Asahi **KASEI**

SAFETY DATA SHEET

Product Name: ASACLEAN™ SDS No.: ASA-Gr2-US-002 First issue: August 28, 2014 Revised: April 1, 2016 Form # 057E

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1. IDENTIFICATION

Product Name:

ASACLEAN™ UP, newUP, HP, UF2, SX, CP

SDS Number:

ASA-Gr2-US-002

RESPONSIBLE PARTY IN THE USA:

Company Name:

Sun Plastech Inc.

Address:

1055 Parsippany Blvd. Parsippany, NJ 07054

Telephone number:

1-973-257-1999

Facsimile number:

1-973-257-1011

EMERGENCY TELEPHONE NUMBER:

CHEMTREC

Telephone number:

1-800-424-9300 (US/Canada) or 1-703-527-3887 (International)

RECOMMENDED APPLICATION:

Purging compound for thermoplastic injection molding machines and extruders

RESTRICTION ON USAGE:

Usage for the following applications is strictly prohibited:

-Being implanted into human body.

-Invasive or non-invasive contact with human body (including blood, body fluids, etc.) continuously for 30 days or more

2. HAZARD(S) IDENTIFICATIONS

GHS CLASSIFICATION:

PHYSICAL AND CHEMICAL HAZARDS:

Combustible solid:

Classification not possible

Metal-corrosive material: Classification not possible

Those items except the above are out of scope for classification.

HEALTH TOXICITY:

Acute toxicity (oral):

Classification not possible

Acute toxicity (dermal):

Classification not possible

Acute toxicity (Inhalation: gases):

Classification not possible

Acute toxicity (Inhalation: vapors):

Classification not possible Classification not possible

Acute toxicity (Inhalation: dusts / mists): Skin corrosion / irritation:

Classification not possible

Serious eye damage / eye irritation:

Classification not possible

Respiratory sensitization:

Classification not possible

Skin sensitization:

Classification not possible

Germ cell mutagenicity:

Classification not possible

Carcinogenicity:

Classification not possible

Reproductive toxicity:

Classification not possible

Specific target organ / systemic toxicity (single exposure):

Classification not possible

Specific target organ / systemic toxicity (repeated exposure):

Classification not possible

Aspiration Hazard:

Classification not possible

HAZARDOUS TO THE AQUATIC ENVIRONMENT:

Toxicity to the aquatic environment (acute):

Classification not possible

Toxicity to the aquatic environment (chronic): Classification not possible

GHS LABEL ELEMENTS:

Pictograms: None Signal word: None Hazard statements: None

Precautionary statements: None



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[First-aid]:

Refer to "4. FIRST-AID MEASURES"

[Storage]:

Refer to "7. HANDLING AND STORAGE"

[Disposal]:

Refer to "13. DISPOSAL CONSIDERATIONS"

3. COMPOSITION / INFORMATION ON INGREDIENTS

Classification of the substance or mixture: Mixture

Grade Type	Composition	Content %	CAS No.
UP	Olefinic resin	More than 50	Rgstd/Non-disclosed
	Resin additives	Less than 10	Rgstd/Non-disclosed
	Inorganic additives	Less than 40	Rgstd/Non-disclosed
newUP	Olefinic resin	More than 80	Rgstd/Non-disclosed
	Resin additives	Less than 10	Rgstd/Non-disclosed
	Other additives	Less than 10	Rgstd/Non-disclosed
HP	Olefinic resin	More than 50	Rgstd/Non-disclosed
	Resin additives	Less than 10	Rgstd/Non-disclosed
	Inorganic additives	Less than 30	Rgstd/Non-disclosed
	Other additives	Less than 10	Rgstd/Non-disclosed
UF2	Olefinic resin	More than 80	Rgstd/Non-disclosed
	Resin additives	Less than 10	Rgstd/Non-disclosed
	Inorganic additives	Less than 10	Rgstd/Non-disclosed
SX	Olefinic resin	More than 50	Rgstd/Non-disclosed
	Resin additives	Less than 50	Rgstd/Non-disclosed
CP	Olefinic resin	More than 60	Rgstd/Non-disclosed
	Resin additives	Less than 10	Rgstd/Non-disclosed
	Inorganic additives	Less than 50	Rgstd/Non-disclosed
	Other additives	Less than 10	Rgstd/Non-disclosed

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

4. FIRST-AID MEASURES

INHALATION: When feeling sick by inhaling gas and / or fumes generated from molten

plastics, move the victim from the area to fresh air and wait for recovery. Seek

medical attention.

SKIN CONTACT: For skin contact with powder or pellets, wash thoroughly with soap and water.

For skin contact with molten plastic, immediately wash thoroughly and cool down with soap and water. Hardened resin on the skin should not be

forcibly peeled off. Seek medical attention if there is a burn.

EYE:

Because there is a possibility of damaging the eyeball, immediately flush the affected eye(s) with copious quantity of clean water for at least 15 minutes.

Remove contact lens(es) at once unless the lens(es) is/are stuck to eye(s).

INGESTION:

If swallowed, induce vomiting. Seek immediate medical attention if

abnormality is felt.

PROTECTION TO FIRST-AIDERS: Ventilate gas generated from the molten plastics / Wear

protective gear.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA:

Water spray, water-jet and other various fire extinguishers.

SPECIFIC HAZARDS / TOXICITY AT FIRE: May emit gases including carbon monoxide, carbon dioxide, etc.

FIRE-FIGHTING INSTRUCTIONS: Extinguish fire from a windward direction.

PROTECTION TO FIRE-FIGHTERS: Wear protective clothing. In case of large amount of gases

emitted, breathing apparatus should be used.



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6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTION: When both pellets and powders are spilled on the floor, promptly

clean to prevent slipping.

ENVIRONMENTAL NOTES: Due to possible adverse affects to fish, birds, etc., immediately

clean up any material that may have spilled into bodies of water.

REMOVAL METHOD:

Sweep with vacuum cleaner, broom, etc., and dispose of properly.

PREVENTIVE MEASURE OF SECONDARY DISASTER: None

7. HANDLING AND STORAGE

HANDLING:

1) Application temperature: Refer to Table 1 on page 7 of 7.

2) Though there is less likelihood of pellets igniting under normal temperatures, avoid any fire/ignition sources in the vicinity of the product and perform adequate housekeeping to keep the surrounding clean.

3) Cool down purge pile with water.

4) Ensure proper ventilation since resins processed at high temperatures will emit gases. Local ventilation preferably should be provided.

STORAGE:

SUITABLE STORAGE CONDITION:

1) Store material in away from heat and ignition sources.

2) Avoid direct sunlight.

3) Store material away from high temperatures and high humidity.

SAFE CONTAINER MATERIAL FOR PACKING: Use appropriate storage containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

MEASURES FOR FACILITIES:

Provide local exhaust ventilation, for comfortable working

environments.

CONTROL OF CONCENTRATION: Not established

ALLOWABLE CONCENTRATION: Although ACGIH has not established the allowable

concentration for dust, the following values are considered

to be appropriate for operation.

ACGIH (2014 version):

Allowable concentration as general dust (TWA) INHALABLE PARTICULATE: 10mg / m³

RESPIRABLE PARTICULATE: $3 \text{ mg} / \text{m}^3$

PROTECTIVE TOOLS:

Respiratory organ: Box respirator for organic gas should be worn when working in areas

where inhalation of high temperature gases is possible.

For hand:

Wear heat-proof gloves when molten resin is handled.

For eye:

During purging operation, resin-made glasses and resin-made goggles

with side-shields should be worn.

For skin & body:

Work wear with long sleeves is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:

Physical form:

Solid

Shape:

Pellet

Color:

Milky white ~ light yellow

Odor:

Specific slight odor

Odor threshold:

Not available

pH:

Not applicable

Melting Point:

(UP, newUP, HP, CP) 154~164°C

(UF2,SX) 130~135°C

Decomposition Temperature:

No data



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Flash Point:

Refer to Table 1 on page 7 of 7.

Auto-ignition Temperature:

Refer to Table 1 on page 7 of 7.

Explosive Limits

Lower Limit:

Not applicable (Lower limit for dust explosion: 15g/m³)

Upper Limit:

Not applicable

Specific Gravity: Refer to Table 1 on page 7 of 7.

Solubility:

Water: Insoluble

Other solvent: Insoluble for organic solvent under normal temperature.

Vapor pressure:

Not available

Vapor density:

Not available

Relative density:

Not available

Partition coefficient:

Not available

Viscosity:

Not available

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal temperatures.

REACTIVITY: None CONDITIONS TO AVOID:

- Avoid using outside the specified temperature range.

-Do not let sit in barrel for more than 30 minutes at the temperature more than 300°C (Type UP, newUP, HP, UF2, and CP).

-Do not let sit in barrel at temperatures higher than 370°C. (Type SX).

MATERIALS TO AVOID: None

HAZARDOUS / TOXIC DECOMPOSITION PRODUCTS:

The product may emit gases such as carbon monoxide, carbon dioxide, etc. during incineration. May produce methyl methacrylate during pyrolysis.

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11. TOXICOLOGICAL INFORMATION

II. IONICOLOGI	11. TOXICOLOGICAL INFORMATION					
	Base Resin	Resin Additives	Inorganic Additives	Other Additives	Composition (Product)	
Acute Toxicity	Classification	Classification	Classification	Classification	Classification	
(oral)	not possible	not possible	not possible	not possible	not possible	
(Ulai)	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)	
Acute Toxicity (Dermal)	Classification	Classification	Classification	Classification	Classification	
	not possible	not possible	not possible	not possible	not possible	
	(No data available)	(No data available)	No data available) (No data available) (No data availal		(No data available)	
Acute Tavicity	Classification	Classification	Classification	Classification	Classification	
Acute Toxicity	not possible	not possible	not possible	not possible	not possible	
(Inhalation: gases)	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)	
A cuto Tourisitu	Classification	Classification	Classification	Classification	Classification	
Acute Toxicity	not possible	not possible	not possible	not possible	not possible	
(Inhalation: vapour)	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)	
Chin Camanian /	Classification	Classification	Classification	Classification	Classification	
Skin Corrosion /	not possible	not possible	not possible	not possible	not possible	
Irritation	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)	
0i F B/	Classification	Classification	Classification	Classification	Classification	
Serious Eye Damage/	not possible	not possible	not possible	not possible	not possible	
Eye Irritation	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)	
Respiratory or Skin	Classification	Classification	Classification	Classification	Classification	
Sensitization	not possible	not possible	not possible	not possible	not possible	
Sensitization	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)	
O O-11	Classification	Classification	Classification	Classification	Classification	
Germ Cell	not possible	not possible	not possible	not possible	not possible	
Mutagenicity	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)	
	Classification	Classification	Classification	(No data available Classification not possible (No data available) Classification not possible	Classification	
Carcinogenicity	not possible	not possible	not possible	not possible	not possible	
(2000)	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)	
Reproductive	Classification	Classification	Classification	Classification	Classification	
Toxicity	not possible	not possible	not possible	not possible	not possible	
	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)	
Specific Target Organ /	Classification	Classification	Classification	Classification	Classification	
Systemic Toxicity (single exposure)	not possible	not possible	not possible	not possible	not possible	
	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)	
Specific Target Organ / Systemic Toxicity (repeated exposure)	Classification	Classification	Classification	Classification	Classification	
	not possible	not possible	not possible	not possible	not possible	
	(No data available)	(No data available)	(No data available)		(No data available)	
Respiratory	Classification	Classification	Classification		Classification	
Toxicity	not possible	not possible	not possible	not possible	not possible	
by Inhalation	(No data available)	(No data available)	(No data available)		(No data available)	

12. ECOLOGICAL INFORMATION

	Base Resin	Resin Additives	Inorganic Additives	Other Additives	Composition (Product)
Hazardous to The	Classification	Classification	Classification	Classification	Classification
Aquatic Environment	not possible	not possible	not possible	not possible	not possible
(Acute)	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)
Hazardous to The	Classification	Classification	Classification	Classification	Classification
Aquatic Environment	not possible	not possible	not possible	not possible	not possible
(Chronic)	(No data available)	(No data available)	(No data available)	(No data available)	(No data available)



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13. DISPOSAL CONSIDERATIONS

Refer to all federal, state and local regulations.

Do not dump this product into sewers, on the ground or into any body of water.

14. TRANSPORT INFORMATION

LAND TRANSPORT

ADR, RID, DOT

Class:

Not applicable Not applicable

Packing Group (PG): **UN Number:**

Not applicable

Proper Shipping Name: ASACLEAN (Purging Compound)

SEA TRANSPORT

IMDG

Class:

Not applicable

Packing Group (PG):

Not applicable

UN Number:

Not applicable

Proper Shipping Name: ASACLEAN (Purging Compound)

AIR TRANSPORT

ICAO/IATA

Class:

Not applicable

Packing Group (PG):

Not applicable

UN Number:

Not applicable

Proper Shipping Name: ASACLEAN (Purging Compound)

15. REGULATORY INFORMATION

USA

OSHA:

Hazard Communication Rule, 29 CFR, 1910.1200.

TSCA Inventory:

All ingredients are listed or exempt.

EPCRA Section 312/313:

No ingredients are listed above reportable quantities. No ingredients are listed above reportable quantities.

CERCLA Hazardous Substances: Canada

Canadian Environmental Protection Act, 1999

HMIS

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used only in conjunction with a fully implemented HMIS® program by workers who have received appropriate HMIS® training. HMIS® is a registered trade and service mark of the NPCA. HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

16. OTHER INFORMATION

This information is furnished 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, both usages of this product to purge when producing the following medical equipment written below and to produce general medical equipment itself are strictly prohibited.

- Being implanted into human body.
- Invasive (human body) applications
- Contact with human body (including blood, body fluid, etc.) continuously for 30 days or more.



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For any other medical-related applications, please contact the Asaclean Business Department. (Phone +81-3-3296-3274).

For any query with respect to what is contained herein, please refer to:

Asaclean Technical Group

Asahi Kasei Corporation

1-3-1 Yakoh, Kawasaki-ku, Kawasaki City, Kanagawa, 210-0863, Japan;

Tel: +81-44-271-2503, Fax: +81-44-271-2333

(Table1)

101)				
Grade Type	Temperature Range for Use (Unit: °C)	Flash Point (Unit: °C)	Auto-ignition Temperature (Unit: °C)	Specific Gravity (23°C)
UP	170~300	330	390	1.09
newUP	170~300	330	390	0.90
HP	170~300	330	390	1.04
UF2	170~320	380	400	0.95
SX	300~370	380	400	0.96
CP	170~300	330	390	1.35

Records of revision

April 1, 2016

: Changed company name (Asahi Kasei Corporation)