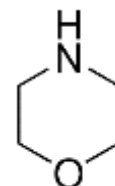


## MORPHOLINE AR/ACS

<b>PRODUCT CODE</b>	587355
<b>SYNONYMS</b>	Tetrahydro-1,4-oxazine
<b>C.I. NO.</b>	N/A
<b>CASR NO.</b>	110-91-8
<b>ATOMIC OR MOLECULAR FORMULA</b>	C <sub>4</sub> H <sub>9</sub> NO
<b>ATOMIC OR MOLECULAR WEIGHT</b>	87.12
<b>PROPERTIES</b>	--



PARAMETER	LIMIT
Description	Clear colourless to pale yellow liquid.
Solubility	Miscible with water forming clear and colourless solution.
Minimum assay(By GC)	99.5%
Wt. per ml at 20°C	0.999 - 1.000 g
Refractive Index (n) <sup>20</sup> <sub>D</sub>	1.454 - 1.455
Boiling Range	127 - 129°C

MAXIMUM LIMIT OF IMPURITIES	
Non-volatile matter	0.01%
Iron (Fe)	0.00005%
Heavy metal (Pb)	0.0001%
Copper (Cu)	0.00001%
Water	0.2%

**Note(s): Assay (if applicable) method mentioned.**

**DANGER HAZARD STATEMENTS:** Flammable liquid and vapour. Fatal if inhaled. Harmful in contact with skin. Harmful if swallowed. May be corrosive to metals. Causes severe skin burns and eye damage.

**PRECAUTIONARY STATEMENTS :**  
**Prevention :** Do not breathe dust or mist. Wash thoroughly after handling. Wash hands thoroughly after handling. Ground/bond container and receiving equipment. Do not eat, drink or smoke when using this product. Use only outdoors or in a well ventilated area. Wear respiratory protection. Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves/clothing and eye/face protection. Wear protective gloves/clothing. Use explosion-proof Electrical/ventilating/lighting/equipment. Take precautionary measures against static discharge. Wear protective gloves and eye/face protection. Keep away from heat/sparks/open flame - No smoking. Keep container tightly closed. Use only non-sparking tools.  
**Response :** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If on skin or hair: remove/take off immediately all contaminated clothing. Rinse with water/shower. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage. Specific treatment: refer to Label or MSDS. IF ON SKIN: Gently wash with plenty of soap and water. Call a POISON CENTER or doctor/physician if you feel unwell.

**Disposal :** Allow to evaporate in safe open area (applicable for small quantities). The chemical should be burnt in a chemical incinerator equipped with burner and scrubber. If the volumes are larger than 500ml and no incinerator and site of evaporation is not available then transfer the waste chemical to waste solvent drum for collection by specialist disposal company.

IMDG Code : 8/I  
 UN No. : 2054  
 IATA : 8

Hazard Pictogram(s) :



Replace Date 11-Apr-2026