Printing date 05/20/2015

Reviewed on 05/20/2015

1 Identification

- · Product identifier
- · Trade name: Ferro-Pak® 35A
- · Application of the substance / the mixture Corrosion inhibitors
- \cdot Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Daubert Cromwell 12701 S. Ridgeway Ave Alsip, IL 60803 708-293-7750

· Information department: info@daubertcromwell.com

- Emergency telephone number:
- CHEMTREC: 800-424-9300 (U.S.), +1-703-527-3887 (International; Call collect)

2 Hazard(s) identification

• *Classification of the substance or mixture The product is not classified according to the Globally Harmonized System (GHS).*

· Label elements

- · GHS label elements None
- · Hazard pictograms None
- · Signal word None
- · Hazard statements None
- · Classification system:
- · NFPA ratings (scale 0 4)

$$\begin{array}{c} \begin{array}{c} & Health = 0\\ Fire = 1\\ Reactivity = 0 \end{array}$$

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

57-55-6 propane-1,2-diol

10-<25%

4 First-aid measures

· Description of first aid measures

· General information: No special measures required.

(Contd. on page 2)

⁻ US

Printing date 05/20/2015

Reviewed on 05/20/2015

Trade name: Ferro-Pak[®] 35A

- · 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.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 *Fire-fighting measures*

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/ surface or ground 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
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · 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.

· Control parameters

· Components with limit values that require monitoring at the workplace:

57-55-6 propane-1,2-diol

WEEL Long-term value: 10 mg/m³

• Additional information: The lists that were valid during the creation were used as basis.

(Contd. on page 3)

Printing date 05/20/2015

Reviewed on 05/20/2015

Trade name: Ferro-Pak[®] 35A

(Contd. of page 2)

· Exposure controls

- · 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: | | |
|-------------------------------------|---|--|
| Appearance: Form: | Fluid | |
| Color: | According to product specification | |
| Odor: | Characteristic | |
| Odour threshold: | Not determined. | |
| pH-value: | Not determined. | |
| Change in condition | | |
| Melting point/Melting range: | Undetermined. | |
| Boiling point/Boiling range: | 100 °C (212 °F) | |
| Flash point: | 101 °C (214 °F) | |
| Flammability (solid, gaseous): | Not applicable. | |
| Ignition temperature: | 371 °C (700 °F) | |
| Decomposition temperature: | Not determined. | |
| Auto igniting: | Product is not selfigniting. | |
| Danger of explosion: | Product does not present an explosion hazard. | |
| Explosion limits: | | |
| Lower: | 2.6 Vol % | |
| Upper: | 12.6 Vol % | |
| Vapor pressure at 20 °C (68 °F): | 0.1 hPa | |
| Density: | Not determined. | |
| Relative density | Not determined. | |
| Vapour density | Not determined. | |
| Evaporation rate | Not determined. | |

Printing date 05/20/2015

Reviewed on 05/20/2015

Trade name: Ferro-Pak® 35A

| | | (Contd. of page |
|--|--|-----------------|
| · Solubility in / Miscibility with Water: | Not miscible or difficult to mix. | |
| · Partition coefficient (n-octanol/w | ater): Not determined. | |
| · Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| · Solvent content: | | |
| Organic solvents: | 11.1 % | |
| VOC content: | 11.1 % | |
| | 111.4 g/l / 0.93 lb/gl | |
| Solids content: | 64.1 % | |
| • Other information | No further relevant information available. | |

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · *Incompatible materials:* No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · 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.

· Carcinogenic categories

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

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

(Contd. on page 5)

119

Printing date 05/20/2015

Reviewed on 05/20/2015

(Contd. of page 4)

Trade name: Ferro-Pak® 35A

12 Ecological information

- · Toxicity
- Aquatic 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.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:

· General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

| UN-Number DOT, ADN, IMDG, IATA | Not regulated |
|--|-----------------|
| UN proper shipping name DOT, ADN, IMDG, IATA | Not regulated |
| Transport hazard class(es) | |
| DOT, ADN, IMDG, IATA Class | Not regulated |
| Packing group DOT, IMDG, IATA | Not regulated |
| Environmental hazards: Marine pollutant: | No |
| Special precautions for user | Not applicable. |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

(Contd. on page 6)

Printing date 05/20/2015

Reviewed on 05/20/2015

Trade name: Ferro-Pak® 35A

(Contd. of page 5)

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot 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) (Substances not listed):

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.

· 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.

· GHS label elements None

· Hazard pictograms None

· Signal word None

• Hazard statements None

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Environment protection department.

· Contact: Dr. Dhoot

- · Date of preparation / last revision 05/20/2015 / -
- Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

Printing date 05/20/2015

Reviewed on 05/20/2015

Trade name: Ferro-Pak[®] 35A

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) (Contd. of page 6)

US –