 mg/kg

Components	Species	Test Results
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 Not known.

Skin corrosion/irritation Due to partial or complete lack of data the classification is not possible.

Serious eye damage/eye irritation Due to partial or complete lack of data the classification is not possible.

Irritation Corrosion - Eye

Xylene	Category2
Ethylbenzene	Category2A

Respiratory sensitiser Due to partial or complete lack of data the classification is not possible.

Skin sensitisation Due to partial or complete lack of data the classification is not possible.

Mutagenicity Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity: Ames test

Ethylbenzene	Result: Negative
Xylene	Result: Negative

Germ cell mutagenicity: Chromosome abberation

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 Risk of cancer cannot be excluded with prolonged exposure.

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 May damage fertility or the unborn child.

Reproductivity

Ethylbenzene	Category1B
Xylene	Category1B

Specific target organ toxicity - single exposure Due to partial or complete lack of data the classification is not possible.

Xylene	Cat.1(Central nervous system,Respiratory,Liver,Kidney), Cat.3(Narcrotic
Ethylbenzene	Cat.3 (Respiratory irritation, Narcotic effect)

Specific target organ toxicity - repeated exposure Due to partial or complete lack of data the classification is not possible.

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

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Xylene	Category1

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

Symptoms Direct contact with eyes may cause temporary irritation.

12. Ecological information

Ecotoxicological data

Product		Species	Test Results
LUMIFLON LF916F			
Aquatic			
Chronic			
Algae	EL50	Algae	> 100 mg/l, 72 h
Crustacea	NOEC	Daphnia magna	> 1.1 mg/l, 21 days

Components		Species	Test Results
Ethylbenzene (CAS 100-41-4)			
Aquatic			
Acute			
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
Xylene (CAS 1330-20-7)			
Aquatic			
Acute			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	3.3 mg/l, 96 hours

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulation

Bioaccumulative potential

Octanol/water partition coefficient log Kow

Ethylbenzene	3.15

Aquatic toxicity Not classified.

Mobility No data available for this product.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal methods Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

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.

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.

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

Country(s) or region	Inventory name	On inventory (yes/no)*
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

This product is an industrial product, it is not the thing which developed / manufactured assuming the medical use.

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.