

SAFETY DATA SHEET

Code Hypros HYP-R2S
Issued: March 07, 2013
Revised: December 7, 2015

1. Chemical Product and Company Identification

Chemical product name HYPROS HYP-R2S
Supplier KYOKUTO BOEKI KAISHA, LTD.
Address 2-1, Otemachi 2-Chmome, Chiyoda-ku,
Tokyo 100-0004 Japan
Telephone number 0800-222-0707
Fax number 03-3246-2159

2. Hazard Identification

GHS Classification

Physical hazards Substances and mixtures which, in contact with water, emit flammable gases Not classified
Health hazards Acute toxicity (Oral) Not classified
Skin corrosion / irritation Category 1
Eye damage / irritation Category 1
Other hazards and toxicological effects which are not stated here are "No classification" or "can not be classified".

Label elements

Pictogram



Single word

Danger

Hazard statements

Cause severe skin burns and eye damage.
Cause serious eye damage.
May cause respiratory irritation.

Instructions Precaution

Do not use it besides the use settled.
When in use, use protective mask, goggle and gloves.
When it adheres to other places, absorb and remove it with cloth etc., promptly.

Storage

Keep container tightly closed.
Keep away from sunlight, and keep at temperature not exceeding 40 °C.

Disposal

Keep away from alkalis.
Entrust to the waste treatment plant, while explain the nature of content.

3. Composition / information on ingredients

Single substance or Compound Compound
Chemical name (main component) Inorganic acid

Composition and content	Material name	CAS No.	Content
	Phosphoric acid	7664-38-2	10 - 20%
	Thiourea	62-56-6	0.1 - 0.9%

Notice through official file number	Chemical Substance Control Law In Japan		
PRTR Law (Japan)	Not applicable		
Industrial Safety and Health Law (Japan)	Phosphoric acid		No. 618
	Thoreau		No. 340
Poisonous and Deleterious Substances Control Act (Japan)	Not applicable		

ENCS No.	Registered
UN Class	8 (Corrosive substances, P.G. 3)
UN No.	3264

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4 First-aid measures

Inhalation	Remove the victim to a fresh air zone, lie quiet, and get medical attention immediately.
Skin contact	If the product contacts skin, immediately wash it away thoroughly from the skin area with a plenty of water. Get medical attention after washing. A slow start or an inadequacy in washing might cause skin disorders.
Eye contact	Immediately flush eyes thoroughly with a plenty of water. Then get medical attention. A slow start or an inadequacy in flushing might cause skin disorders.
Ingestion	Do not induce vomiting immediately because of corrosive product. Get medical attention immediately.
Protection for first-aides	Rescuer person should wear appropriate protective tools.

5 Fire-fighting measures

Extinguishing media	Dry chemical powder, form, carbon dioxide, sand , water.
Specific method of fire-fighting	Fighter should work from windward side as much as possible.
Protection for fighters	Fighter should wear appropriate protective tools.

6 Accidental release measures

Personal precautions	Arrange adequate ventilation until it completes, in case of indoor work. Wear proper personal protective equipment to avoid contact to skin and inhalation of gas.
Environmental precautions	Do not allow the spilled material to enter in rivers, etc. that will cause a possible reverse effect to environmental.
Methods for cleaning up	In case of small release, be absorbed into dry sand, soil, sawdust and waste and then collect them into empty container. Remainder should be washed out with water. In case of large release, enclose and block the flow by embankment, and collect them after leading to a safety place.
Neutralization	Use alkali material (Sodium carbonate, etc.) because this is an acid based product.

7 Handling and storage

Handling	
Technical measures	Avoid contacting to skin, mucous membrane, contaminated clothes and eyes. Wear proper protector. Handle carefully container. Do not turn over, fall, shock and trail container.
Precautions	Provide local or / and whole area exhaust ventilations. Handle under well-ventilation.
Precautions for safe handling:	Avoid contact to Alkaline products, because this is an acid based product.
Storage	
Proper storage conditions	Store away from direct sunlight in a dry , cool and well-ventilated area. Avoid high temperature (over 40 degree C). The container should be closely stopped.
Precautions	Do not keep it together with an alkaline material.
Safety material of container and packaging	Avoid to use container made of stainless steel or iron, etc. because it has strong corrosively.

8 Exposure control / personal protection

Protective equipment	Provide local or / and whole area exhaust ventilations.
Control parameters.	
Management density	Not applicable

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Japan Society for Occupational Health AGGIH	1mg/m3 (Phosphoric acid, 2014 version) 1mg/m3 (TWA, Phosphoric acid, 2012 version) 1mg/m3 (STEL, Phosphoric acid, 2012 version)
Protective equipment	
Respiratory protection	Simple sanitary mask
Hand protection	Protective rubber gloves.
Eye protection	Safety goggles.
Skin and body protection	Impervious protective working clothes

9 Physical and chemical properties

Physical state	
Appearance	Liquid (@20 degree C)
Color	Green
pH	2.1 (1%)
Density/specific gravity	1.10 (@20 degree C)
Solubility	Soluble in water optionally

10 Physical hazard (stability and reactivity)

Stability	
Lighting	May change color by lighting
Heating	Stable in the normal handling conditions
Mechanical shocking	Stable in the normal handling conditions

11 Toxicological information

Acute toxicity (Oral)	LD 50 (Oral, Rad) 8500mg/kg (Note 1)
Local effect	Cause severe skin burns and eye damage
Carcinogenic primeval	Japan Society for Occupation Health Group 2 (Thiourea)

12 Ecological information

May move to the atmosphere, area of the sea and the soil.

13. Disposal consideration

Residues	Dispose of in accordance with related laws and local regulations via licensed waste dispose contractor.
A pollution container and packing	Dispose of in accordance with related laws and local regulations. Dispose of an empty container, after the material is removed.

14 Transport information

International restriction	
UN Class	Class 8 (Corrosive , P. G. 3)
UN number	3264
IMO information (Sea)	Corrosive
IATA information (Aircraft)	Corrosive
Specific precautionary measures	Prior to transport, check the containers and loading to prevent leakage or turnover and fall during transport. Avoid direct sunshine and the high temperature (40 degree C and more) and the high humidity.

15 Regulatory information

International	
Follow all regulation in a place where the product is discharged or consumed.	
Refer to regulatory information with regard to this substance in country or in region where it is discharged or consumed.	

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Domestic (Japan)

Explosive Control Law		Not applicable
High Pressure Gas Safety Act		Not applicable
Fire Service Act		Not applicable (Non-Hazard product)
Poisonous and Deleterious Substances Control Act		Not applicable
Industrial Safety and Health Law	Hazardous items to report	Not applicable
	Specified Chemicals Ordinance	Not applicable
	Organic Solvent Ordinance	Not applicable
	Indication Substances	Not applicable
	Targeted substances for a notice	Applicable
Chemical Substance Control Law	Specified Chemical Substances and Monitoring Chemical Substances.	Not applicable
	Priority Assessment Chemical Substances	Thiourea
Ship Safety Act	Corrosive material	Applicable
Civil Aeronautics Act	Corrosive material	Applicable
Sea Pollution Prevention Act	Bulk shipping	Not applicable
	Unit product shipping	Not applicable
PRTR Law		Not applicable

16 Other information

Note 1 Value This value is calculated from LD50 of raw material used for this product.

The described content herein is given based on the present data and information we can know at present, but no warranty for completeness and accuracy of any data, information and estimation. This product is developed for specific industrial application.

This product should not be used for purposes other than shown in the safety data sheet (SDS).

Before using this product, carefully read and understand the safety attention stated in SDS or brochure.

Do careful handling, since all chemical materials may present possible unknown hazards.

Final determination of suitability of this product is the sole responsibility of the user.