

## Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 05/09/2012

Reviewed on 05/09/2012

### 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Y045 ( B-341/342/343 Std. Solution )
- **Article Code:** 3200053536 (9088001400)
- **MSDS No:** 9
- **Application of the substance / the preparation** Calibration for NO<sub>3</sub>- electrode
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
HORIBA, Ltd.  
2 Miyanohigashi, Kisshoin,  
Minami-ku Kyoto, Japan, KYOTO  
601-8510 JAPAN
- **Information department:** Liquid & Water Quality R&D Dept.
- **Emergency telephone number:** During normal opening times: +81 75 313-8121

### 2 Composition/information on ingredients

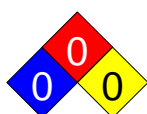
- **Chemical characterization:** Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Components:**

7757-79-1	potassium nitrate	Nearly 0.02%
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### 3 Hazards identification

- **Classification of the substance or mixture**  
The product is not classified according to the Globally Harmonized System (GHS).
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
Not applicable.
- **Information concerning particular hazards for human and environment:**  
The product does not have to be labelled due to the calculation procedure of international guidelines.
- **Classification system:**  
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**  
Observe the general safety regulations when handling chemicals.  
The product is not subject to identification regulations according to directives on hazardous materials.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 0  
Fire = 0  
Reactivity = 0

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**· HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

### 4 First aid measures

- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

### 5 Firefighting measures

- **Suitable extinguishing agents:** CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Protective equipment:** No special measures required.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Dilute with plenty of water.
- **Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections** No dangerous substances are released.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:** The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Goggles recommended during refilling.

### 9 Physical and chemical properties

- **General Information**
- **Appearance:**

<b>Form:</b>	Fluid
<b>Color:</b>	Colorless
<b>Odor:</b>	Odorless
- **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.
- **Flash point:** Not applicable.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Density:** Not determined.
- **Solubility in / Miscibility with**

<b>Water:</b>	Fully miscible.
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- **Other information** No further relevant information available.

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials:** No further relevant information available.

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· **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product is not subject to classification according to internally approved calculation methods for preparations:  
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

### 12 Ecological information

- **Acquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Generally not hazardous for water

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport information

- |                                     |  |
|-------------------------------------|--|
| · <b>UN-Number</b>                  | 1486   |
| · <b>IMDG</b>                       | Class:5.1<br>Packing Group:III<br>This material is less than defined amount. |
| · <b>UN proper shipping name</b>    | Not applicable   |
| · <b>Transport hazard class(es)</b> | Not applicable   |
| · <b>Packing group</b>              | Not applicable   |
| · <b>Environmental hazards:</b>     |  |
| · <b>Marine pollutant:</b>          | No   |

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· **Special precautions for user** Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

### 15 Regulatory information

· **Sara**

· **Section 355 (extremely hazardous substances):**  
None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**  
None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**  
All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**  
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**  
None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**  
None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**  
None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**  
None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**  
None of the ingredients is listed.

· **NTP (National Toxicology Program)**  
None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**  
None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**  
None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**  
None of the ingredients is listed.

· **Product related hazard informations:**

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

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- **National regulations:**
- **Water hazard class:** Generally not hazardous for water.

### 16 Other information

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- **Department issuing MSDS:** Quality Management Center

- **Abbreviations and acronyms:**

ACGIH: American Conference of Governmental Industrial Hygienists  
EINECS: European Inventory of Existing Commercial Chemical Substances  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)

- **Sources**

RTECS

A chemistry large dictionary (KIORITZ CORP. publication 1963)

A product safe data sheet preparation guide book (Corporate Juridical person Nippon Chemical Industrial Co., Ltd. Organization information center)

Safety data sheet guidebook edited by the information center of the Society for Japan Chemical Industry

Japan Advanced Information center of Safety and Health (2009)

- **\* Data compared to the previous version altered.**

Date May. 1, 2009

Revised May. 09, 2012