

SAFETY DATA SHEET

First issue: 20 August 2018

ASA-GR1-TH-EN-002-2

Version number: 2

SECTION 1: Identification of the substance or mixture and of the supplier

- 1.1 Product identifier** ASACLEAN™ U, UE, newE, newEX, SA, CG, GL2, IMX, SL, YG
- 1.2 Other identification** Not available.
- 1.3 Recommendations and restrictions on use** Purging compound for thermoplastic injection molding machines and extruders.
Uses advised against: usage of this product is strictly prohibited for the following areas:
- Implantation into human body
 - Invasive human body applications
 - Contact with human body, including blood, body fluid, etc., continuously for 30 days or longer.
- See Section 16 for further details.
- 1.4 Supplier's details** Asahi Kasei Advance (Thailand) Co.,Ltd.
62 Moo 11 Soi Wilalai, Bangna-Trad, Bangchalong, Bangplee, Samutprakarn 10540, Thailand
Telephone: +66-(0)2337-2840
- Supplier:* Asahi Kasei Corporation, ASACLEAN Business Department, Hibiya Mitsui Tower, 1-1-2 Yurakucho, Chiyoda-Ku, Tokyo, 100-0006, Japan; Tel +81-(0)3-6699-3274; Fax +81-(0)3-6699-3458.
- 1.5 Emergency telephone number** 662-540-1200 (9:00-17:00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to UN GHS This product does not meet the criteria for classification in any hazard class according to UN GHS criteria (Thai adaptations). It is therefore not mandatory to supply a safety data sheet, but it contains information and advice concerning safe handling of the product.

2.2 Label elements

Pictogram None.

Signal word None.

Hazard statements None.

Precautionary statements None.

2.3 Other hazards

Not available.

SECTION 3: Composition/information on ingredients

3.1 Mixtures^a

Declarable components	Conc. (wt%)	CAS No.
Not disclosed		

SAFETY DATA SHEET

First issue: 20 August 2018

ASA-GR1-TH-EN-002-2

Version number: 2

<i>Other components</i>		
Styrenic resin, resin additives, inorganic additives (including glass fibre), other additives	Not disclosed	Not disclosed

^a The specific chemical identities and percentages of composition have been withheld as trade secrets.

SECTION 4: First-aid measures

4.1 Description of first aid measures

Inhalation	For inhalation of fume from molten product, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention.
Skin	For skin contact with powder or pellets, rinse skin with water and soap. For skin contact with molten plastic, cool with water, and wash area. Hardened resin adhered to skin should not be peeled off. Seek medical attention for burns.
Eye	In case of contact with eyes, irrigate with room-temperature water for 15 minutes, occasionally lifting eyelids. Remove any contact lenses if easy to do. Continue rinsing. Get medical attention if irritation persists.
Ingestion	If swallowed, wash out mouth thoroughly and give water to drink. Get medical attention if patient feels unwell. Do not induce vomiting, unless instructed by medical personnel.

4.2 Most important symptoms and effects, acute and delayed Dust or fume may irritate eyes. Inhalation of fume may cause respiratory irritation and other toxic effects.

4.3 Indication of any immediate medical attention and special treatment needed Treat symptoms as they occur.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable	Small fire: carbon dioxide, dry chemical powder, water spray, alcohol-resistant foam. Large fire: water spray, alcohol-resistant foam.
Unsuitable	Carbon dioxide gas and dry chemicals lack cooling capacity, with the possibility of re-ignition.

5.2 Special hazards arising from the chemical Not classified as flammable, but is a combustible thermoplastic material and will burn if involved in a fire, producing smoke, and hazardous fumes and gases, such as styrene and ethylbenzene.

5.3 Special protective actions for fire-fighters Remove containers from fire or cool them with water spray. Fully cool containers after extinction of the fire.

SAFETY DATA SHEET

First issue: 20 August 2018

ASA-GR1-TH-EN-002-2

Version number: 2

Firefighters should wear an approved self-contained breathing apparatus and full protective clothing.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures** For large spills, wear full personal protection. Keep unauthorised personnel from the spillage area. May cause slip hazard. Ventilate area and avoid creating airborne dust. Take precautionary measures against static discharge and use non-sparking equipment. Follow prescribed procedures for responding to large spills and reporting to authorities. For recommended personal protective equipment, see Section 8. For disposal considerations, see Section 13.
- 6.2 Environmental precautions** Prevent product from entering water courses or drainage system.
- 6.3 Methods and materials for containment and cleaning up** Clean up spill as soon as possible. For small quantities, wipe off with cloth or paper, and wash affected area with water and detergent. For large quantities, carefully sweep up or collect using vacuum cleaner. Wash contaminated surfaces with water and detergent, and collect washings for safe disposal. Place waste in a container for disposal.
-

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling** Avoid skin and eye contact, and inhalation of any dust or vapor during heat processing. Use protective measures described in Section 8. Use only in a well-ventilated area. Wash hands after use. Dust that develops from processing may cause dust explosion hazard. Always clean up dust. Keep away from sources of ignition. Use only non-sparking equipment. When processing molten resin, use protective equipment to prevent burns. Do not allow molten resin to remain in container or machine at elevated temperature for long periods (see usage table in Section 16). All ASACLEAN product grades should not remain at temperatures of >150 °C for ≥ 1 h. Cool container if necessary. Purge machinery of the product once it reaches processing temperature. Purged resin should be cooled as soon as possible.
- 7.2 Conditions for safe storage, including any incompatibilities** Avoiding direct sunlight and high humidity. To prevent fire, keep away from heat, flame, and sources of ignition.
-

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Thai limit values	Not available
US limit values	Not available.

SAFETY DATA SHEET

First issue: 20 August 2018

ASA-GR1-TH-EN-002-2

Version number: 2

8.2 Engineering controls	<p>Good general ventilation is recommended for handling the product.</p> <p>For processing, where dust or vapor might be formed, local exhaust ventilation or use in a closed system is recommended.</p>
8.3 Individual protection measures, such as personal protective equipment (PPE)	<p>The need for personal protective equipment should be based on a workplace risk assessment for the particular use.</p> <p>Avoid skin and eye contact by wearing gloves and eye protection. Where more extensive contact may occur, wear protective clothing (eg apron, overalls).</p> <p>During processing, if exposure to dust or vapors is possible, wear a dust mask or organic vapor mask.</p> <p>When handling molten resin, wear safety glasses, heat-resistant gloves and long-sleeved clothing to prevent burns.</p> <p>PPE should be to national standards. Consult manufacturers concerning breakthrough times.</p>

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Milky white to pale yellow pellet; for grade SL, transparent and white are mixed
Odour	Slight, specific
Odour threshold	Not available
pH	Not available
Melting/freezing point	Softens at ca. 60 °C (IMX), 80 °C (SL), 130 °C (other grades)
Initial boiling point/range	Not available
Flash point	380 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flamm. or expl. limits	Not available (Lower limit for dust explosion: 35 g/m ³)
Vapor pressure	Not available
Vapor density	Not available
Relative density	newEX, 1.48; YG, 1.62; CG, 1.39; U, 1.25; SA, 1.04; GL2, 1.32; UE, 1.32; newE, 1.06; SL, 1.05; IMX, 1.12
Solubilities	Insoluble in water; soluble in methyl ethyl ketone and cyclohexanone, except for inorganic content
Partition coeff. (log K _{ow})	Not available
Auto-ignition temp.	490 °C
Decomposition temp.	Not available
Viscosity	Not available
Other information	Not available

SAFETY DATA SHEET

First issue: 20 August 2018

ASA-GR1-TH-EN-002-2

Version number: 2

SECTION 10: Stability and reactivity

10.1 Reactivity	Not available.
10.2 Chemical stability	Stable under normal handling conditions.
10.3 Possibility of hazardous reactions	Not available.
10.4 Conditions to avoid	Avoid keeping at high temperatures, see Section 16 for details. Do not store in direct sunlight or in high humidity.
10.5 Incompatible materials	Strong acids, alkalis, and oxidising agents.
10.6 Hazardous decomposition products	Decomposes if heated and produces hazardous fumes and gases, such as styrene and ethylbenzene.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity	This product is a solid plastic pellet that has a small contact surface, and is not inhalable to the respiratory system. Ingredients are not expected to leach from the product. The product contains some hazardous ingredients, but we consider that hazards are not manifested in the product, so that it is not expected to meet the criteria for classification. In particular, grades newEX, CG, and YG contain glass fiber, but the product is not expected to cause skin irritation, eye irritation, or respiratory irritation.
	Not classified due to lack of data.
Skin corrosion/irritation	Not classified due to lack of data.
Serious eye damage/irritation	Not classified due to lack of data.
Respiratory or skin sensitisation	Not classified due to lack of data.
Germ cell mutagenicity	Not classified due to lack of data.
Carcinogenicity	Not classified due to lack of data.
Reproductive toxicity	Not classified due to lack of data.
STOT-single exposure	Not classified due to lack of data.
STOT-repeated exposure	Not classified due to lack of data.
Aspiration hazard	Not expected to meet the criteria for classification.

SECTION 12: Ecological information

12.1 Toxicity	This product is a plastic pellet and ingredients are not expected to be separated from pellets by leaching. The product is not considered as
----------------------	--

SAFETY DATA SHEET

First issue: 20 August 2018

ASA-GR1-TH-EN-002-2

Version number: 2

	ecologically harmful, although it may persist in the environment.
12.2 Persistence and degradability	Not expected to be readily biodegradable.
12.3 Bioaccumulation potential	Not expected to bioaccumulate.
12.4 Mobility in soil	Not available.
12.5 Other adverse effects	Not available.

SECTION 13: Disposal considerations

13.1 Disposal methods	Incineration is recommended for disposal of this substance. This substance may be suitable for landfill. Disposal via the drains is not recommended. Disposal must be in accordance with current national and local regulations. All hazard precautions given in this data sheet must be observed for used containers, unless containers are thoroughly cleaned.
------------------------------	---

SECTION 14: Transport information

14.1 UN Number	Not classified as dangerous goods for transport.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	Not classified as marine pollutant/environmentally hazardous.
14.6 Special precautions for user	Not available.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question	<i>For Thailand:</i> Notification on the Hazard Classification and Communication System for Hazardous Substances; B.E. 2555 (2012). Hazardous Substance Act; B.E. 2535 (1992). Notification of Ministry of Industry; List of hazardous substances; B.E. 2556 (2013).
---	---

SAFETY DATA SHEET

First issue: 20 August 2018

ASA-GR1-TH-EN-002-2

Version number: 2

SECTION 16: Other information

Abbreviations	GHS, globally harmonised system of classification and labelling of chemicals; STOT RE, specific target organ toxicity repeated exposure; STOT SE, specific target organ toxicity single exposure.
References	Search for chemicals; available at the European Chemicals Agency (ECHA) website: http://echa.europa.eu/ .

Grade	Operating Conditions	
	Temperature range (°C)	Conditions to avoid
newEX	200 to 330	Kept in barrel at overall temperature range
YG	200 to 330	Kept in barrel at overall temperature range
CG	180 to 330	Kept in barrel at overall temperature range
U	180 to 330	Kept in barrel at ≥30 min at 280 to 330 °C
SA	180 to 330	Kept in barrel at ≥30 min at 280 to 330 °C
GL2	180 to 330	Kept in barrel at ≥30 min at 280 to 330 °C
UE	180 to 300	Kept in barrel at ≥30 min at 280 to 300 °C
newE	160 to 300	Kept in barrel at ≥30 min at 280 to 300 °C
SL	150 to 300	Kept in barrel at ≥30 min at 280 to 300 °C
IMX	160 to 280	See comment below
All ASACLEAN product grades should not remain at temperatures of >150 °C for ≥ 1 h.		

Disclaimer: This information is given without warranty, express or implied, except that it is accurate to the best knowledge of Asahi Kasei Corporation. It relates only to the specific product designated herein, and does not relate to use in combination with any other material or in any process. Asahi Kasei Corporation assumes no legal responsibility for use of or reliance upon this information.

According to our company policy, usage of this product as a purging agent when producing medical equipment, or to produce medical equipment directly, is strictly prohibited in for the following areas:

- Implantation into human body
- Invasive human body applications
- Contact with human body, including blood, body fluid, etc., continuously for 30 days or longer.

For any other medical-related applications, please contact the ASACLEAN Business Department; Tel +81-(0)3-6699-3274.

For any query regarding the contents of the safety data sheet, contact:

ASACLEAN R&D Dept., Asahi Kasei Corporation, 1-3-1 Yakoh, Kawasaki-Ku, Kawasaki City, Kanagawa, 210-0863, Japan; Tel +81-(0)44-271-2503; Fax +81-(0)44-271-2333.