

# SAFETY DATA SHEET

SDS No. 1021-31010

Date

June 30, 2015

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## 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Acetaldehyde-DNPH  
NAME OF MANUFACTURER : GL Sciences Inc.  
ADDRESS : 22-1 Nishishinjuku 6-chome Shinjuku-ku Tokyo 163-1130, Japan  
CHARGE SECTION : International Sales Section  
TELEPHONE No. : +81-3-5323-6620  
FACSIMILE No. : +81-3-5323-6621  
PRODUCT No. : 1021-31010  
SDS No. : 1021-31010  
Research use only.

## 2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION : Flammable solid : Category 2  
Acute toxicity - oral - : Category 4  
Skin corrosion/irritation : Category 2  
Eye damage/irritation : Category 2

HAZARD SYMBOL :



SIGNAL WORD : Warning

HAZARD STATEMENTS :

H228 Flammable solids  
H302 Harmful if swallowed  
H315 Cause skin irritation  
H319 Cause serious eye irritation

PRECAUTIONARY STATEMENTS :

P210 Keep away from heat/sparks/open flames/hot surfaces. –No smoking.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P370+P378 In case of fire: Use appropriate medias to extinguish.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P330 Rinse mouth.  
P332+P313 If skin irritation occurs: Get medical attention.  
P337+P313 If eye irritation persists: Get medical attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME : Acetaldehyde-2,4-dinitrophenylhydrazone  
SYNONYMS : Acetaldehyde-DNPH  
CONTENT : > 98%  
CHEMICAL FORMULA : C<sub>8</sub>H<sub>8</sub>N<sub>4</sub>O<sub>4</sub>  
CAS NUMBER : 1019-57-4  
TSCA INVENTORY : Listed  
EINECS No : Not established  
EC INDEX No. : Not established

4. FIRST AID MEASURES

- GENERAL ADVICE : Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.
- INHALATION : Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.
- SKIN CONTACT : Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.
- EYE CONTACT : Remove any contact lenses at once. Flush eyes well with flooding large amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.
- INGESTION : Rinse mouth, give plenty of water to dilute the substance. Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.

5. FIRE FIGHTING MEASURES

- EXTINGUISHING MEDIA : Powder, foam (alcohol foam), carbon dioxide, water spray.
- DISABLED EXTINGUISHING MEDIA : Straight stream.
- FIRE & EXPLOSION HAZARDS : Toxic, irritating, fumes or smoke may be emitted.
- SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS : Firemen should wear normal protective equipment(full bunker gear) and positive-pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

- PERSONAL PRECAUTIONS : Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.
- ENVIROMENTAL PRECATIONS : Prevent spills from entering sewers, watercourses or low areas.
- METHODS FOR CLEAN UP : Do not touch spilled material without suitable protection. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Pull all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose contaminated clothing.

7. HANDLING AND STORAGE

- HANDLING : Keep away from ignition sources and ventilate the area - No smoking. In case of insufficient ventilation, wear suitable respiratory equipment.  
Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Handle this product with suitable protection.  
After using this product, dispose of contents/container in accordance with all applicable regulations and appropriate ways.
- STORAGE : Store away from sunlight, heat and all ignition sources in well-ventilated dry place. Keep container tightly closed.
- INCOMOPATIBLE PRODUCTS : Strong oxidizers, acids

8. EXPOSURE CONTROL/PERSONAL PROTECTION

- ENGINEERING MEASURES : Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.
- VENTILATION : Local Exhaust ; Necessary, Mechanical(General) ; Recommended
- PERSONAL PROTECTION
- RESPIRATORY PROTECTION : Safety mask(Use respirators approved under appropriate government standards and follow all regulations.)
- HAND PROTECTION : Protective gloves
- EYE PROTECTION : Safety glasses(goggles)
- SKIN PROTECTION : Protective clothing
- CONTROL PARAMETERS
- ACGIH : No data available
- OSHA PEL : No data available

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	: Light yellow, reddish yellow
SHAPE	: Solid (crystal, powder)
ODOR	: No data available
pH	: No data available
BOILING POINT	: No data available
MELTING POINT	: 164 °C
FLASH POINT	: No data available
EXPLOSIVE LIMITS	: No data available
VAPOR PRESSURE	: No data available
VAPOR DENSITY	: No data available
SPECIFIC GRAVITY	: No data available
SOLUBILITY IN	: No data available
PARTITION COEFFICIENT ; n-octanol/water	: No data available
AUTOIGNITION TEMPERATURE	: No data available

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**10. STABILITY AND REACTIVITY**

REACTIVITY	: Stable under recommended storage conditions.
CHEMICAL STABILITY	: Decomposed by heat, shock, or friction.
CONDITION TO AVOID	: Sunlight, heat, open flames, high temperature, sparks, static electrical charge, shock, friction
INCOMPATIBLE MATERIALS	: No data available
HAZARDOUS DECOMPOSITION PRODUCTS	: CO, CO <sub>2</sub> , NO <sub>x</sub>

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**11. TOXICOLOGICAL INFORMATION**

ACUTE TOXICITY	: No data available
SKIN CORROSION/IRRITATION	: No data available
EYE DAMAGE/EYE IRRITATION	: No data available
SENSITIZATION	: No data available
GERM CELL MUTAGENICITY	: No data available
CARCINOGENICITY	: No data available
SPECIFIC TARGET ORGAN TOXICITY	: No data available
ASPIRATION TOXICITY	: No data available

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**12. ECOLOGICAL INFORMATION**

ECOTOXICITY	: No data available
BIODEGRADABILITY	: No data available
BIOACCUMULATION POTENTIAL	: No data available
MOBILITY IN SOIL	: No data available
OTHER ADVERSE EFFECTS	: Not listed in Montreal Protocol list.

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**13. DISPOSAL INFORMATION**

Dispose in a hazardous-waste site in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environment agency for specific rules).

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**14. TRANSPORT INFORMATION**

IATA	
UN NUMBER	: 1325
UN PROPER SHIPPING NAME	: FLAMMABLE SOLID, ORGANIC, N.O.S (Nitro compounds)
CLASS	: Class 4.1, Flammable Solids
PACKING GROUP	: III
ADR/RID	: 1325, Flammable Solids
DOT	: 1325, Flammable Solids
MARINE POLLUTANT	: Not classified

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**15. REGULATORY INFORMATION**

US REGULATIONS	: Labeling according to EC Directives; See section 2
EU REGULATIONS	: Labeling according to EC Directives; See section 2

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**16. OTHER INFORMATION****NOTICE:**

The information contained in the SDS description is applicable exclusively to the chemical substance identified herein and for its intended use as an analytical reference standard or reagent and to the unit quantity intended for that purpose. The information does not relate to, and may not be appropriate for, any application or larger quantity of the substance described. Our products are intended for the use by individuals possessing sufficient technical skill and qualification on use the material potential hazardous chemical. Accordingly, no representation or warranty, express or implied, with respect to merchantability and fitness for a particular purpose is made with respect to the information contained herein.

**Attention:**

This product in terms of chemical identity and the unit amount provide is intended for use in chemical analysis and not for human consumption, nor any other purpose.