

1. Identification

GHS product identifier	AsahiGuard E-SERIES AG-E060
SDS number	AGC-X-0568
Version No.	02
Issue date	19-December-2020
Revision date	18-May-2021
Supersedes date	19-December-2020
CAS #	Mixture
Recommended use	Water and oil repellent
Recommended Restrictions	Not available.
Synonym(s)	Fluoropolymer aqueous solution
Manufacturer	
Company name	AGC Inc. Chemicals Company Functional Products Business Group
Address	1-5-1, Marunouchi, Chiyoda-ku, Tokyo 100-8405, Japan
Phone number	+81-3-3218-5504
Fax	+81-3-3218-7843
Emergency telephone number	Verisk3E (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 liquids	Not classified
	Pyrophoric liquids	Not classified
Health hazards	Acute toxicity, oral	Not classified
	Skin corrosion/irritation	Not classified
	Serious eye damage/eye irritation	Not classified
	Sensitization, skin	Not classified
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Not classified
	Hazardous to the aquatic environment, long-term hazard	Not classified
	Hazardous to the ozone layer	Classification not possible
GHS label elements		
Signal word	None.	
Hazard symbols	None.	
Hazard statement	Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)	
Precautionary statement		
Prevention		
P233	Keep container tightly closed.	
P264	Wash hands thoroughly after handling.	
P273	Avoid release to the environment.	
P280	Wear personal protective equipment/face protection.	
Response		
P305 + P351 + P338	Use personal protective equipment as required. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P312	Call a POISON CENTRE/doctor if you feel unwell.	

Storage

P410
P402 + P404
P410 + P403

Protect from sunlight.
Store in a dry place. Store in a closed container.
Protect from sunlight. Store in a well-ventilated place.

Disposal

Dispose of waste and residues in accordance with local authority requirements.

Other hazards which do not result in classification

Inhalation of aerosol or fine spray mist may cause serious respiratory problems. Inhale thermal decomposition products or smoking of contaminated tobacco goods leads after 2 - 6 hours to the so-called "fluorine polymer fever" (= allergic alveolitis with flu-like illness). Danger of the formation of a pulmonary edema after substantial intoxication by thermal decomposition products.

Supplemental information

None.

3. Composition/information on ingredients

Components	CAS #	Percent
See Section16	863408-20-2	20
Acetate	64-19-7	<1
water	7732-18-5	>79

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 physician if symptoms develop or persist.

Skin

Immediately take off all contaminated clothing.
Wash off with soap and water.
Do not use solvents and thinner for wipe up.

Eye

Get medical attention 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, for at least 15 minutes.

Ingestion

Call a physician immediately.
Do not induce vomiting without advice from poison control center.
Never give anything by mouth to a victim who is unconscious or is having convulsions.

Most important symptoms and effects, both acute and delayed

Not available.

Notes to physician

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

When a surrounding fire occurs, extinguish with an appropriate extinguishing agent according to the situation. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Not applicable, non-combustible.

Specific hazards arising from the chemical

In a fire situation, hydrogen fluoride, carbonyl fluoride, carbon monoxide and carbon dioxide may liberate.

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

Fight fire from upwind area.

Cool containers exposed to heat with water spray and remove container, if no risk is involved.
Move combustibles out of path of advancing pool if you can do so without risk.

General fire hazards

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions

Keep unnecessary personnel away.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
For personal protection, see section 8 of the SDS.

Environmental precautions

Avoid release to the environment.
Do not flush into surface water or sanitary sewer system.

Methods for containment

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Methods for cleaning up

This product is miscible in water.

Large Spills:

Stop the flow of material, if this is without risk.

Dike the spilled material, where this is possible.

Absorb in vermiculite, dry sand or earth and place into containers.

Following product recovery, flush area with water.

Small Spills:

Wipe up with absorbent material (e.g. cloth, fleece).

Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

For waste disposal, see section 13 of the SDS.

7. Handling and storage

Handling

DO NOT use for Spray Application without prior written consent of Manufacturer, Supplier or user's immediate seller of this product.

(Spray application: Spray so as to form fine mist (not depending on high or low spray pressure) to various base materials)

Do not use at temperatures above 220 ° C.

At such temperatures there is a possibility of generating harmful decomposition products such as hydrogen fluoride, fluorocarbonyl, carbon monoxide, carbon dioxide and the like.

Contamination of tobacco products MUST be avoided.

Avoid contact with skin.

Avoid contact with eyes.

Avoid formation of dust and aerosols.

Do not breathe spray.

Wear appropriate personal protective equipment.

Storage

Do not store in direct sunlight.

Keep away from heat and flame.

Store in a well-ventilated place.

Recommended storage temperature : 5- 40 °C (41 - 104 °F).

Store in tightly closed container.

Do not allow material to freeze.

A concentration gradient may occur after thawing if this product has been allowed to freeze.

Please stir the defrosted product before use.

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

Acetate (CAS 64-19-7)

STEL

15 ppm

TWA

10 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

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.

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Wear appropriate chemical resistant gloves.

9. Physical and chemical properties

Appearance

Liquid.

Physical state

Liquid.

Colour

pale yellow to brownish

Form

Not available.

Odour

Acetic acid odor

Odour threshold	Not available.
pH	2.9 - 5.9
Melting point/freezing point	Not available.
Boiling point	>= 100 °C (>= 212 °F)
Flash point	>= 100.0 °C (>= 212.0 °F) Cleveland open cup non flammable
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)	Freely soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Specific gravity	1.04 - 1.12

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	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidising agents.
Hazardous decomposition products	Hydrogen fluoride (HF) and carbonyl fluoride (COF ₂).

11. Toxicological information

Toxicological data		
Product	Species	Test Results
AsahiGuard E-SERIES AG-E060		
Acute		
Oral		
LD50	Rat	> 2500 mg/kg OECD423
Routes of exposure		
Eye contact		
AsahiGuard E-SERIES AG-E060		OECD405 Result: Mild irritant Species: Rabbit
Component analysis - LD50		
AsahiGuard E-SERIES AG-E060		Species: -
Skin corrosion/irritation		
Based on available data, the classification criteria are not met.		
Irritation Corrosion - Skin		
AsahiGuard E-SERIES AG-E060		OECD404 Result: Non-irritant Species: Rabbit
Serious eye damage/eye irritation		
Based on available data, the classification criteria are not met.		
Respiratory sensitiser		
Due to partial or complete lack of data the classification is not possible.		
Skin sensitisation		
Based on available data, the classification criteria are not met.		

Skin Sensitisation

AsahiGuard E-SERIES AG-E060

LLNA

Result: Negative

Mutagenicity Due to partial or complete lack of data the classification is not possible.**Germ cell mutagenicity: Ames test**

AsahiGuard E-SERIES AG-E060

Result: Negative

Germ cell mutagenicity: Chromosome Aberration

AsahiGuard E-SERIES AG-E060

Result: Negative

Carcinogenicity Due to partial or complete lack of data the classification is not possible. None of the Japan Society for Occupational Health, ACGIH, NTP, IARC is mentioned**Reproductive toxicity** Due to partial or complete lack of data the classification is not possible.**Specific target organ toxicity - single exposure** Due to partial or complete lack of data the classification is not possible.**Specific target organ toxicity - repeated exposure** Due to partial or complete lack of data the classification is not possible.

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1000 mg/kg/day 28day

Species: Rat

Aspiration hazard Due to partial or complete lack of data the classification is not possible.**Symptoms** Direct contact with eyes may cause temporary irritation.**12. Ecological information****Ecotoxicological data**

Product	Species		Test Results
AsahiGuard E-SERIES AG-E060			
Aquatic			
Acute			
Algae	EC50	Algae	> 100 mg/l OECD201(Fluoropolymer)
Crustacea	EC50	Daphnia	> 100 mg/l OECD202(Fluoropolymer)
Fish	LC50	Fish	> 100 mg/l OECD203(Fluoropolymer)

Components		Species	Test Results
Acetate (CAS 64-19-7)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	65 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	75 mg/l, 96 hours

Ecotoxicity 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.**Environmental effects** 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** 46000mg/l COD (JIS K0102 17)
7100mg/l BOD (JIS K0102 21 and 32.3)**Bioaccumulation****Bioaccumulative potential****Bioconcentration factor**

AsahiGuard E-SERIES AG-E060

7.7 - 13 Fluoropolymer

Octanol/water partition coefficient log Kow

Acetate

-0.17

Aquatic toxicity Not classified.**Mobility** This product is miscible in water.**13. Disposal considerations****Disposal methods** Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

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.
When performing consignment processing, contract with a specialized industrial waste disposer authorized by the prefectural governor.
When incinerating, harmful gases may be generated, so incinerate in facilities that can treat exhaust gas.
Waste generated by wastewater treatment, incineration, etc. shall be processed or consigned according to Waste Management and Public Cleansing Act. and the related laws.

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 established.

15. Regulatory information**Regulatory information**

Ensure this materials in compliance with federal requirements and ensure conformity to local regulation.

TSCA STATUS: All components of this product are listed on the TSCA inventory. ACTIVE.
Council Directive 92/32/EEC Status: All monomers and ingredient are listed in the EINECS.

16. Other information**Disclaimer**

Item 3 Component Name Copolymer of perfluorohexylethyl methacrylate, 2-N,Ndiethylaminoethyl methacrylate, 2-hydroxyethyl methacrylate, and 2,2'-ethylenedioxydiethyl dimethacrylate, acetic acid salt(CAS Reg.No. 863408-20-2)

US FDA: Approved as FCN 599, FCN 604

TSCA 5(e) is applicable. Only AGC Chemicals Americas can import this product. TSCA12 (b) is applicable.

AGC Inc. Chemicals Company Functional Products 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.

up date: Section1,14,15,16 (2021.5)