

1. Chemical product and company identification

Product identifier

Trade name : HANDY FLO 350
Substance name : HANDY FLO 350
Product code : 83-350
Product group : Trade product

Recommended use of the chemical and restrictions on use

Recommended use : Alloys for brazing/soldering and other metallurgical processes

Company information

Lucas-Milhaupt, Inc.

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Emergency telephone number

Emergency number : CHEMTREC within the USA and Canada: 1-800-424-9300
CHEMTREC outside the USA and Canada +1 701-741-5970

2. Hazards identification

GHS classification

Physical hazards	Flammable liquid	Category 4	Calculation method
Health hazards	Eye damage/irritation	Category 2B	Calculation method
Environmental hazards	Acute aquatic toxicity	Category 2	Calculation method

Signal word (GHS-JP) : Warning

Contains : Petroleum distillates, hydrotreated light; Naphtha, petroleum, hydrotreated heavy

Hazard statements (GHS-JP) : Combustible liquid (H227)
Causes eye irritation (H320)
Toxic to aquatic life (H401)

Precautionary statements (GHS-JP)

Prevention precautionary statements : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)
Wash hands, forearms and face thoroughly after handling. (P264)
Avoid release to the environment. (P273)
Wear protective gloves/protective clothing/eye protection/face protection. (P280)

Response Precautionary Statements : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
If eye irritation persists: Get medical advice/attention. (P337+P313)
In case of fire: Use ... to extinguish. (P370+P378)

Storage precautionary statements : Store in a well-ventilated place. Keep cool. (P403+P235)

Disposal precautionary statements : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation (P501)

3. Composition/information on ingredients

Product form : Mixture

Name	Concentration	Formula	Kanpo number		CAS-No.
			CSCL no	ISHL no	
Petroleum distillates, hydrotreated light ()	63 - 81%	Unspecified			64742-47-8
Naphtha, petroleum, hydrotreated heavy ()	7.4 - 22.2%	Unspecified			64742-48-9
2,6-Di-tert-butyl-p-cresol ()	0.0052 - 0.0156%	C ₁₅ H ₂₄ O	(9)-1805; (5)-6372; (3)-540	(9)-1805; (5)-6372; (3)-540	128-37-0
Polyisobutylene ()	2.574 - 7.722%	(C ₄ H ₈) _x	(6)-774	(6)-774	9003-27-4

4. First aid measures

First aid measures

- First-aid measures general : IF exposed or concerned: Get medical advice/attention.
If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
Call a doctor.
- First-aid measures after skin contact : Rinse skin with water/shower.
Take off immediately all contaminated clothing.
- First-aid measures after eye contact : Rinse eyes with water as a precaution.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

Other medical advice or treatment

- Other medical advice or treatment : Treat symptomatically.

5. Fire fighting measures

- Suitable extinguishing media : Dry powder, Water spray, Foam, Carbon dioxide
- Unsuitable extinguishing media : Water
- Fire hazard : Flammable liquid and vapour.
- Hazardous decomposition products in case of fire : Toxic fumes may be released
- Protection during firefighting : Do not attempt to take action without suitable protective equipment.
Self-contained breathing apparatus.

Complete protective clothing.

6. Accidental release measures

For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking.
Only qualified personnel equipped with suitable protective equipment may intervene.
Avoid breathing dust/fume/gas/mist/vapours/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment.
For further information refer to section 8: "Exposure controls/personal protection".

Environmental precautions

Environmental precautions : Avoid release to the environment.
Notify authorities if product enters sewers or public waters.

Methods and Equipment for Containment and Cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material.
Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

7. Handling and storage

Handling

Precautions for safe handling : Ensure good ventilation of the work station.
Wear personal protective equipment.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground/bond container and receiving equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Flammable vapours may accumulate in the container.
Use explosion-proof equipment.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Take all necessary technical measures to avoid or minimize the release of the product on the workplace.
Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers.
Provide local exhaust or general room ventilation.
Floors, walls and other surfaces in the hazard area must be cleaned regularly.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Do not get in eyes, on skin, or on clothing.
Hygiene measures : Do not eat, drink or smoke when using this product.
Always wash hands after handling the product.
Separate working clothes from town clothes. Launder separately.

Wash contaminated clothing before reuse.

Storage precautionary statements

Storage conditions : Store in a well-ventilated place.
 Keep cool.
 Keep container tightly closed.
 Store locked up.

Technical measures : Ground/bond container and receiving equipment.

8. Exposure controls / Personal protection equipment

2, 6-Di-tert-butyl-p-cresol (128-37-0)			
USA - ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (inhalable fraction and vapor)	
USA - ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen	

Appropriate engineering controls : Ensure good ventilation of the work station

Hand protection : Protective gloves

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment, [In case of inadequate ventilation] wear respiratory protection.

Environmental exposure controls : Avoid release to the environment.

9. Physical and chemical properties

Physical state : Liquid

Relative evaporation rate (butylacetate=1) : Not applicable

Melting point : Not applicable

Boiling point : Not applicable

Flammability (solid, gas) : Not applicable

Explosive limits (g/m³) : Not applicable

Explosive limits (g/m³) : Not applicable

10. Stability and reactivity

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.
 Flammable liquid and vapour.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No dangerous reactions known under normal conditions of use.

Conditions to avoid : None under recommended storage and handling conditions (see section 7). Avoid contact with hot surfaces. Heat. No flames, no sparks.
 Eliminate all sources of ignition.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Acute toxicity (oral) :
 Acute toxicity (dermal) :
 Acute toxicity (inhalation) :

Petroleum distillates, hydrotreated light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.2 mg/l/4h
Naphtha, petroleum, hydrotreated heavy (64742-48-9)	
LD50 oral rat	> 6000 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 inhalation rat (mg/l)	> 8500 mg/m ³ (Exposure time: 4 h)
2, 6-Di-tert-butyl-p-cresol (128-37-0)	
LD50 oral rat	> 2930 mg/kg
LD50 dermal rat	> 2000 mg/kg

Skin corrosion/irritation :
 Serious eye damage/irritation : Causes eye irritation
 Respiratory sensitisation :
 Skin sensitisation :
 Germ cell mutagenicity :
 Carcinogenicity :
 Reproductive toxicity :
 STOT-single exposure :
 STOT-repeated exposure :
 Aspiration hazard :

12. Ecological information

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment, Harmful to aquatic life, Toxic to aquatic life.
 Acute aquatic toxicity : Toxic to aquatic life
 Chronic aquatic toxicity :

Petroleum distillates, hydrotreated light (64742-47-8)	
LC50 fish 1	45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	2.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
BCF fish 1	61 - 159
Naphtha, petroleum, hydrotreated heavy (64742-48-9)	
LC50 fish 1	2200 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
2, 6-Di-tert-butyl-p-cresol (128-37-0)	
EC50 72h algae (1)	6 mg/l (Species: Pseudokirchneriella subcapitata)
EC50 72h algae (2)	> 0.42 mg/l (Species: Desmodesmus subspicatus)
BCF fish 1	230 - 2500
Log Pow	4.17
HANDY FLO 350	
Persistence and degradability	No additional information available

HANDY FLO 350	
Bioaccumulative potential	No additional information available
Petroleum distillates, hydrotreated light (64742-47-8)	
BCF fish 1	61 - 159
2, 6-Di-tert-butyl-p-cresol (128-37-0)	
BCF fish 1	230 - 2500
Log Pow	4.17
HANDY FLO 350	
Mobility in soil	No additional information available
2, 6-Di-tert-butyl-p-cresol (128-37-0)	
Log Pow	4.17

Ozone :
Other adverse effects : No additional information available

13. Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector' s sorting instructions.

Additional information

Additional information : Flammable vapours may accumulate in the container.

14. Transport information

International Regulations

Overland transport (UN RTDG)

UN-No. (UN RTDG) : Not applicable
Proper Shipping Name (UN RTDG) : Not applicable
Packing group (UN RTDG) : Not applicable
Transport hazard class(es) (UN RTDG) : Not applicable

Transport by sea (IMDG)

UN-No. (IMDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Packing group (IMDG) : Not applicable
Transport hazard class(es) (IMDG) : Not applicable

Air transport (IATA)

UN-No. (IATA) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Packing group (IATA) : Not applicable
Transport hazard class(es) (IATA) : Not applicable

Inland waterway transport (ADN)

UN-No. (ADN) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Packing group (ADN) : Not applicable
Transport hazard class(es) (ADN) : Not applicable
Carriage prohibited (ADN) : No
Not subject to ADN : No

Rail transport (RID)

UN-No. (RID) : Not applicable
Proper Shipping Name (RID) : Not applicable
Packing group (RID) : Not applicable

Transport hazard class(es) (RID) : Not applicable
Carriage prohibited (RID) : No
Marine pollutant : No

Regulations in Japan

Other information : No supplementary information available

15. Regulatory information**16. Other information**

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