



Safety Data Sheet acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

1 Identification

- **Product identifier**
- **Trade name:** SHS46 LOW STRENGTH BLACK MIXING TINT
- **Article number:** SHS46
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Lusid Technologies
5195 West 4700 South
KEARNS, UT 84118
USA
www.lusid.biz
- **Information department:** Product safety department
- **Emergency telephone number:**
24 Hrs Emergency Contact:
INFOTRAC
1-800-535-5053

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS08 Health hazard

Muta. 1B H340 May cause genetic defects.

Carc. 1B H350 May cause cancer.



GHS07

STOT SE 3 H336 May cause drowsiness or dizziness.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

Trade name: SHS46 LOW STRENGTH BLACK MIXING TINT

(Contd. of page 1)

- **Hazard pictograms**



GHS02 GHS07 GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

n-butyl acetate
Carbon black
Solvent naphtha (petroleum), light arom.

- **Hazard statements**

Flammable liquid and vapor.
May cause genetic defects.
May cause cancer.
May cause drowsiness or dizziness.

- **Precautionary statements**

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.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
Call a poison center/doctor if you feel unwell.
In case of fire: Use for extinction: CO₂, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 0
Fire = 3
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



HEALTH *0 Health = *0
FIRE 3 Fire = 3
REACTIVITY 0 Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

(Contd. on page 3)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

Trade name: SHS46 LOW STRENGTH BLACK MIXING TINT

· **vPvB:** Not applicable.

(Contd. of page 2)

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

123-86-4	<i>n</i> -butyl acetate	25-50%
110-43-0	heptan-2-one	2.5-10%
1333-86-4	Carbon black	2.5-10%
1330-20-7	xylene	≤2.5%
64742-95-6	Solvent naphtha (petroleum), light arom.	≤2.5%
100-41-4	ethylbenzene	≤2.5%

4 First-aid measures

- **Description of first aid measures**
- **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:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **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**
Wear protective equipment. Keep unprotected persons away.
- **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).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

Trade name: SHS46 LOW STRENGTH BLACK MIXING TINT

(Contd. of page 3)

See Section 13 for disposal information.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**

123-86-4	<i>n</i> -butyl acetate	5 ppm
110-43-0	heptan-2-one	150 ppm
1333-86-4	Carbon black	9 mg/m ³
1330-20-7	xylene	130 ppm
108-83-8	2,6-dimethylheptan-4-one	75 ppm
34590-94-8	Dipropylene glycol monomethyl ether	150 ppm
108-65-6	2-methoxy-1-methylethyl acetate	50 ppm
100-41-4	ethylbenzene	33 ppm
70657-70-4	2-methoxypropyl acetate	50 ppm

· **PAC-2:**

123-86-4	<i>n</i> -butyl acetate	200 ppm
110-43-0	heptan-2-one	670 ppm
1333-86-4	Carbon black	99 mg/m ³
1330-20-7	xylene	920* ppm
108-83-8	2,6-dimethylheptan-4-one	330 ppm
34590-94-8	Dipropylene glycol monomethyl ether	1700* ppm
108-65-6	2-methoxy-1-methylethyl acetate	1,000 ppm
100-41-4	ethylbenzene	1100* ppm
70657-70-4	2-methoxypropyl acetate	1,000 ppm

· **PAC-3:**

123-86-4	<i>n</i> -butyl acetate	3000* ppm
110-43-0	heptan-2-one	4000* ppm
1333-86-4	Carbon black	590 mg/m ³
1330-20-7	xylene	2500* ppm
108-83-8	2,6-dimethylheptan-4-one	2000* ppm
34590-94-8	Dipropylene glycol monomethyl ether	9900** ppm
108-65-6	2-methoxy-1-methylethyl acetate	5000* ppm
100-41-4	ethylbenzene	1800* ppm
70657-70-4	2-methoxypropyl acetate	5,000 ppm

7 Handling and storage

· **Handling:**

· **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· **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:** Keep receptacle tightly sealed.

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

Trade name: SHS46 LOW STRENGTH BLACK MIXING TINT

(Contd. of page 4)

· **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:**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

123-86-4 n-butyl acetate

PEL	Long-term value: 710 mg/m ³ , 150 ppm
REL	Short-term value: 950 mg/m ³ , 200 ppm Long-term value: 710 mg/m ³ , 150 ppm
TLV	Short-term value: 712 mg/m ³ , 150 ppm Long-term value: 238 mg/m ³ , 50 ppm

110-43-0 heptan-2-one

PEL	Long-term value: 465 mg/m ³ , 100 ppm
REL	Long-term value: 465 mg/m ³ , 100 ppm
TLV	Long-term value: 233 mg/m ³ , 50 ppm

1333-86-4 Carbon black

PEL	Long-term value: 3.5 mg/m ³
REL	Long-term value: 3.5* mg/m ³ *0.1 in presence of PAHs; See Pocket Guide Apps.A+C
TLV	Long-term value: 3* mg/m ³ *inhalable fraction

1330-20-7 xylene

PEL	Long-term value: 435 mg/m ³ , 100 ppm
REL	Short-term value: 655 mg/m ³ , 150 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV	Short-term value: 651 mg/m ³ , 150 ppm Long-term value: 434 mg/m ³ , 100 ppm BEI

100-41-4 ethylbenzene

PEL	Long-term value: 435 mg/m ³ , 100 ppm
REL	Short-term value: 545 mg/m ³ , 125 ppm Long-term value: 435 mg/m ³ , 100 ppm
TLV	Long-term value: 87 mg/m ³ , 20 ppm BEI

· **Ingredients with biological limit values:**

1330-20-7 xylene

BEI	1.5 g/g creatinine Medium: urine Time: end of shift Parameter: Methylhippuric acids
-----	--

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

Trade name: SHS46 LOW STRENGTH BLACK MIXING TINT

(Contd. of page 5)

100-41-4 ethylbenzene

BEI	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-quantitative)

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

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:**



Tightly sealed goggles

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
Form: Liquid

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

Trade name: SHS46 LOW STRENGTH BLACK MIXING TINT

(Contd. of page 6)

Color:	Black
· Odor:	Characteristic
· Odor threshold:	Not determined.
· pH-value:	Not determined (pH N/A in solvent coatings)
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	124 °C (255.2 °F)
· Flash point:	27 °C (80.6 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	370 °C (698 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	1.2 Vol %
Upper:	7.5 Vol %
· Vapor pressure at 20 °C (68 °F):	10.7 hPa (8 mm Hg)
· Density at 20 °C (68 °F):	0.9942 g/cm ³ (8.2966 lbs/gal)
· Relative density	Not determined.
· 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:	Not determined.
· Solvent content:	
Organic solvents:	40.1 %
VOC content:	40.08 %
	395.8 g/l / 3.30 lb/gal
· Solids content:	60.1 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **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.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

Trade name: SHS46 LOW STRENGTH BLACK MIXING TINT

(Contd. of page 7)

· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6,800 mg/kg (rat)
Dermal	LD50	>3,400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)

· **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 shows the following dangers according to internally approved calculation methods for preparations:

The product can cause inheritable damage.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

1333-86-4	Carbon black	2B
1330-20-7	xylene	3
100-41-4	ethylbenzene	2B

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

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 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

USA

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

Trade name: SHS46 LOW STRENGTH BLACK MIXING TINT

(Contd. of page 8)

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **UN-Number**
- **DOT, IMDG, IATA** UN1263

- **UN proper shipping name**
- **DOT** Paint
- **IMDG, IATA** PAINT

- **Transport hazard class(es)**
- **DOT**



- **Class** 3 Flammable liquids
- **Label** 3

- **IMDG, IATA**



- **Class** 3 Flammable liquids
- **Label** 3

- **Packing group**
- **DOT, IMDG, IATA** III

- **Environmental hazards:**
- **Marine pollutant:** No

- **Special precautions for user** Warning: Flammable liquids
- **Danger code (Kemler):** 30
- **EMS Number:** F-E, S-E
- **Stowage Category** A

- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

- **Transport/Additional information:**

- **DOT**
- **Quantity limitations** On passenger aircraft/rail: 60 L
On cargo aircraft only: 220 L

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

Trade name: SHS46 LOW STRENGTH BLACK MIXING TINT

(Contd. of page 9)

· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1263 PAINT, 3, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

1330-20-7 xylene

100-41-4 ethylbenzene

- **TSCA (Toxic Substances Control Act):**

123-86-4 n-butyl acetate

110-43-0 heptan-2-one

1333-86-4 Carbon black

1330-20-7 xylene

64742-95-6 Solvent naphtha (petroleum), light arom.

108-83-8 2,6-dimethylheptan-4-one

34590-94-8 Dipropylene glycol monomethyl ether

108-65-6 2-methoxy-1-methylethyl acetate

100-41-4 ethylbenzene

- **Proposition 65**

- **Chemicals known to cause cancer:**

1333-86-4 Carbon black

100-41-4 ethylbenzene

- **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)**

1330-20-7 xylene

I

100-41-4 ethylbenzene

D

- **TLV (Threshold Limit Value established by ACGIH)**

1333-86-4 Carbon black

A4

1330-20-7 xylene

A4

(Contd. on page 11)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

Trade name: SHS46 LOW STRENGTH BLACK MIXING TINT

(Contd. of page 10)

100-41-4 ethylbenzene

A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

1333-86-4 Carbon black

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

n-butyl acetate

Carbon black

Solvent naphtha (petroleum), light arom.

· **Hazard statements**

Flammable liquid and vapor.

May cause genetic defects.

May cause cancer.

May cause drowsiness or dizziness.

· **Precautionary statements**

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.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Call a poison center/doctor if you feel unwell.

In case of fire: Use for extinction: CO₂, powder or water spray.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials:**

Carcinogenic hazardous material group III (dangerous).

· **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

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

USA

(Contd. on page 12)

Safety Data Sheet

acc. to OSHA HCS

Printing date 08/06/2018

Reviewed on 12/05/2017

Trade name: SHS46 LOW STRENGTH BLACK MIXING TINT

(Contd. of page 11)

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:** Product Safety Dept.

· **Date of preparation / last revision** 08/06/2018 / 2

· **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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 3: Flammable liquids – Category 3

Muta. 1B: Germ cell mutagenicity – Category 1B

Carc. 1B: Carcinogenicity – Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· *** Data compared to the previous version altered.**

USA