SAFETY DATA SHEET

SUN ABC STANDARD FOR MODEL PE1HR-A, PE2HR-A, PE2CR-A, PE4HR-A, PE4CR-A, PE12HR-A, PE12CR-A

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name:	SUN ABC STANDARD FOR MODEL PE1HR-A, PE2HR-A, PE2CR-A, PE4HR-A, PE4CR-A, PE12HR-A, PE12CR-A
Other names / Synonyms:	PE1HR-A , PE2HR-A , PE2HR-B , PE2CR-A, PE4HR-A, PE4CR-A , PE12HR-A , PE12CR-A
Product no.:	600150-60, 600150, 600171-60, 600171, 600119-60, 600119, 600159-60, 600159, 600160-60, 600160, 600143-60, 600143, 600144-60, 600144, 600124-60, 600124, 600177, 600178, 600181, 600098-60, 600098, 600034-60, 600034, 600099-60, 600099, 617006-60, 617006, 600154, 600156, 600276, 600277, 600278, 600279, 600263

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture:	Powder for fire extinguisher. Restricted to professional users.
Uses advised against :	None known.

1.3. Details of the supplier of the safety data sheet

▼*Company and address:*	**GPBM Nordic AB** Sörredsvägen 113 SE-41878 Göteborg
Contact person:	Frank Willy Ottesen
Revision:	21/02/2024
SDS Version:	2.0
Date of previous version:	30/01/2024 (1.0)

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).
See section 4 “First aid measures”.
112 - European emergency number (24/7, anywhere in the EU) to reach emergency medical services or the fire brigade

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK

law.

2.2. Label elements

Hazard pictogram(s): Not applicable.

Signal word: Not applicable.

Hazard statement(s): Not applicable.

Precautionary statement(s):

General: -

Prevention: -

Response: -

Storage: -

Disposal: -

Hazardous substances: None known.

Additional labelling: Not applicable.

2.3. Other hazards

Dust may irritate throat and respiratory system and cause coughing.
Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.
Dust may give mechanical eye irritation.

Additional warnings: This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Ammonium sulphate	CAS No.: 7783-20-2 EC No.: 231-984-1 UK-REACH: Index No.:	60 - 75%		
Ammonium dihydrogenorthophosphate	CAS No.: 7722-76-1 EC No.: 231-764-5 UK-REACH: Index No.:	20 - 25 %		
Mica	CAS No.: 12001-26-2 EC No.: UK-REACH:	1-<5%		

	Index No.:			
Talc	CAS No.: 14807-96-6 EC No.: 238-877-9 UK-REACH: Index No.:	1-<5%		
Hexamethyldisiloxane	CAS No.: 107-46-0 EC No.: 203-492-7 UK-REACH: Index No.:	<1%	Flam. Liq. 2, H225 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information: In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation: In case of discomfort: bring the person into fresh air.

Skin contact: Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact: If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) and continue until irritation stops. Remove contact lenses.

Ingestion: Rinse and flush mouth thoroughly and consume large quantities of water. In case of continued discomfort: seek medical assistance and bring this safety data sheet.

Burns: Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

Dust may give mechanical eye irritation.
Ingestion may cause discomfort.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media
The product is an extinguishing agent.

5.2. Special hazards arising from the substance or mixture
Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters
Fire fighters should wear appropriate personal protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation, especially in confined areas.
Contaminated areas may be slippery.
Avoid inhalation of dust.
Avoid the suspension of dust in the air.

6.2. Environmental precautions
Avoid discharge to lakes, streams, sewers, etc.
Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up
Collect spills carefully. Moist the material with water in order to prevent the formation and propagation of dust.
Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.
Minor spills are collected with a cloth. Collection and disposal of the material shall be done with minimum creation of dust. Sweep and collect. Shall be contained in suitable and tightly closed disposal containers.

6.4. Reference to other sections
See section 13 “Disposal considerations” on handling of waste.
See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Smoking, drinking and consumption of food is not allowed in the work area.
See section 8 "Exposure controls/personal protection" for information on personal protection.
Avoid inhalation of dust.
Avoid the suspension of dust in the air.

7.2. Conditions for safe storage, including any incompatibilities

Recommended storage material:	Keep only in original packaging.
Storage temperature:	Protect from moisture.
Incompatible materials:	Strong oxidizing agents

Bases
Magnesium

7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. ▼Control parameters

Mica
Long term exposure limit (8 hours) (mg/m^3): 10(inhalable)/0,8(respirable)

Talc
Long term exposure limit (8 hours) (mg/m^3): 1

Dusts
Long term exposure limit (8 hours) (mg/m^3): 4 (respirable dust) / 10 (total inhalable dust)

Phosphorus pentoxide
Long term exposure limit (8 hours) (mg/m^3): 1
Short term exposure limit (15 minutes) (mg/m^3): 2

Ammonia
Long term exposure limit (8 hours) (ppm): 25
Long term exposure limit (8 hours) (mg/m^3): 18
Short term exposure limit (15 minutes) (ppm): 35
Short term exposure limit (15 minutes) (mg/m^3): 25

In a fire, small amounts of phosphorus pentoxide and ammonia can be formed.
Contains no substances with occupational exposure limit values.
The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.
EH40/2005 Workplace exposure limits (Fourth Edition 2020).

DNEL

No data available.

PNEC

No data available.

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations:	Smoking, drinking and consumption of food is not allowed in the work area.
Exposure scenarios:	There are no exposure scenarios implemented for this product.
Exposure limits:	Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.
Appropriate technical measures:	Apply standard precautions during use of the product.

Avoid inhalation of gas or dust.
Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and showers are clearly marked. Airborne gas and dust concentrations must be kept at a minimum. Provide efficient mechanical ventilation. If not possible use suitable respiratory equipment.

Hygiene measures: Wash hands after use.

Measures to avoid environmental exposure: No specific requirements.

Individual protection measures, such as personal protective equipment

Generally: Use only UKCA marked protective equipment.

Respiratory Equipment:

Type	Class	Colour	Standards	
Dust mask			EN143	

Skin protection:

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	

Hand protection:

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	≥ 0,3	≥ 60	EN374, EN420	
Latex	≥ 0,3	≥ 60	EN374, EN420	

Eye protection:

Type	Standards	
Wear dust resistant safety goggles where there is danger of eye contact.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Powder
Colour:	Blue
Odour / Odour threshold:	None
pH:	-
pH in solution:	4,5 (%)
Density (g/cm³):	> 0,8 g/ml
Kinematic viscosity:	Does not apply to solids.
Particle characteristics:	Testing not relevant or not possible due to the nature of the product.

Phase changes

Melting point/Freezing point (°C):	197 °C
Softening point/range (waxes and pastes) (°C):	Does not apply to solids.
▼*Boiling point (°C):*	
Vapour pressure:	Testing not relevant or not possible due to the nature of the product.
▼*Relative vapour density:*	
Decomposition temperature (°C):	> 197 °C

Data on fire and explosion hazards

Flash point (°C):	Does not apply to solids.
Flammability (°C):	Testing not relevant or not possible due to the nature of the product.
Auto-ignition temperature (°C):	Testing not relevant or not possible due to the nature of the product.
Lower and upper explosion limit (% v/v):	Does not apply to solids.

Solubility

Solubility in water:	Testing not relevant or not possible due to the nature of the product.
n-octanol/water coefficient (LogKow):	Testing not relevant or not possible due to the nature of the product.
Solubility in fat (g/L):	Testing not relevant or not possible due to the nature of the product.

9.2. Other information

Oxidizing properties:	Not oxidizing.
Other physical and chemical parameters:	Dissociation constant in water (pKa): 9.25 (25 °C) (CAS 7722-76-1)

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability
The product is stable under the conditions, noted in section 7 “Handling and storage”.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
Moisture

10.5. Incompatible materials
Strong oxidizing agents
Bases
Magnesium

10.6. Hazardous decomposition products
The product is not degraded when used as specified in section 1.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 as retained and amended in UK law

Acute toxicity

Product/substance	Ammonium dihydrogenorthophosphate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	5750 mg/kg

Product/substance	Ammonium dihydrogenorthophosphate
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	>7940 mg/kg

Product/substance	SUN ABC STANDARD
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	>2000 mg/kgbw

Product/substance	SUN ABC STANDARD
Species:	Rat
Route of exposure:	Dermal
Test:	LD50
Result:	>5000 mg/kgbw

Product/substance	SUN ABC STANDARD
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50 (4 hours)
Result:	>5 mg/L

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Long term effects

None known.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

Dust may give mechanical eye irritation.
Dust may irritate throat and respiratory system and cause coughing.
Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Product/substance	Ammonium dihydrogenorthophosphate
Test method:	OECD 203
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	> 85,9 mg/L

Product/substance	Ammonium dihydrogenorthophosphate
Test method:	OECD 201
Species:	Algae
Duration:	72 hours
Test:	LC50

Result: > 97,1 mg/L

Product/substance Ammonium dihydrogenorthophosphate
Test method: OECD 202
Species: Crustacean
Duration: 72 hours
Test: EC50
Result: 1790 mg/L

12.2. Persistence and degradability
Based on available data, the classification criteria are not met.

12.3. Bioaccumulative potential
Based on available data, the classification criteria are not met.

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties
This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects
This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.
The chemical contains phosphorus. The supply of phosphorus can cause unwanted algae growth in water systems.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods
Product is not covered by regulations on dangerous waste.
Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

EWC code
16 05 09 Discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

Specific labelling

Contaminated packing
Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other information:
ADR	-	-	-	-	-	-
IMDG	-	-	-	-	-	-
IATA	-	-	-	-	-	-

* Packing group

** Environmental hazards

Additional information

Not dangerous goods according to ADR, IATA and IMDG.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Restrictions for application:	Restricted to professional users.
Demands for specific education:	No specific requirements.
SEVESO - Categories / dangerous substances:	Ammonia

UK-REACH, Annex XVII

Not applicable.

Additional information:	Not applicable.
Sources:	Control of Major Accident Hazards (COMAH) Regulations 2015. Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law. Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

15.2. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

H225, Highly flammable liquid and vapour.
H400, Very toxic to aquatic life.
H411, Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

Not applicable.

▼The safety data sheet is validated by

Kiwa Technical Consulting AB

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
It is recommended to hand over this safety data sheet to the actual user of the product.
Information in this safety data sheet cannot be used as a product specification.
Country-language: GB-en