

MATERIAL SAFETY DATA SHEET



HPLC Gradient Accuracy Standard

SECTION 1 – CHEMICAL IDENTIFICATION

HPLC Gradient Accuracy Standard

SECTION 2 – COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	EINECS#	Name
67-64-1	200-662-2	Acetone
7732-18-5	231-791-2	Water

Standard	Concentration in Water
HPLC Gradient Accuracy Standard	15%

SECTION 3 – HAZARDS IDENTIFICATION

Irritating to the eyes. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness

Potential Health Effects

Eye: - Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. Vapours cause eye irritation.

Skin: - May be absorbed through the skin. Repeated or prolonged exposure may cause drying and cracking of the skin.

Ingestion: - May cause irritation of the digestive tract. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.

Inhalation: - Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause motor incoordination and speech abnormalities.

Chronic: - Prolonged or repeated skin contact may cause dermatitis. Chronic inhalation may cause effects similar to those of acute inhalation.

SECTION 4 – FIRST AID MEASURES

Skin contact – In the case of skin contact, wash the splashed surface with large quantities of running water. Remove contaminated clothing and wash before re-use. In severe cases, obtain medical attention.

Eye contact – If the substance has entered the eyes, wash out with water or saline solution for at least 15 minutes. Obtain medical attention.

Ingestion – If the chemical has been confined to the mouth, give large quantities of water as a mouthwash – ensure mouthwash is not swallowed. If the chemical has been swallowed, wash mouth out thoroughly with water and give about 250ml to dilute it in the stomach. In severe cases, obtain medical attention.

Inhalation – Remove from exposure, rest and keep warm. In severe cases, obtain medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

General Information: - If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Extremely flammable liquid and vapour. Vapour may cause flash fire. Vapours are heavier than air and may travel to a source of ignition and flash back. Vapours can spread along the ground and collect in low or confined areas.

Extinguishing Media: - Use dry chemical, carbon dioxide, or appropriate foam. Water may be ineffective because it will not cool material below its flash point.

MATERIAL SAFETY DATA SHEET



HPLC Gradient Accuracy Standard

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal protection – Wear anti-splash eye protection and gloves.
Spillages – Shut off all ignition sources and evacuate the area.
Small spillages may be washed to drain with large amounts of water as there are no perceived adverse environmental effects from this quantity.
Otherwise absorb spill onto sand or other inert non-combustible absorbent material. Transfer to a closable salvage container and arrange for specialist disposal.
Clean-up procedures – Ventilate area to dispel residual vapour

SECTION 7 – HANDLING AND STORAGE

Handling precautions – Wear eye protection, gloves and protective clothing. Take precautions against static discharge.
Storage precautions – Store at 15-25°C. Keep well closed and protected from direct sunlight and moisture. Store in a suitable flameproof cabinet when not in use.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

Personal protection – Wear anti-splash eye protection and nitrile gloves.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: colourless liquid with a fragrant, sweet odour
Melting point: -95 C
Boiling point: 56 C
Vapour density: 2.0
Vapour pressure: 181 mm Hg at 20 C
Specific gravity: 0.79
Flash point: -18 C
Explosion limits: 2.6% - 13.0%
Autoignition temperature: 538 C

SECTION 10 – STABILITY AND REACTIVITY

Stable. Incompatible with halogen acids and halogen compounds, strong bases, strong oxidizing agents, caustics, amines and ammonia, chlorine and chlorine compounds, strong acids, nitrosyl compounds. Highly flammable. Readily forms explosive mixtures with air.

MATERIAL SAFETY DATA SHEET



HPLC Gradient Accuracy Standard

SECTION 11 – TOXICOLOGICAL INFORMATION

No toxic effects from skin exposure although redness and irritation may occur.
Further data – Oral LD50 (rat) 5800mg/kg
Inhalation LD50 (rat) 50mg/l
No evidence of carcinogenic properties. No evidence of mutagenic or teratogenic effects.

SECTION 12 – ECOLOGICAL INFORMATION

No environmental hazard is anticipated, provided that the material is handled and disposed of with due care and attention.

SECTION 13 – DISPOSAL CONSIDERATIONS.

Dispose of in a manner consistent with local and regional regulations.

SECTION 14 – TRANSPORT INFORMATION

Contact NLG Analytical for transportation details

SECTION 15 – REGULATORY INFORMATION

Classification and Symbol – HIGHLY FLAMMABLE (F); IRRITANT (Xi)
Risk phrases –
R11 Highly flammable
R36 Irritating to eyes
R66 Repeated exposure may cause skin dryness or cracking
R67 Vapours may cause drowsiness and dizziness
Safety phrases –
S9 Keep container in a well ventilated place
S16 Keep away from sources of ignition. No smoking.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical attention
EEC No: 200-662-2
Regulated in the UK under the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1972
Workplace Exposure Limits:
Short term exposure limit (15 minute reference period) 3620mg/m³ (1500 ppm)
Long term exposure limit (8 hour TWA reference period) 1210mg/m³ (500 ppm)

SECTION 16 – GENERAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibilities of such damages.