SAFETY DATA SHEET

Revision Date 19-Aug-2015

1. IDENTIFICATION

Version 3

Product identifier Product Name

Case I.H. Red

Other means of identificationProduct CodeTP110GALSKU(s)45575, TP110GAL, TP110QT

Recommended use of the chemical and restrictions on useRecommended UseNo information available.Uses advised againstNo information available

Details of the supplier of the safety data sheet Supplier Address TISCO PO Box 82222 Lincoln, NE 68501

Lincoln, NE 68501 Phone: 402-476-6558 Fax: 402-476-6749

Emergency telephone number Emergency Telephone

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

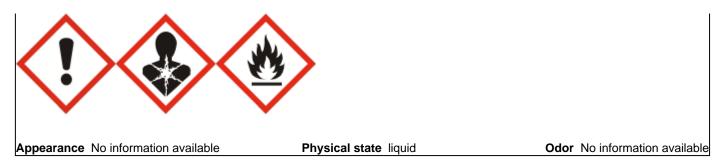
| Skin sensitization | Category 1 |
|--|-------------|
| Germ cell mutagenicity | Category 1B |
| Carcinogenicity | Category 2 |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Aspiration toxicity | Category 1 |
| Flammable liquids | Category 3 |

Emergency Overview

Danger

Hazard statements

May cause an allergic skin reaction May cause genetic defects Suspected of causing cancer Causes damage to organs through prolonged or repeated exposure May be fatal if swallowed and enters airways Flammable liquid and vapor



Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Contaminated work clothing should not be allowed out of the workplace Wear protective gloves Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Keep away from heat/sparks/open flames/hot surfaces. - No smoking Keep container tightly closed Ground/bond container and receiving equipment Use only non-sparking tools Take precautionary measures against static discharge Use explosion-proof electrical/ ventilating/ lighting/ equipment

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomiting In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information

- Causes mild skin irritation
- Harmful to aquatic life with long lasting effects

• Harmful to aquatic life Unknown acute toxicity

10.13% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|-----------------------------------|------------|----------|--------------|
| Solvent Naphtha, Medium Aliphatic | 64742-88-7 | 15 - 40 | * |
| Stoddard Solvent | 8052-41-3 | 3 - 7 | * |
| Xylene | 1330-20-7 | 1 - 5 | * |
| Titanium dioxide | 13463-67-7 | 0.1 - 1 | * |
| Ethyl Benzene | 100-41-4 | 0.1 - 1 | * |
| Methyl Ethyl Ketoxime | 96-29-7 | 0.1 - 1 | * |

| Neo C9-13 Acid, Cobalt Salts | 68955-83-9 | 0.1 - 1 | * |
|------------------------------|------------|---------|---|
| Cobalt neodecanoate | 27253-31-2 | 0.1 - 1 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

| Description of first aid measures | | |
|--|--|--|
| General advice | Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). | |
| Eye contact | Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. | |
| Skin Contact | Wash off immediately with plenty of water. Call a physician immediately. | |
| Inhalation | Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a physician immediately. | |
| Ingestion | Do NOT induce vomiting. Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention. | |
| Self-protection of the first aider | Remove all sources of ignition. | |
| Most important symptoms and effects, both acute and delayed | | |
| Symptoms | No information available. | |
| Indication of any immediate medical attention and special treatment needed | | |
| Note to physicians | Treat symptomatically. | |

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Flammable.

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required.

Environmental precautions

| Environmental precautions | Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information. | | |
|-----------------------------------|---|--|--|
| Methods and material for containn | nent and cleaning up | | |
| Methods for containment | Prevent further leakage or spillage if safe to do so. | | |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Cover liquid spill with sand, earth or other non-combustible absorbent material. Soak up with inert absorbent material. | | |
| 7. HANDLING AND STORAGE | | | |

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

| Incompatible materials | Chlorinated compounds. |
|------------------------|------------------------|
|------------------------|------------------------|

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-------------------------------|---------------------------|--|---|
| Stoddard Solvent 8052-41-3 | TWA: 100 ppm | TWA: 500 ppm TWA: 2900 mg/m ³ | IDLH: 20000 mg/m ³ Ceiling: 1800 mg/m ³ 15 min |
| | | (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³ | TWA: 350 mg/m ³ |
| Xylene | STEL: 150 ppm | TWA: 100 ppm | - |
| 1330-20-7 | TWA: 100 ppm | TWA: 435 mg/m ³ | |
| | | (vacated) TWA: 100 ppm | |
| | | (vacated) TWA: 435 mg/m ³ | |
| | | (vacated) STEL: 150 ppm | |
| | | (vacated) STEL: 655 mg/m ³ | |
| Titanium dioxide | TWA: 10 mg/m ³ | TWA: 15 mg/m ³ total dust | IDLH: 5000 mg/m ³ |
| 13463-67-7 | _ | (vacated) TWA: 10 mg/m ³ total dust | - |
| Ethyl Benzene | TWA: 20 ppm | TWA: 100 ppm | IDLH: 800 ppm |
| 100-41-4 | | TWA: 435 mg/m ³ | TWA: 100 ppm |
| | | (vacated) TWA: 100 ppm | TWA: 435 mg/m ³ |
| | | (vacated) TWA: 435 mg/m ³ | STEL: 125 ppm |
| | | (vacated) STEL: 125 ppm | STEL: 545 mg/m ³ |
| | | (vacated) STEL: 545 mg/m ³ | - |

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

| Engineering Controls | Showers Eyewash stations Ventilation systems. |
|------------------------------------|---|
| Individual protection measures, su | ich as personal protective equipment |
| Eye/face protection | Tight sealing safety goggles. |
| Skin and body protection | No special technical protective measures are necessary. |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| General Hygiene Considerations | When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Physical state Appearance Color | liquid No information available No information available | Odor Odor threshold | No information available No information available |
|---|--|-------------------------|--|
| Property pH Melting point/freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density Specific Gravity Water solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity Explosive properties | ValuesNo information availableNo information available>= 117 °C / 243 °F $39 °C / 102 °F$ No information availableNo information available | <u>Remarks • Method</u> | |
| Oxidizing properties Other Information | No information available | | |
| Softening point Molecular weight VOC Content (%) Density Bulk density Percent solids by weight Percent volatile by weight Percent solids by volume Actual VOC (lbs/gal) Actual VOC (grams/liter) EPA VOC (lbs/gal) | No information available No information available No information available 7.87 lbs/gal No information available 52.2% 47.8% 42.2% 3.8 450.3 3.8 | | |

EPA VOC (grams/liter) EPA VOC (lb/gal solids) 8.9

450.3

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Chlorinated compounds.

Hazardous Decomposition Products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| Product Information | No data available |
|---------------------|--------------------|
| Inhalation | No data available. |
| Eye contact | No data available. |
| Skin Contact | No data available. |
| Ingestion | No data available. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|---------------------|---|--|
| Solvent Naphtha, Medium Aliphatic 64742-88-7 | > 5000 mg/kg (Rat) | = 3000 mg/kg (Rabbit) | > 5.28 mg/L (Rat)4 h |
| Xylene 1330-20-7 | = 3500 mg/kg (Rat) | > 1700 mg/kg (Rabbit)> 4350 mg/kg (Rabbit) | = 29.08 mg/L (Rat)4 h = 5000 ppm (Rat)4 h |
| Titanium dioxide 13463-67-7 | > 10000 mg/kg (Rat) | - | - |
| Ethyl Benzene 100-41-4 | = 3500 mg/kg (Rat) | = 15400 mg/kg (Rabbit) | = 17.2 mg/L (Rat)4 h |
| Methyl Ethyl Ketoxime 96-29-7 | = 930 mg/kg (Rat) | = 0.2 mg/kg (Rabbit) | = 20 mg/L (Rat)4 h |

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Sensitization Germ cell mutagenicity Carcinogenicity | No information available. No information available. No information available. | | | |
|--|---|----------|-----|------|
| Chemical Name | ACGIH | IARC | NTP | OSHA |
| Xylene 1330-20-7 | - | Group 3 | - | - |
| Titanium dioxide 13463-67-7 | - | Group 2B | - | Х |

| Ethyl Benzene 100-41-4 | A3 | Group 2B | - | X | |
|---|--|---|---|---|--|
| Neo C9-13 Acid, Cobalt Salts 68955-83-9 | - | Group 2B | - | Х | |
| Cobalt neodecanoate 27253-31-2 | - | Group 2B | - | Х | |
| A3 - Animal Carcinogen IARC (International Age Group 2B - Possibly Caro Group 3 - Not classifiable | ency for Research on Cance cinogenic to Humans a as a human carcinogen afety and Health Administra No informati No informati re No informati Ethylbenzen (IARC) as po | ogenic to Humans s a human carcinogen ty and Health Administration of the US Department of Labor) No information available. No information available. | | | |
| Target Organ Effects Aspiration hazard | system, thyro Central nervo | system, thyroid, testicles, and pituitary glands. Central nervous system, Eyes, kidney, Respiratory system, Skin. No information available. | | | |

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document mg/kg mg/l

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT.

Ecotoxicity

Harmful to aquatic life with long lasting effects

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---|---|--|--|
| Solvent Naphtha, Medium Aliphatic 64742-88-7 | 450: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 800: 96 h Pimephales promelas mg/L LC50 static | 100: 48 h Daphnia magna mg/L EC50 |
| Xylene 1330-20-7 | | 13.4: 96 h Pimephales promelas mg/L LC50 flow-through 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 19: 96 h Lepomis macrochirus mg/L LC50 7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 semi-static 780: 96 h Cyprinus carpio mg/L LC50 30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static | 3.82: 48 h water flea mg/L EC50 0.6: 48 h Gammarus lacustris mg/L LC50 |
| Ethyl Benzene 100-41-4 | 4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static | 11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through 32: 96 h Lepomis macrochirus mg/L LC50 static 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static | 1.8 - 2.4: 48 h Daphnia magna mg/L EC50 |

| Methyl Ethyl Ketoxime 96-29-7 | 83: 72 h Desmodesmus subspicatus mg/L EC50 | promelas mg/L LC50 flow-through | 750: 48 h Daphnia magna mg/L EC50 |
|----------------------------------|---|--|--------------------------------------|
| | | 760: 96 h Poecilia reticulata mg/L LC50 static 320 - 1000: 96 h | |
| | | Leuciscus idus mg/L LC50 static | |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | Partition coefficient |
|----------------------------------|-----------------------|
| Xylene 1330-20-7 | 2.77 - 3.15 |
| Ethyl Benzene 100-41-4 | 3.118 |
| Methyl Ethyl Ketoxime 96-29-7 | 0.65 |

Other adverse effects

No information available

Do not reuse container.

D001 U239

13. DISPOSAL CONSIDERATIONS

|--|

Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

US EPA Waste Number

| Chemical Name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|---------------------------|------|-----------------------------------|------------------------|------------------------|
| Xylene 1330-20-7 | - | Included in waste stream: F039 | - | U239 |
| Ethyl Benzene 100-41-4 | - | Included in waste stream: F039 | - | - |

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste Status |
|------------------------------|-----------------------------------|
| Xylene | Toxic |
| 1330-20-7 | Ignitable |
| Ethyl Benzene | Toxic |
| 100-41-4 | Ignitable |
| Neo C9-13 Acid, Cobalt Salts | Toxic |
| 68955-83-9 | |
| Cobalt neodecanoate | Toxic |
| 27253-31-2 | |

14. TRANSPORT INFORMATION

DOT Marine pollutant Not regulated This product contains a chemical which is listed as a marine pollutant according to DOT.

15. REGULATORY INFORMATION

| International Inventories | |
|---------------------------|-------------------|
| TSCA | Complies |
| DSL/NDSL | Complies * |
| EINECS/ELINCS | Complies * |
| ENCS | Does not comply * |
| IECSC | Complies * |
| KECL | Complies * |
| PICCS | Does not comply * |
| AICS | Does not comply * |
| | |

* This product contains an unknown chemical, therefore, this product's compliance to the inventory list is NOT DETERMINED

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | SARA 313 - Threshold Values % |
|--------------------------|-------------------------------|
| Xylene - 1330-20-7 | 1.0 |
| Ethyl Benzene - 100-41-4 | 0.1 |

SARA 311/312 Hazard Categories

| Acute health hazard | Yes |
|-----------------------------------|-----|
| Chronic Health Hazard | Yes |
| Fire hazard | Yes |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------------|--------------------------------|------------------------|---------------------------|-------------------------------|
| Xylene 1330-20-7 | 100 lb | - | - | Х |
| Ethyl Benzene 100-41-4 | 1000 lb | Х | Х | Х |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|-----------------------|--------------------------|----------------|--------------------------|
| Xylene | 100 lb | - | RQ 100 lb final RQ |
| 1330-20-7 | | | RQ 45.4 kg final RQ |
| Ethyl Benzene | 1000 lb | - | RQ 1000 lb final RQ |
| 100-41-4 | | | RQ 454 kg final RQ |
| LIC Ctote Degulations | | | |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical Name | California Proposition 65 | |
|---------------------------------|---------------------------|--|
| Titanium dioxide - 13463-67-7 | Carcinogen | |
| Ethyl Benzene - 100-41-4 | Carcinogen | |
| Crystalline Silica - 14808-60-7 | Carcinogen | |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| Solvent Naphtha, Medium Aliphatic 64742-88-7 | X | - | <u>-</u> |
| Stoddard Solvent 8052-41-3 | Х | X | Х |
| Xylene 1330-20-7 | Х | X | Х |
| Ethyl Benzene 100-41-4 | Х | X | Х |
| Neo C9-13 Acid, Cobalt Salts 68955-83-9 | Х | - | Х |
| Cobalt neodecanoate 27253-31-2 | Х | - | Х |
| Propylene Glycol Methyl Ether 107-98-2 | Х | X | Х |
| Silica, Amorphous fumed 7631-86-9 | Х | X | Х |
| Crystalline Silica X 14808-60-7 | | X | Х |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Hazardous air pollutants (HAPS) content

LIST OF HAZARDOUS AIR POLLUTANTS SUBJECT TO THE PROVISIONS OF THE CLEAN AIR ACT, TITLE I SECTION 112 'National Emission Standards for Hazardous Air Pollutants':

| Chemical Name | Weight % of HAPS in Product | Pounds HAPS / Gal Product |
|---------------|-----------------------------|---------------------------|
| Xylene | 2.66% | 0.21 |
| 1330-20-7 | | |

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

| NFPA | Health hazards 2 | Flammability 2 | Instability 0 | Physical and Chemical Properties - |
|------|-------------------|----------------|--------------------|---------------------------------------|
| HMIS | Health hazards 2* | Flammability 2 | Physical hazards 0 | Personal protection X |

Chronic Hazard Star Legend

19-Aug-2015

* = Chronic Health Hazard

Revision Date Revision Note No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

End of Safety Data Sheet