

PERMIT NO :C0766P160464

PAGE :1 of 2

POLLUTION CONTROL DEPARTMENT
ENVIRONMENTAL PROTECTION AND MANAGEMENT ACT
ENVIRONMENTAL PROTECTION AND MANAGEMENT (HAZARDOUS SUBSTANCES)
REGULATIONS
PERMIT TO STORE AND USE HAZARDOUS SUBSTANCES

Under Regulation 17 of the Environmental Protection And Management (Hazardous Substances) Regulations, a permit is hereby granted to:

DR HUGO GERALD SCHMIDT

NRIC/Employment Pass No. G3137576U

of CAMBRIDGE CENTRE FOR ADVANCED RESEARCH AND EDUCATION IN
SINGAPORE LTD.
22 DUXTON HILL
SINGAPORE 089605

to store at

1 CREATE WAY

#07-6/7/8

SINGAPORE 138602

and use the following hazardous substances in the quantity/quantities entered against each substance hereunder and for the purposes specified herein:

Name of Hazardous Substances	Purity	Max Qty Permitted to be stored		Purpose
HYDROCHLORIC ACID	(37.00%)	10.00	LIT	For R & D
LABORATORY REAGENTS EXCEPT THOSE IN ANNEX I	(100.00%)	50.00	LIT	For R & D
LABORATORY REAGENTS EXCEPT THOSE IN ANNEX I	(100.00%)	100.00	KG	For R & D
OLEUM	(30.00%)	10.00	LIT	For R & D
PHOSPHORUS TRICHLORIDE	(99.00%)	1.00	LIT	For R & D
SULPHURIC ACID	(99.00%)	10.00	LIT	For R & D

This permit is issued subject to the provisions of the Environmental Protection And Management Act, the Environmental Protection And Management (Hazardous Substances) Regulations and to the following conditions:

- 1) Hazardous substances in packaging such as drums, carboys etc are to be kept in a sheltered store with adequate security, ventilation and control facilities to contain spillage or leakage.
- 2) All cyanides shall be transported and stored separately from acids.
- 3) All peroxides shall be transported and stored separately from acids, oxidising and reducing agents, accelerators and heavy metal compounds.
- 4) All epichlorohydrin shall be transported and stored separately from any acids, bases, alcohol-containing materials and metals such as zinc and aluminium and anhydrous metal halides.

PERMIT NO :C0766P160464

PAGE :2 of 2

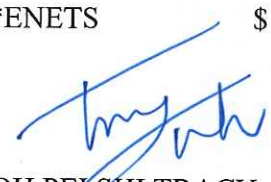
POLLUTION CONTROL DEPARTMENT
ENVIRONMENTAL PROTECTION AND MANAGEMENT ACT
ENVIRONMENTAL PROTECTION AND MANAGEMENT (HAZARDOUS SUBSTANCES)
REGULATIONS
PERMIT TO STORE AND USE HAZARDOUS SUBSTANCES

- 5) Safety measures such as gas leak detectors, alarm system and gas clearing devices shall be installed to ensure the safe storage of toxic gases.
- 6) The percentage and quantity refer to the maximum percentage and maximum aggregate storage quantity allowed for the hazardous substance; including preparations and solutions containing the hazardous substance.
- 7) Boric acid/ sodium borate shall not be used in food manufacturing.
- 8) All organic peroxides shall be transported and stored at temperature below the SADT and not exceeding the storage temperature stated in their respective safety data sheets.
- 9) Hazardous substances shall be labelled according to the Singapore Standard 586: 2014 (Hazard communication for hazardous chemicals and dangerous goods).
- 10) Licence/Permit holder shall immediately notify NEA upon occurrence of any incident involving the loss, releases and/or fires of hazardous substances.
- 11) Nitric acid with a concentration above 90% shall be stored below 25° C within a fire resistant enclosure and away from all other materials. Fire safety measures in accordance to Fire Safety & Shelter Department requirements shall also be taken to ensure the safe storage.
- 12) Permit holder shall ensure that his employment pass is valid throughout the period of validity of his permit.

This permit takes effect from 18 APR 2016 and expires on 17 APR 2017.

Dated this 18th day of APR 2016.

**ENETS \$ 115.00 15-APR-2016 **



TOH PEI SHI TRACY
for Director-General
Environmental Protection

ANNEX I

	List of Hazardous Substances	CAS Number
	Acetic anhydride	108-24-7
	All PIC (Prior Informed Consent) chemicals controlled under the Rotterdam Convention and subject to PIC procedure	-
	Ammonia	7664-41-7
	Arsine	7784-42-1
	Boron tribromide	10294-33-4
	Boron trichloride	10294-34-5
	Boron trifluoride	7637-07-2; 13319-75-0
	Carbon monoxide	630-08-0
	Carbon tetrafluoride	75-73-0
	Chlorinated hydrocarbons used as pesticides	-
	Chlorine	7782-50-5
	Chlorine trifluoride	7790-91-2
	Chlorobenzenes as defined in the Second Schedule of the Environmental Protection And Management Act	-
	Chlorophenols as defined in the Second Schedule of the Environmental Protection And Management Act	-
	Chloropicrin	76-06-2
	Diborane	19287-45-7
	Dibromochloropropane	96-12-8
	Dinosam; its compounds with a metal or a base	4097-36-3
	Drazoxolon	5707-69-7
	Endothal; its salts	145-73-3; 28874-46-6; 129-67-9
	Ethylene imine	151-56-4
	Fluorine	7782-41-4
	Formetanate	22259-30-9
	Germane	7782-65-2
	Hydrochloric acid and Hydrogen chloride (Gas)	7647-01-0
	Hydrogen cyanide; Hydrocyanic acid	74-90-8
	Hydrogen fluoride (Gas)	7664-39-3
	Hydrogen selenide	7783-07-5
*	Hexabromocyclododecane	3194-55-6
*	Mercury	7439-97-6
	Methyl bromide	74-83-9

Methyl chloride	74-87-3
Niclofolan	10331-57-4
Nicotine sulphate	65-30-5
Nitric oxide	10102-43-9
Nitrogen trifluoride	7783-54-2
Oleum and Sulphuric acid	8014-95-7; 7664-93-9
Phosgene	75-44-5
Phosphine	7803-51-2
Phosphorus oxybromide	7789-59-5
Phosphorus oxychloride	10025-87-3
Phosphorus pentabromide	7789-69-7
Phosphorus pentachloride	10026-13-8
Phosphorus pentafluoride	7647-19-0
Phosphorus trichloride	7719-12-2
Sulphur tetrafluoride	7783-60-0
Tetraethyl lead, tetramethyl lead and similar lead containing compounds	78-00-2; 75-74-1; 1920-90-7
Tungsten hexafluoride	7783-82-6

* Added as of 1 Nov 2014

Note : For the above listed hazardous substances in Annex I, companies shall apply to include these hazardous substances individually into the HS Licence/Permit even though they are used as laboratory reagents.