

MATERIAL SAFETY DATA SHEET

[1.PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : AMINON C-11S
SUPPLIER : PT. Kao Indonesia Chemicals
ADDRESS : Jl.Raya Tambun Km.42, Bekasi 17510, West Java, Indonesia
DIVISION : Marketing Departement
TELEPHONE NUMBER : +62-21-88326188
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EMERGENCY TELEPHONE NUMBER : +62-21-88326188 (Ext.1300)
RECOMMENDED USE :
AND RESTRICTIONS ON USE :

[2.HAZARDS IDENTIFICATION]

MOST IMPORTANT HAZARDS AND EFFECTS : Corrosive

GHS CLASSIFICATION

PHYSICAL AND CHEMICAL HAZARDS : Not classified

HEALTH HAZARDS

ACUTE TOXICITY (Oral) : Not classified
ACUTE TOXICITY (Dermal) : Not classified
ACUTE TOXICITY (Inhalation) : Not applicable(Vapours)
SKIN CORROSION / IRRITATION : Category 1
SERIOUS EYE DAMAGE / EYE IRRITATION : Category 1
RESPIRATORY SENSITIZATION : Classification not possible
SKIN SENSITIZATION : Not classified
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
- REPEATED EXPOSURE : Classification not possible
ASPIRATION HAZARD : Classification not possible

ENVIRONMENTAL HAZARDS

HAZARDOUS TO THE AQUATIC ENVIRONMENT

- ACUTE TOXICITY : Category 1
- CHRONIC TOXICITY : Classification not possible

GHS LABEL ELEMENTS

PICTOGRAMS OR SYMBOLS



SIGNAL WORD : Danger

HAZARD STATEMENTS : Causes severe skin burns and eye damage
Causes serious eye damage
Very toxic to aquatic life

PRECAUTIONARY STATEMENTS

PREVENTION : Do not breathe dust/fume/gas/mist/vapours/spray.
Avoid release to the environment.
Wash thoroughly after handling.
Wear protective gloves/eye protection/face protection/protective clothing.

| | |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RESPONSE | : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTRE or doctor/physician. Collect spillage. |
| STORAGE | : Store locked up. |
| DISPOSAL | : Passed to a licensed waste contractor. |
| SAFE HANDLING ADVICE | : Refer to MSDS. |

[3.COMPOSITION / INFORMATION ON INGREDIENTS]

| | |
|-------------------------------------|------------------------------------------|
| SUBSTANCE OR MIXTURE | : Substance |
| INGREDIENTS AND CONCENTRATION RANGE | : Fatty acids, C8-18, methylethanolamide |
| CAS RN | : 371967-96-3 |

[4.FIRST-AID MEASURES]

| | |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IN CASE OF INHALATION | : Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTRE or doctor/physician. |
| IN CASE OF SKIN CONTACT | : Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTRE or doctor/physician. |
| IN CASE OF EYE CONTACT | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor/physician. |
| IN CASE OF INGESTION | : Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. |

[5.FIRE-FIGHTING MEASURES]

| | |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EXTINGUISHING MEDIA | : Powder, alcohol-resistant foam, water spray, carbon dioxide,sand |
| NOT SUITABLE EXTINGUISHING MEDIA | : No information available |
| SPECIFIC HAZARDS | : Produce irritating or toxic gases in a fire. |
| SPECIFIC METHODS | : Keep away from sources of ignition and use appropriate extinguishing media.Fight fire from upwind position if possible. Do not flow the materials causing adverse effects into the environment with effluent fire extinguishing agents. |
| PROTECTION OF FIRE FIGHTERS | : Use goggles in combination with dust mask, and another protections as appropriate to situation. Risk of producing harmful gases such as carbon monoxide and nitrogen oxides. Avoid inhalation of smoke or gases. |

[6.ACCIDENTAL RELEASE MEASURES]

| | |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURE | : Use goggles and protective gloves. Large spills : Remove person to safety. Ensure adequate ventilation. |
| ENVIRONMENTAL PRECAUTIONS | : Avoid release to the environment. |
| METHODS FOR CLEANING UP | : Small spills: Absorb spills with sand, inert absorbent, waste cloth or sawdust. Then wipe up remainder in waste cloth. Large spills: Dike spills and dispose of in safe area. |

PREVENTION OF SECONDARY HAZARDS : Keep away from sources of ignition and prepare extinguishing media.

[7.HANDLING AND STORAGE]

HANDLING

TECHNICAL MEASURES : Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

PRECAUTIONS : Keep away from source of ignition.
Avoid contact with eyes and skin.

SAFE HANDLING ADVICE : Use an adequate ventilation.
Wash thoroughly after handling.
Use personal protective equipment as required.
Do not breathe dust/fume/gas/mist/vapours/spray.

STORAGE

SUITABLE STORAGE CONDITIONS : Store container tightly closed in well-ventilated place.
Store locked up.
Keep away from source of ignition.

SAFE PACKAGING MATERIALS : No information available

[8.EXPOSURE CONTROLS / PERSONAL PROTECTION]

ENGINEERING MEASURES : Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Use an adequate ventilation.

LIMIT VALUES

ACGIH (TLV) : 10 mg/m³ TWA
Glycerin mist

OSHA (PEL) : 15 mg/m³ TWA (total); 5 mg/m³ TWA (respirable fraction)
Glycerin

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION : Use as appropriate to situation.

HAND PROTECTION : Rubber gloves

EYE PROTECTION : Safety goggles or Face shield

SKIN AND BODY PROTECTION : Full-body suit

HYGIENE MEASURES : No information available

[9.PHYSICAL AND CHEMICAL PROPERTIES]

PHYSICAL STATES

FORM : Liquid

COLOUR : Colorless to light yellow clear

ODOUR : Slightly characteristic odour

pH : 10 (5%(Water/Methanol=1/1))

SPECIFIC TEMPERATURES / TEMPERATURE RANGES AT WHICH CHANGES IN PHYSICAL STATE OCCUR

BOILING POINT : No information available

MELTING POINT : -8.7 °C (16.3 °F)

FLASH POINT : 208 °C (406.4 °F) (CLEVELAND open cup method)

FLAMMABILITY OR EXPLOSIVE PROPERTIES

FLAMMABILITY OR EXPLOSIVE LIMITS : UPPER LIMIT : No information available LOWER LIMIT : No information available

VAPOUR PRESSURE : No information available

VAPOUR DENSITY : No information available

SPECIFIC GRAVITY (DENSITY) : 0.952 g/mL (30 °C) (86 °F)

0.936 g/mL (53 °C) (127.4 °F)
0.926 g/mL (70 °C) (158 °F)

SOLUBILITY

| | |
|--------------------------------------------------------|----------------------------------------|
| WATER SOLUBILITY | : Emulsifiable |
| SOLVENT SOLUBILITY | : Soluble in various organic solvents. |
| PARTITION COEFFICIENT: n- OCTANOL / WATER (log Pow) | : No information available |
| AUTO-IGNITION TEMPERATURE | : No information available |
| DECOMPOSITION TEMPERATURE | : No information available |
| ODOUR THRESHOLD | : No information available |
| EVAPORATION RATE | : No information available |
| FLAMMABILITY (SOLID,GAS) | : No information available |
| VISCOSITY | : No information available |
| OTHER DATA | : No information available |

[10.STABILITY AND REACTIVITY]

| | |
|---------------------------------------|-------------------------------------------------|
| CHEMICAL STABILITY | : Stable in general. |
| POSSIBILITY OF HAZARDOUS REACTIONS | : Reacts with acids. No self-reactivity. |
| CONDITIONS TO AVOID | : No information available |
| INCOMPATIBLE MATERIALS | : No information available |
| HAZARDOUS DECOMPOSITION PRODUCTS | : Carbon dioxide Nitrogen oxides |
| OTHERS | : No information available |

[11.TOXICOLOGICAL INFORMATION]**ACUTE TOXICITY**

Oral

INFORMATION ON PRODUCT : Rat, LD50 : > 2000 mg/kg (male, female)

Dermal

INFORMATION ON PRODUCT : No information available

Inhalation

INFORMATION ON PRODUCT : No information available

SKIN CORROSION / IRRITATION

INFORMATION ON PRODUCT : Guinea pig, 30% in water, 24 hours closed patch test :Category 1
Rabbit, 5% in water, 24 hour closed patch test, Intact and abraded skin :
P.I.I. = 2.09, Moderate irritant
Rabbit, 5% in water, 14 times repeated application test : No reaction

SERIOUS EYE DAMAGE / IRRITATION

INFORMATION ON PRODUCT : Draize test, active 5% in water :
Unwashed eyes, MAS = 8.0, Minimally irritating
Washed eyes, MAS = 7.3, Minimally irritating
(Kay and Calandra's classification)

RESPIRATORY OR SKIN SENSITIZATION**RESPIRATORY**

INFORMATION ON PRODUCT : No information available

SKIN

INFORMATION ON PRODUCT : Guinea pig, Guinea Pig Maximization Test : Negative

MUTAGENICITY (GERM CELL MUTAGENICITY)

INFORMATION ON PRODUCT : Ames test (TA98,TA100,TA1535,TA1537, WP2uvrA) : Negative
Chromosomal aberration test (CHL cells) : Negative

CARCINOGENICITY

INFORMATION ON PRODUCT : No information available

IARC : Not listed

NTP : Not listed

EU : Not listed

OSHA : Not listed

REPRODUCTIVE TOXICITY

INFORMATION ON PRODUCT : No information available

SPECIFIC TARGET ORGAN SYSTEMIC TOXICITY

- SINGLE EXPOSURE

INFORMATION ON PRODUCT : No information available

- REPEATED EXPOSURE

INFORMATION ON PRODUCT : No information available

ASPIRATION HAZARD

INFORMATION ON PRODUCT : No information available

OTHER INFORMATION

: No information available

[12.ECOLOGICAL INFORMATION]

ECOTOXICITY

: Data on similar product
Red killifish, 96h, LC50 : 3.3 mg/L
Daphnia magna, 48h, EC50 : 0.29 mg/L
Algae, 72h, ErC50 : 1.2 mg/L

PERSISTENCE / DEGRADABILITY : This material has good biodegradability.

MOBILITY IN SOIL : No information available

BIOACCUMULATIVE POTENTIAL : No information available

OTHER ADVERSE EFFECTS : No information available

[13.DISPOSAL CONSIDERATIONS]

Review "HANDLING AND STORAGE (Section 7)".

Passed to a licensed waste contractor.

Incinerate with little portions.

Risk of producing harmful gases such as carbon monoxide and nitrogen oxides.

Dispose of waste in accordance with local,state and federal regulations.

[14.TRANSPORT INFORMATION]

Follow all regulations in your country or region

INTERNATIONAL REGULATIONS

UN CLASS / UN NUMBER : Class 8 / UN1760

IATA : UN Number UN1760

Proper Shipping Name Corrosive Liquid, n.o.s.(containing Fatty acids, C8-18, methylethanolamide)

Class 8

Packing Group III

IMDG : UN Number UN1760

Proper Shipping Name Corrosive Liquid, n.o.s.(containing Fatty acids, C8-18, methylethanolamide)

Class 8

Packing Group III

Additional Information Marine pollutant

SPECIAL PRECAUTIONS FOR USER : Review "ACCIDENTAL RELEASE MEASURES (Section 6)".
Review "HANDLING AND STORAGE (Section 7)".
Ensure containers without breakage or leakage.
Ensure containers tightly fixed.
Follow all regulations in your country or region.
Keep away from source of ignition.
Emergency Response Guide(ERG) Numbers : 153

[15.REGULATORY INFORMATION]

Follow all regulations in your country or region.

| | | |
|-------------|--------------------|-----|
| INVENTORIES | : ENCS(Japan) | Yes |
| | TSCA(USA) | No |
| | EINECS(EU) | No |
| | AICS(Australia) | No |
| | DSL(Canada) | No |
| | ECL(Korea) | No |
| | PICCS(Philippines) | No |
| | IECSC(China) | Yes |

KAO Corporation is not able to check up the regulatory information in regard to the substances in your country or region,therefore,we request this matter would be filled by your responsibility.

[16.OTHER INFORMATION]

REFERENCE : -Safety data sheet for chemical products - Part 1: Content and order of sections(ISO 11014-1)
-International Chemical Safety Cards(ICSC) (Compiler's Guide)(1994)

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