Print Date: 11/16/18 Total pages: Page 1 of 8

Product Name: GS250 Grip Solvent

Product Code: G\$250

SAFETY DATA SHEET

1. Product and Company Identification

Product Name: GS 250 Grip Solvent

Product Code: GS250 Chemical Type: Solvent Blend

Product Use: Use as received. Shake well before use.

Manufacturer: Chemical Solvents Inc.

Address:

3751 Jennings Rd.

Cleveland, Ohio 44109

Revision Date: 11/15/2018

Emergency: Chemtrec (800)424-9300

Phone: (800) 362-0693

2. Hazards Identification

GHS Classification of the substance or mixture :

Flammable liquids, Category 3 Skin irritation, Category 2 Eye Irritation, Category 2A Skin Sensitization, Category 1 Reproductive toxicity, Category 2 Carcinogen, Category 2

Specific target organ systemic toxicity - single exposure, Category 3, Respiratory system, Central nervous system

Specific target organ systemic toxicity - repeated exposure, Category 1, Nervous system Aspiration hazard, Category 1

Signal word: Danger







Hazard pictograms: Hazard statements:

Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation, May cause an allergic skin reaction. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

Precautionary statements

Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist/vapors/spray. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection.

Response:

IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes, Remove contact lenses, if present and easy to do. Continue rinsing.

Product Name: GS250 Grip Solvent Product Code: GS250

IF exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use foam, powder, or carbon dioxide for extinction.

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

Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

3. Composition / Information on Ingredients

Ingredients	CAS#	Percent
Hydrotreated Light Distillates	64742-47-8	80-90%
Xylene - mixed	1330-20-7	5-15%
d-limonene	5989-27-5	2-8%
ethylbenzene	100-41-4	<2.5%
Toluene	108-88-3	<1%

4. First Aid Measures

inhalation:

Supply fresh air; consult doctor in case of complaints. Provide oxygen treatment if affected person has difficulty breathing. In case of irregular breathing or respiratory arrest provide artificial respiration. In case of unconsciousness place patient stably in side position for transportation.

Skin contact:

Immediately remove any clothing soiled by the product. Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

Eye contact:

Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Swallowing:

Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately call for medical help. A person vomiting white lying on their back should be turned onto their side.

Most important symptoms and effects, both acute and delayed:

Headache, Breathing difficulty, Dizziness, Coughing, Vomiting: Irritant to skin and mucous membranes. Gastric or intestinal disorders when ingested. Nausea in case of ingestion. Altergic reactions, Disorientation

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing agents: Foam, Alcohol resistant foam, Carbon dioxide, Fireextinguishing powder, Water fog / haze

For safety reasons unsuitable extinguishing agents: Water stream.

Special hazards arising from the substance or mixture

Flammable liquid and vapor. Formation of toxic gases is possible during heating or in case of fire. Advice for firefighters Protective equipment: Wear self-contained respiratory protective device. Wear fully protective suit.

Additional information:

Eliminate all ignition sources if safe to do so. Cool endangered containers with water fog.

Product Name: GS250 Grip Solvent Product Code: GS250

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of furnes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

Keep away from ignition sources. Protect from heat. Particular danger of slipping on leaked/spilled product.

Environmental precautions Do not allow to enter sewers/ surface or ground water. Methods and material for containment and cleaning up

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Remove from the water surface (e.g. skim or suck off). Send for recovery or disposal in suitable receptacles.

7. Handling and Storage

Handling: FOR INDUSTRIAL USE ONLY, KEEP OUT OF REACH OF CHILDREN

Use in accordance with good work place practices. Use with adequate ventilation. Keep containers closed when not in use. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapor. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Decontaminate soiled clothing thoroughly before re-use. Destroy contaminated leather clothing.

This product may generate a static charge. Ground/bond equipment when transferring material to prevent static accumulation. Electrical equipment and circuits in all storage and handling must conform to requirements of National Electric Code (Article 500 and 501) for hazardous location. Empty containers may contain residues from the product. Treat empty containers with the same precautions as the material last contained. Do not cut, weld or apply heat to empty containers. **Storage:** Store in a cool, dry area, away form heat or direct sunlight. Keep containers closed when not in use. Do not store with incompatible materials

8. Exposure Controls / Personal Protection

Exposure controls

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. All electrical equipment should compty with the National Electric Gode. An emergency eye wash station and safety shower should be located near the work-station.

Personal Protective Equipment: Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations.

Eye Protection: Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. Suitable eye wash water should be readily available.

Hand Protection: Avoid skin contact. Use chemical resistant gloves. Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.

Body Protection: Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex®) while working with flammable and combustible liquids. Additional chemical-resistant protective

Product Name: GS250 Grip Solvent Product Code: GS250

Print Date: 11/16/18 Total pages: Page 4 of 8

gear may be required if splashing or spraying conditions exist. This may include an apronuishoots and additional facial protection. If product comes in contact with clothing, immediately remove soaked clothing and shower. Promptly remove and discarded contaminated leather goods, Respiratory Protection: Based on workplace contaminant level and working limits of the respirator, use a respirator approved by NiOSH. The following is the minimum recommended. equipment for an occupational exposure level. For concentrations > 1 and < 10 times the occupational exposure level: Use air-purifying respirator with full face-piece and organic vapor cartridge(s) or air-purifying full face-piece respirator with an organic vapor canister or a full facepiece powered air-purifying respirator fitted with organic vapor cartridge(s). The air purifying element must have an end of service life indicator, or a documented change out schedule must be established. Otherwise, use supplied air. For escape; Use self-contained breathing apparatus with full face-piece or any respirator specifically approved for escape.

General Comments: Warning! Use of this material in spaces without adequate ventilation may result in generation of hazardous levels of combustion products and/or inadequate oxygen levels for breathing. Odor is an inadequate warning for hazardous conditions.

Other Suggested Equipment: Eye wash station and emergency showers should be available. Spill containment equipment should be available.

Discretion Advised: Chemical Solvents Inc. takes no responsibility for determining what measures are required for personal protection in any specific application. The general information should be used with discretion.

```
Exposure guidelines: Components Exposure limit(s)
64742-47-8 Distillates (petroleum), hydro-treated light
EL (Canada)
               Long-term value: 200 mg/m³ Skin
1330-20-7 Xylene
PEL (USA)
               Long-term value: 435 mg/m3, 100 ppm
REL (USA)
               Short-term value: 655 mg/m³, 150 ppm
               Long-term value: 435 mg/m³, 100 ppm
               Short-term value: 651 mg/m³, 150 ppm
TLV (USA)
              Long-term value: 434 mg/m³, 100 ppm BEI
EL (Canada)
              Short-term value: 150 ppm
              Long-term value: 100 ppm
              short-term value: 650 mg/m³, 150 ppm
EV (Canada)
              Long-term value: 435 mg/m³, 100 ppm
LMPE (Mexico) Short-term value: 150 ppm
              Long-term value: 100 ppm A4, IBE
100-41-4 ethylbenzene
PEL (USA)

    Long-term value: 435 mg/m³, 100 ppm.

              Short-term value: 545 mg/m³, 125 ppm
REL (USA)
              Long-term value: 435 mg/m³, 100 ppm
TLV (USA)
              Long-term value: 87 mg/m³, 20 ppm BEI
EL (Canada)
              Long-term value: 20 ppm TARC 2B-
              Short-term value: 540 mg/m³, 125 ppm
EV (Canada)
              Long-term value: 435 mg/m³, 100 ppm
                                                    A CONTRACTOR OF SECURE
                                                         LMPE (Mexico) Long-term value: 20 ppm ---
108-88-3 Toluene
PEL (USA)
              Long-term value: 200 ppm
              Ceiling limit value: 300: 500* ppm
              *10-min peak per 8-hr shift
```

Short-term value: 560 mg/m³, 150 ppm

Long-term value: 375 mg/m³, 100 ppm

Long-term value: 20 ppm

Long-term value: 20 ppm LMPE (Mexico) Long-term value: 20 ppm A4, IBE

Long-term value: 75 mg/m³, 20 ppm BEI

REL (USA)

TLV (USA)

EL (Canada)

EV (Canada)

Product Name: GS250 Grip Solvent Product Code: GS2S0

Print Date: 11/16/18 Total pages; Page 5 of 8

PEL= Permissible Exposure Limits TLV= Threshold Limit Value EL= Excursion Limit

TWA= Time Weighted Average (6 hr.) STEL= Short Term Exposure Limit (15 min.) WEEL= Workplace Environmental Exposure Level

Ingredients with biological limit values:

1330-20-7 Xvlene

BEI (USA) 1.5 g/g creatinine Medium: urine Time; end of shift

Parameter: Methylhippuric acids

100-41-4 ethylbenzene

BEI (USA) 0.7 g/g creatinine Medium: urine Time: end of shift at end of workweek Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific, semi-quantitative)

Medium: end-exhaled air Time: not critical

Parameter: Ethyl benzene (semi-guantitative)

108-88-3 Toluene

BEI (USA) 0.02 mg/L Medium: blood Time: prior to last shift of workweek

Parameter: Toluene 0.03 mg/L Medium: urine Time; end of shift

Parameter: Toluene

0.3 mg/g creatinine Medium: urine Time: end of shift

Parameter: o-Cresol with hydrolysis (background)

9. Physical and Chemical Properties

Appearance:

Form: Liquid Color: Clear to straw color. Odor: Citrus. Odor threshold: Not determined.

pH-value: Not determined.

Melting point/Melting range: Not determined.

Flash point: 130 °F

Flammability (solid, gaseous): Not applicable. Auto-ignition temperature: Not determined. Decomposition temperature: Not determined.

Danger of explosion: Product is not explosive, However, formation of explosive air/vapor mixtures

are possible. Explosion limits

Lower: Not determined,

Upper: Not determined.

Oxidizing properties: Non-oxidizing.

Vapor pressure: Not determined.

Boiling point/Boiling range: Not determined.

Relative density: 0,791

Vapor density: Not determined.

Evaporation rate: Not determined.

Solubility in / Miscibility with Water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water); Not determined.

Viscosity

Dynamic Not determined. ""Kinematic at 40 °C (104 °F); Not Determined

10. Stability and Reactivity

Reactivity: No relevant information available.

Chemical stability: Stable under normal temperatures and pressures.

Thermal decomposition / conditions to be avoided: Keep away from heat and direct sunlight. Possibility of hazardous reactions

Flammable liquid and vapor. Reacts with oxidizing agents. Toxic fumes may be released if heated above the decomposition point. Used empty containers may contain product gases which form explosive mixtures with air. Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.

Conditions to avoid Excessive heat.

···. . <u>-</u> . —<u>_</u> .

Product Name: G\$250 Grip Solvent Product Code: GS250

Incompatible materials Oxidizers Hazardous decomposition products Carbon monoxide and carbon dioxide, Hydrocarbons

11. Toxicological Information

Hydrotreated Distillate, Light .. C9-16 64742-47-8

Chronic Data:

Carcinogenicity: Prolonged and repeated skin exposure of mice to certain middle distillate streams has resulted in dermatitis, which has been associated with the promotion of skin tumors via a non-genotoxic mechanism. This material has not been identified as a carcinogen by NTP, IARC, or OSHA.

Acute Data:

Hydrotreated Distillate, Light .. C9-16 64742-47-8

Dermal LD50= >2g/kg (Rabbit) (Based on similar material) Inhalation LC50= >5mg/L (4-hr., Rat) (Based on similar material) Oral LD50= > 5g/kg (Rat) (Based on similar material)

d-limonene 5989-27-5 Oral: LD50 >5 g/kg, rabbit Dermal: LD50 >5 g/kg, rabbit

Skin: The skin irritancy of limonene in guinea pigs and rabbits is considered moderate and low,

Sensitization: d-Limonene is not a sensitizer. Improper storage and handling can lead to oxidation. The oxidized forms of d-Limonene have been shown to be a skin sensitizer.

Inhalation: RD50 >1000 ppm

Chronic Toxicity: Not listed as a carcinogen (OSHA, NTP, IARC, or ACGIH)

Xylene 1330-20-7

Inhalation Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by

inhalation. Inhalation of vapors may cause irritation to respiratory tract.

Skin contact Harmful in contact with skin. Causes skin irritation.

Eve contact Causes serious eye irritation.

Ingestion Swallowing or vomiting of the liquid may result in aspiration into the lungs. Droplets of the product

aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Abdominal pain. Nausea, vomiting. Swallowing or vomiting of the liquid may result in aspiration into the lungs. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory-irritation. Skin irritation, May cause redness and pain. Edema.

Information on toxicological effects.....

oli Alebahar alam Tabah Acute toxicity May be fatal if swallowed and enters airways. Harmful if inhaled. Harmful in contact with skin. May cause respiratory irritation.

Components Species Test Results

Toluene (CAS 108-88-3)

LC50 Rat Inhalation

8000 mg/l, 4 Hours

LD50 Rat Oral

2.6 g/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory sensitization No data available.

Skin sensitization No data available.

Germ cell mutagenicity No data available.

Carcinogenicity Suspected of causing cancer.

Product Code: G\$250

Print Date: 11/16/18 Total pages: Page 7 of 8

IARC Monographs. Overall Evaluation of Carcinogenicity

Ethylbenzene (CAS 100-41-4) 2B Possibly carcinogenic to humans.

m-Xylene (CAS 108-38-3) 3 Not classifiable as to carcinogenicity to humans.

o-Xylene (CAS-95-47-6) 3 Not classifiable as to careinogenicity to humans.

p-Xylene (CAS 106-42-3) 3 Not classifiable as to carcinogenicity to humans.

Toluene (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

Reproductive toxicity Suspected of damaging fertility or the unborn child.

Specific target organ toxicity - single exposure May cause irritation to the respiratory system.

Specific target organ toxicity - repeated exposure May cause damage to organs (central

nervous system, kidney, liver) through prolonged or repeated exposure.

Aspiration hazard May be fatal if swallowed and enters airways.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Long term exposures may affect liver, kidneys, and central nervous system.

Further information No other specific acute or chronic health impact noted.

Caution studies have linked the over exposure of "solvents" to possible irregularities in blood and Non-Hodgkin's Lymphoma.

12. Ecological Information

Persistence and degradability The product is partially biodegradable. Significant residuals remain

Bioaccumulative potential: No relevant information available.

Mobility in soil: No relevant information available.

Ecotoxical effects:

- Remark: Due to mechanical actions of the product (e.g. agglutinations), damages may occur. Additional ecological information
- General notes: Do not allow product to reach ground water, water course or sewage system. Other adverse effects No relevant information available.

13. Disposal Considerations

Dispose of spilled material in accordance with state and local regulations for waste that is non-hazardous by Federal definition. Note that this information applies to the material as manufactured; processing, use, or contamination may make this information inappropriate, inaccurate, or incomplete. Note that this handling and disposal information may also apply to empty containers, liners and rinsate. State or local regulations or restrictions are complex and may differ from federal regulations. This information is intended as an aid to proper handling and disposal; the final responsibility for handling and disposal is with the owner of the waste.

14. Transport Information

NA 1993, Combustible Liquid N.O.S, PGIII, ERG#128

Product Code: GS250

Print Date: 11/16/18 Total pages: Page 3 of 8

15. Regulatory Information

Environmental Regulations ***

- United States (USA)
- SARA
- Section 302 (extremely hazardous substances): None of the ingredients are listed.
- Section 355 (extremely hazardous substances): None of the ingredients are listed.
- Section 313 (Specific toxic chemical listings):

m-Xylene 108-38-3

p-Xylene 106-42-3

Ethylbenzene 100-41-4

o-Xylene 95-47-6

- TSCA (Toxic Substances Control Act) All ingredients are listed.
- Proposition 65 (California)
- Chemicals known to cause cancer:

100-41-4 ethylbenzene 71-43-2 benzene

Chemicals known to cause developmental toxicity for females: No ingredients are listed.

Chemicals known to cause developmental toxicity for males: 71-43-2 benzene

Chemicals known to cause developmental toxicity: 108-88-3 Toluene, 71-43-2 benzene

EPA (Environmental Protection Agency):

1330-20-7 Xvlene I

100-41-4 ethylbenzene D

108-88-3 Toluene II

IARC (International Agency for Research on Cancer):

100-41-4 ethylbenzene 2B

98-82-8 Cumene 2B

71-43-2 benzene 1

91-20-3 Naphthalene 2B

CERCLA Hazardous Substance List (40 CFR 302.4)

Ethylbenzene (CAS 100-41-4) LISTED

o-Xviene (CAS 95-47-6) LISTED

m-Xylene (CAS 108-38-3) LISTED

p-Xylene (CAS 106-42-3) LISTED

Toluene (CAS 108-88-3) LISTED

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance Benzene (CAS 71-43-2), Ethylbenzene (CAS 100-41-4), Toluene (CAS 108-88-3)

16. Other Information

Hazard ratings This information is intended solely for the use of individuals trained in the NFPA and/or HMIS systems.

NEPA: Health: 2 Flammability: 2 Reactivity: 0

HMIS: Health: 2* Flammability: 2 Reactivity: 0

RATING: 4-EXTREME 3-HIGH 2-MODERATE 1-SLIGHT 0-INSIGNIEICANT

For industrial use only. The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Chemical Solvents Inc makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. This material may be released from gas, liquid, or solid materials made directly or indirectly from it. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards. Possession of an MSDS does not indicate that the possessor of the MSDS was a purchaser or user of the subject product. 11/15/2018