



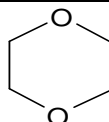
**SDFCL**  
s d fine-chem limited

Quality Control Dept.

Product Specification



|                                |                                              |
|--------------------------------|----------------------------------------------|
| E Control                      | QC2\DATAD\D:\PS\20100XPS.xls                 |
| PRODUCT CODE                   | 20100                                        |
| PRODUCT NAME                   | 1,4-DIOXAN AR (Stabilised with 25 ppm BHT)   |
| SYNONYMS                       | N/A                                          |
| C.I. NO.                       | N/A                                          |
| CASR NO.                       | 123- 91- 1                                   |
| ATOMIC OR<br>MOLECULAR FORMULA | C <sub>4</sub> H <sub>8</sub> O <sub>2</sub> |
| ATOMIC OR<br>MOLECULAR WEIGHT  | 88.11                                        |
| PROPERTIES                     |                                              |



| PARAMETER                                       | LIMIT                                                                                                                                                                                |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description                                     | A clear liquid, not more than 10 Hazen units in colour with a characteristic odour. Dioxan readily takes up atmospheric oxygen on storage with the formation of explosive peroxides. |
| Solubility                                      | Miscible with water and with diethyl ether to clear & Colourless solution.                                                                                                           |
| Minimum assay(By GC)                            | 99.5%                                                                                                                                                                                |
| Wt.per ml at 20 °C                              | 1.032 - 1.034 g                                                                                                                                                                      |
| Freezing Point                                  | Not below 11.5°C                                                                                                                                                                     |
| Boiling Range<br>(100.0 - 102.0°C)              | Min. 95.0%                                                                                                                                                                           |
| Refractive Index (n) <sub>D</sub> <sup>20</sup> | 1.420 - 1.424                                                                                                                                                                        |
| MAXIMUM LIMIT OF IMPURITIES                     |                                                                                                                                                                                      |
| Water                                           | 0.05%                                                                                                                                                                                |
| Acidity (CH <sub>3</sub> COOH)                  | 0.02%                                                                                                                                                                                |
| Non volatile matter                             | 0.01%                                                                                                                                                                                |
| Copper (Cu)                                     | 0.0001%                                                                                                                                                                              |
| Iron (Fe)                                       | 0.0001%                                                                                                                                                                              |
| Lead (Pb)                                       | 0.0001%                                                                                                                                                                              |
| Peroxide (as H <sub>2</sub> O <sub>2</sub> )    | 0.005%                                                                                                                                                                               |

Caution : Peroxide content is reduced to lowest practical limit.  
Take care during distillation.

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

**DANGER**

**HAZARD STATEMENTS** : May cause respiratory irritation. Highly flammable liquid and vapour. Harmful if swallowed. Causes mild skin irritation. Causes serious eye irritation. Suspected of causing cancer.

**PRECAUTIONARY STATEMENTS** :

**Prevention** : Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Ground/bond container and receiving equipment. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use only non-sparking tools. Wear protective gloves and eye/face protection. Keep container tightly closed. Keep away from heat/sparks/open flame - No smoking. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting/equipment.

**Response** : If eye irritation persists, get medical advice/attention. If skin irritation occurs, seek medical advice/attention. Wear eye/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If on skin or hair: remove/take off immediately all contaminated clothing. Rinse with water/shower. Specific treatment: refer to Label or MSDS. If exposed or concerned: Get medical attention advice.

IMDG Code :-----  
UN No. :----- IATA  
:-----

**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. After testing for peroxide the product should be given to specialized disposal company.

Hazard pictogram(s) :



**Skin irritation   Flammable liquids   Aspiration hazard**

|                             |                            |                               |                           |
|-----------------------------|----------------------------|-------------------------------|---------------------------|
| Prepared By : DINESH        | Checked By: RAJU VYAS      | Approved By: S.S.TOLIA        | Issue Date : 01/07/2002   |
| Name/Dept. : Officer (Q.A.) | Name/Dept. :Incharge(Q.A.) | Name/Dept. : Incharge (Tech.) | Revision No. : 01         |
| Sign. :                     | Sign. :                    | Sign. :                       | Revision dt. : 16/08/2010 |
| Date : 13/08/2010           | Date : 13/08/2010          | Date : 16/08/2010             | AMEND NO. : P062          |