

[SAFETY DATA SHEET]

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name/Identifier: HYFER COMPLETE INORGANIC FERTILIZER (14-14-14)
FPA Registration No: 1-1LF-7086
Recommended Use: Fertilizer
Recommended Restrictions: None Known
Manufacturer/Importer/Supplier/Distributor Information
Manufacturer/Supplier AGROTIGER PHILS. CORP.
Rm 205, 2nd flr. ONE Greenhills Shopping Plaza Bldg.
No. 5 Eisenhower St., Greenhills San Juan City
Metro Manila, Philippines 1504
Contact No. +632-7453096

2. HAZARD(S) IDENTIFICATION

Physical hazards Not classified.
Health hazards
Eye contact Contact with eyes may cause irritation
Skin contact Irritation possible
Ingestion Considered practically non-toxic. Possible gastrointestinal tract irritation
Inhalation Considered practically non-toxic. May cause irritation of respiratory tract
Label elements
Hazard symbol None.
Signal word CAUTION.
Hazard statement The mixture does not meet the criteria for classification.
Precautionary statement
Prevention Observe good industrial hygiene practices.
Response Wash hands after handling.
Storage Store away from incompatible materials.
Disposal Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC) None known
Supplemental information Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	% Comp	CAS #
Monoammonium phosphate	22-24	7722-76-1
Potassium sulfate	13-14	7778-80-5
Urea	24-25	57-13-6
Coating	1-5	mixture

Composition comments

All concentrations are in percent by weight

This Safety Data Sheet is not a guarantee of product specification or NPK value(s). NPK content is on specified sales orders, customer invoices, or product specification sheets obtained from supplier.

4. FIRST AID MEASURES

Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided by a qualified operator. Get medical attention if irritation develops and persists.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Get medical attention if irritation develops and persists.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.
Ingestion	Induce vomiting, but only if victim is fully conscious. Never give anything by mouth to an unconscious person. Drink 1 or 2 glasses of water. Do not give milk or alcoholic beverages. Call a physician.
Most important symptoms/effects, acute and delayed	Eye contact: Causes serious eye irritation. Skin contact: Causes skin irritation. Ingestion: Toxic if swallowed. Inhalation: May cause respiratory irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials. Avoid excessive water to minimize runoff. Prevent firefighter water from entering the environment.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Container may rupture on heating. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses. Explosive reactions with oxidizing agents such as potassium chlorate and/or peroxides. In case of fire hazardous decomposition products may be produced such as: <ul style="list-style-type: none">- Sulphur oxides- Ammonia- Carbon monoxide- Carbon dioxide (CO₂)
Special protective equipment and precautions for firefighters	In the event of fire and/or explosion do not breathe fumes. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

[SAFETY DATA SHEET]

Fire fighting Move containers from fire area if you can do it without risk. Use water equipment/instructions spray to absorb heat, keep containers cool and protect fire-exposed material.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Wear suitable protective clothing. Use personal protection recommended.

Methods and materials for containment and cleaning up Use mechanical handling equipment.
Clean contaminated surface thoroughly.
Pick up and arrange disposal without creating dust.
Use a suitable vacuum cleaner.

Environmental precautions Do not flush into surface water or sanitary sewer system.
Prevent further leakage or spillage if safe to do so.
Do not allow to enter drains, sewers or watercourses.

7. HANDLING AND STORAGE

Precautions for safe handling Handle with care. Wear personal protective equipment. Use only in well-ventilated areas. Avoid dust formation. Provide exhaust ventilation if dust is formed. Dust must be extracted directly at the point of origin. Avoid breathing dust. Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Dust	TWA	0.05 mg/m ³	Respirable particles.
		10 mg/m ³	Inhalable particles.

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

Appropriate engineering controls Provide exhaust ventilation if dust is formed. Dust must be extracted directly at the point of origin. Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection Do not wear contact lenses. Wear as appropriate: Safety glasses with side-shields

Skin protection

Hand protection Gloves must be inspected prior to use. Replace when worn.

Other Normal work clothing (long sleeved shirts and long pants) is recommended.

[SAFETY DATA SHEET]

Respiratory protection	A NIOSH approved air purifying respirator with a type 95 (R or P) particulate filter may be used under conditions where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known or any other circumstances where air purifying respirators may not provide adequate protection.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment before re-use. Keep working clothes separately. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	Solid
Form	Granular solid
Color	Pink
Odor	Odorless
Odor threshold	Not available
pH	Not available
Flammability (solid, gas)	Not available
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing

10. STABILITY AND REACTIVITY

Reactivity	Reacts with acids that forms carbon dioxide (CO ₂). This displaces the oxygen in the air in closed spaces. (danger of suffocation)
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Moisture. High temperatures. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents, Acids, Chlorates and Hypochlorites
Hazardous decomposition products	If heated to the point of decomposition, Sulphur oxides, Carbon dioxide (CO ₂), Carbon monoxide, oxides of nitrogen may be released.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Ingredients:	
	Urea:	Oral, rat LD50 (mg/kg): 8471
	Monoammonium phosphate:	Oral, rat LD50 (mg/kg): >2000
	Potassium sulfate:	Oral, rat LD50 (mg/kg): 6600

[SAFETY DATA SHEET]

Skin corrosion/irritation:	Causes skin irritation
Serious eye damage/irritation:	Causes serious eye irritation
Respiratory or skin sensitisation:	No data available
Carcinogenicity:	Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Teratogenicity:	No information available.
Neurotoxicity:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	May be toxic to aquatic life. In sufficient quantity may deplete oxygen required by aquatic life. May cause eutrophication of ponds and lakes.
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available.
Other adverse effects	May release ammonium ions that are toxic to fish. Un-ionized ammonia concentrations above 0.02 mg/l are considered toxic in fresh water. May release phosphates which will result in algae growth, increased turbidity, and depleted oxygen. At extremely high concentrations, this may be hazardous to fish or other marine organisms. Release to watercourses may cause effects downstream. Fish 96 hour LC50, OECD Guidelines 203 (rainbow trout): >86mg/L.

13. DISPOSAL CONSIDERATIONS

Disposal instructions	Recover or recycle if possible. Properly characterize all waste materials. Consult federal, state/provincial and local regulations regarding the proper disposal of this material. Prevent material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways. Empty containers should be taken to an approved waste handling site for recycling or disposal
Hazardous waste code	Not regulated.
Waste from residues / unused products	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods.

[SAFETY DATA SHEET]

Transport in bulk Not applicable. However, product ingredients are covered under
according to Annex II of Appendix I of the IMSBC Code.
MARPOL 73/78 and
the IBC Code

15. REGULATORY INFORMATION

Fertilizer and Pesticide Authority - Department of Agriculture	Regulated
Philippine National Police	Not regulated
Philippine Drug Enforcement Agency	Not regulated
Philippine Food and Drugs Administration	Not regulated

Based on available information, not classified as hazardous according to DENR DAO 2005-27
Revised Priority Chemical list and RA 6969 - The Toxic Substances & Nuclear & Hazardous Waste
Control Act of 1992

This material is listed in the Philippine Inventory of Chemicals and Chemical Substances (PICCS)

16. OTHER INFORMATION

Issue date	29-March-2019
Revision date	-
Version #	01
List of abbreviations	ACGIH: American conference of governmental and industrial hygienist CAS No.: Chemical Abstract Service Number LC50: Lethal Concentration, 50%. LD50: Lethal Dose, 50%.
References	ECHA CHEM HSDB® - Hazardous Substances Data Bank


Methods of evaluation for the classification of mixtures

The classification of the mixture was set based on the regulation (US) HCS 1910.1200
[HCS 2012].

Other information

This information is based on our present knowledge and is provided according to the
relevant national regulations. This information is intended as a characterization of the
product in order to provide guidance for the relevant safety issues. However, this
document does not provide any warranty, expressed or implied, regarding the
properties of the product.

Prepared by:


LORENZO M. FABRO, JR.
Registered Chemist
PRC 0007971
Valid thru July 2021